

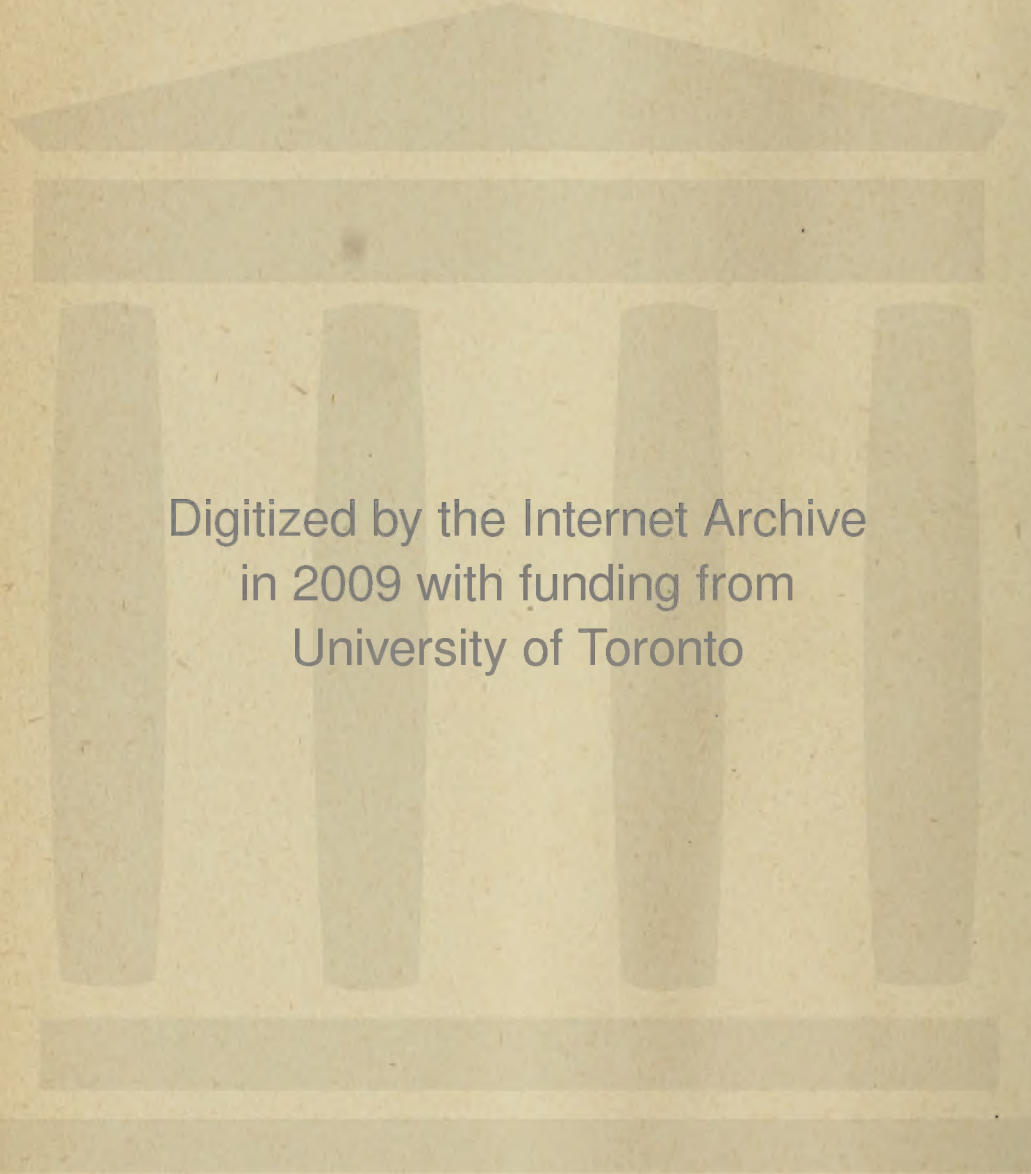
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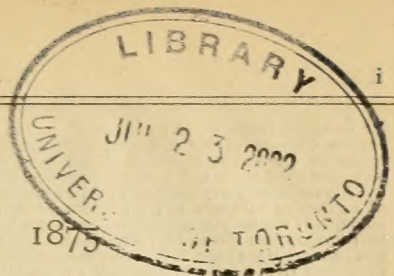
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REPORTS TO THE SCIENTIFIC GRANTS COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.

The Report of Dr. Rutherford and M. Vignal on Experiments on the Biliary Secretion of the Dog, and the Commencement of the Report on the Life History of Contagium, by Dr. Braidwood and Mr. Vacher, were published in the JOURNALS for October 23rd and 30th, November 6th and 13th, and December 11th.

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THE HARVEIAN ORATION

DELIVERED BEFORE

THE ROYAL COLLEGE OF PHYSICIANS,

On Friday, June 25th, 1875.

By WILLIAM A. GUY, M.B., F.R.S.,

Fellow of the Royal College of Physicians.

PRESIDENT AND FELLOWS.—More than two centuries ago (it was some time in the month of July, 1656, nine years, therefore, before the great Plague, and ten before the great Fire of London), the old College of Physicians, at Amen Corner, was the scene of a most touching ceremony. In the library of the "noble building" which he had erected at his own cost, furnished, supplied with books, objects of curiosity, and surgical instruments, and three years previously presented to the College, William Harvey met the Fellows, his colleagues, friends, and pupils, for the last time. Bent beneath the weight of nearly fourscore years, worn by repeated attacks of a painful malady, "not only far stricken in years", but "afflicted with more and more indifferent health", conscious that his life must be drawing to a close (he died in less than a year afterwards), Harvey formally resigned the chair he had held for upwards of forty years; and, as the crowning act of many a deed of princely munificence, made over to the College his paternal estate.

Harvey's object in so doing was to incite other Fellows and members of the College to like deeds of liberality, "to search and study out the secrets of nature by way of experiment", and to cultivate mutual love and affection among themselves: his means to these ends, an oration to be delivered annually within the College.

Such, in brief, is the origin of this day's ceremony; a ceremony which, for upwards of two centuries, has been the occasion of gathering together, year by year, the *élite* of the medical profession, with many a worthy representative of every department of learning and literature, art and science.

The appointment of the Harveian orator rests, as is well known, with the President of our College. Were it not so—if I were a volunteer, self chosen for the duty I have this day to perform—I should begin my address by words of self depreciation; but these, under the circumstances, would be obviously out of place. Assuming, then, a certain undefined and wholly undefinable degree of competence, I address myself earnestly to the task of justifying the President's choice, fulfilling your reasonable expectations, and approaching, as near as my powers permit, to my own ideal of what is due to the dignity of this College and the memory of its brightest ornament and greatest benefactor.

The lapse of time and altered circumstances have, as you are aware, brought about deviations from the original design of the Harveian oration. In lieu of the Latin tongue, once the written and spoken language of the learned, we now use our own native English, which promises some day to be to the whole world what Latin was to the educated section of a small part of it; and, by a sort of general understanding and consent, we meet on this occasion to do honour to Harvey himself, as the man who, above and beyond all others, has "approved" himself "a benefactor to the College", and our greatest contributor "to the sum of medical science".

In saying this, I think that I rightly represent your feelings and expectations; but, on referring to the published orations of my predecessors, I find them grouping themselves into two equal classes, the one devoted to Harvey and his labours, the other to some topic connected with modern discovery and research.

Among those who have chosen to discourse of Harvey, some (like my immediate predecessor Dr. West) have set him before us in "his

habit as he lived"; others (among whom Dr. Rolleston deserves special mention, as having made an important discovery bearing on the question of Harvey's originality) have maintained Harvey's claim to be considered the real discoverer of the circulation; and one (I speak of my friend and former colleague Dr. Arthur Farre), handling a subject of which he is an acknowledged master, showed us how Harvey, in his *Treatise on Generation*, displayed the same ability as in that great discovery with which his name is more generally associated.

It is with this class of Harveian orators that I elect to associate myself; and the more willingly, as certain physiological questions connected with the circulation were the first of a strictly scientific character which attracted my own attention.

Harvey entered on his work of discovery with some considerable advantages. He came of a wealthy family, and had independent means of his own, so that he could command the very best education England or Italy could give, and either purchase, or secure through royal favour, whatever he needed for purposes of experiment and illustration. And thus his easy circumstances took from him all motive and temptation to a hasty or premature announcement of his views; and though, as his writings attest, he had good opportunities of experience as physician, surgeon, and accoucheur (for in Harvey's day the three faculties were united), and turned them to excellent account, he was not overwhelmed by the cares and incessant demands of practice, and was even withdrawn more than once by command of the Court from the usual duties of his profession.

Harvey, in being spared the drawbacks of poverty, must have lost with them the proverbial stimulus of necessity. But happily he found, in the stirring circumstances of his times, and the example of great thinkers and discoverers (his contemporaries or immediate predecessors), that spur to exertion to which generous minds yield so ready a response. For Harvey lived in an age of excitement, political and theological, breathing an atmosphere of civil strife, a witness of, and a sufferer by, one of the fiercest struggles between throne and people, between power and prescription, on the one side, and aggressive liberty on the other, that the world has ever seen. And this state of excitement, be it recollected, was but the carrying forward of the agitation of men's minds that had arisen out of the events of the Renaissance and the Reformation.

Harvey, as I have said, had for contemporaries many great thinkers and discoverers. He might have known both Shakespeare and Milton; for he was thirty-eight years old when Shakespeare died, and thirty when Milton was born. He was well acquainted with Lord Bacon, who died when Harvey was forty-eight years of age; Lord Napier, the inventor of Logarithms; Hobbes of Malmesbury, author of the *Leviathan*; Robert Boyle, Dryden, Cowley, and rare Ben Jonson, were among his contemporaries; the Marquis of Worcester was busy with his water-compelling engine and *Century of Inventions*; Sir Hugh Middleton was at work with the New River; John Woodall, author of *The Surgeon's Mate*, was commending lemon-juice as preventive and cure of scurvy; and Sydenham (thirty-three years of age when Harvey died) was collecting materials for his immortal works, when Harvey was demonstrating the circulation of the blood. It is worthy of note that the *Novum Organon* and Harvey's great work *De Motu Cordis et Sanguinis* appeared within a few years of each other. Need I add that Harvey, surviving the execution of his royal master and patron, died in the same year with Oliver Cromwell?

As to foreign contemporaries, Harvey was only by seven years the junior of Kepler, and by fourteen of Galileo, and the senior by several years both of Descartes and of Spinoza. So that Harvey was of an age to have shared that Italian journey of Milton's, during which, as Milton tells us in his *Areopagitica*, "he found and visited the famous Galileo, grown old, a prisoner to the Inquisition, for thinking in astronomy otherwise than the Franciscan and Dominican licensers thought". And here I am reminded of another advantage Harvey had in dealing with his great discovery. The views he might form and promulgate were not likely to clash with the preconceived notions of those who drew their science equally with their theology from the same source—from that Bible, of which the authorised version was first published when Harvey was thirty-three years of age; and which, laying hold of the

m. of men by the sustained dignity of its language, its lofty poetry, its vivid and life-like narratives, and stirring them to their very depths by awful threats and precious promises, must have greatly added to the excitement and exaltation of the popular mind.

Harvey, then, as I have just stated, took in hand the work of discovery, with some obvious advantages. And, on the other hand, he had only to contend with the obstacles which beset all such paths as he was about to tread. He would arouse that spirit of opposition and de- traction which springs up quite naturally in the minds of those who, having imbibed certain views, at the cost of much study, and from the lips of men whom they hold in respect, are asked to abandon not only the views themselves, but all that, in course of time, has grown up and clustered round them. To root up these weeds and keep them under, to select and sow the better seeds, to reap and gather in the harvest, is a work demanding both industry and patience.

Such a work Harvey took in hand when he set himself to discover the circulation of the blood; and such industry and patience he continued to display to the end of his long life. For it should be well understood, and constantly borne in mind, that the discovery of the circulation was not a something that lay on the surface, and which any man of common discernment might pick up and appropriate. It was not like a new remedy which, having come into repute among the common people, waited only for some patient and intelligent collector of facts to affix to it the stamp of authority. It was not such a discovery as John Woodall made, when he inferred the efficacy of lemon-juice, as others since his day have done of oranges, or fruits, or vegetables, or even of a mixed diet, from the happy accident of two ships' crews, one smitten with scurvy, the other free from it, differing in the possession of the one article of diet, and in nothing else. Nor was it a mere simple and natural inference from occurrences numerous and uniform, as was the severity of the natural small-pox, and the mildness of the inoculated form of it, as all the world of Constantinople saw them, when Lady Montague made herself the organ and interpreter of an universal belief. It was not even so simple a matter as Jenner had to deal with when he (more observant, more logical, more persevering than his neighbours, and with the precedent of inoculation to help him), converted the neglected gossip of the dairy into a life-preserving principle; or (to give but one other example), the discovery of the circulation was not such a simple correction of ancient and authoritative error as Ambrose Paré made when, with a mind prepared by a wholesome scepticism, he found the soldiers wounded by gunshot, and treated by the orthodox method of boiling oil, suffering pain and inflammation, from which those he had been forced, by lack of material, to dress with a cold slimy mixture, were comparatively free.

Harvey's work was of a different order. It demanded observations and experiments of a novel kind, and a keen, penetrating, refined logic to bring it to perfection. As we think of what it was, we are forcibly reminded of the modern researches of Sir Charles Bell, and at the same time of that famous *Essay on Devo*, by Dr. Wells, to which logicians accord such high praise, or that other not less remarkable inquiry by which Sir George Baker, a former President of this College, compassed the discovery of the true cause of the colic of Devonshire.

To put the matter somewhat differently—between discoveries of a more simple and obvious kind, and that of Harvey, there is the same sort of difference as between the merit of discerning the use of a tool never seen before, and that of a man who, having the parts of a complex machine, such as a watch, a clock, or a steam engine placed before him, should find out their uses, discover its motive force, and (being a work of human minds) succeed in putting it together, and setting it in motion.

You will observe that I take it for granted that Harvey did really discover the circulation of the blood; that neither he himself, nor his contemporaries who, whether they opposed or supported him, at least took him at his word, were mistaken about the matter. Harvey, who had come from Padua laden with university honours, bearing with him all the learning of the ancients, and the best fruits of modern teaching; intelligent, well-informed, candid, honest; doubtless spoke the simple truth when he said to the President of the Royal College of Physicians, other learned physicians, and his esteemed colleagues, concerning the great work he deduced to them, "*Præter alios, de hinc, de illo, de ... et de ... a novo modo*"; and equally when, in his old age, he says with allowable self-complacency, "The admirable circulation of the blood originally discovered by me, I have lived to see admitted by almost all." Harvey, fancying himself a discoverer, and all the great anatomists and physiologists of Europe sharing his belief, would be a delusion for which, with all our experience of human credulity, we are scarcely prepared.

To understand Harvey and his work aright, to appreciate thoroughly what he did, to form a just estimate of the ability with which he exposed fallacious arguments, his acuteness of observation and corre-

sponding clearness of description, the ingenuity with which he devised experiments, and his skill in performing them, we must study not only his great work, the *Exercitatio Anatomica de Motu Cordis et Sanguinis*, but also his anatomical disquisitions addressed to Riolan of Paris, and his letters to Hofmann, Slegel, Nardi, and others. Having, as in duty bound, and in accordance with the plan I had sketched out for myself, read these productions with care and attention, I venture to submit to you a brief analytical sketch of the circulation of the blood as Harvey understood it.

I may premise that nowhere, unless I am greatly mistaken, does Harvey tell us when and where (whether while a student at the University of Padua, or while studying for his degree at Cambridge, or after settling here in London) those doubts and misgivings entered his mind, without which, in his case as in others, there could have been neither motive nor stimulus to inquiry. The first glimpse we get of him is when, seeking to discover the motions and uses of the heart by actual inspection of the living animal, and not from the writing of others, he stands perplexed and bewildered by the rapid alternation of dilatation and contraction, coming and going in the twinkling of an eye like a flash of lightning; not surprised that Andreas Laurentius found these motions as perplexing as did Aristotle the flux and reflux of Euripus (that narrow sea between Bœotia and Eubœa, which ebbed and flowed seven times a day or oftener), and almost tempted with Fracastorius to think, "that the motion of the heart was only to be comprehended by God". He is, as it were, in a labyrinth from which he can only extricate himself by using greater and daily diligence, by performing frequent vivisections of a variety of animals, and by the collation of numerous observations. Having by these means discovered "both the motion and use of the heart and arteries", he proceeds to enlighten not only his friends, but the public also, in his anatomical lectures, after the manner of the Academy of old.

But Harvey, though he does not tell us when he first began to suspect the true state of things, lets us into the secret of the process of thought by which he attained to his grand inference. He surveys his mass of evidence drawn from vivisections, and his reflections on them; on the structure of the heart and of its ventricles; on the symmetry and size of the conduits which enter into and issue from them; on the arrangement and intimate structure of the valves, with many things besides; and then, frequently and seriously revolving in his mind what might be the quantity of blood transmitted, in what time, and the like, and deeming it impossible that this quantity could be supplied by the juices of the ingested aliment, without draining the veins on the one hand, or rupturing the arteries on the other, unless the blood should somehow find its way from the arteries into the veins, and so return to the right side of the heart, "I began", he says, "to think whether there might not be a *motion as it were in a circle*. Now this I afterwards found to be true."

I proceed with my analysis. Harvey begins by telling us what he saw on exposing to view the heart of a living animal, especially such "colder animals" as frogs, serpents, small fishes, snails, and the like; or such warmblooded animals as dogs and hogs, when the heart begins to flag. There is a time when the heart moves, and a time when it is motionless: and when it moves, it grows hard and tense; when it does not move, it is soft and flaccid. This difference may be both seen and felt in the heart of an eel taken out of the body; and, in all colder blooded animals, the heart which grows pale as it moves, takes a deep red colour when it becomes quiescent; pale in the one case, because this motion is a muscular contraction which squeezes out the blood; red in the other, because the muscular walls relax, and the blood flows into the cavity. That this is so, is plain from the fact that, if the ventricle be pierced, the blood spurts out each time the heart moves, and grows tense; and, when the heart as a whole has ceased to beat; but the auricles still contract, if the finger be placed on the ventricles, each contraction is felt as a pulse, and, if the point of the heart be cut off with a pair of scissors, blood flows with each beat.

Putting together all his many observations and experiments on this division of his subject, Harvey concluded that the heart moves in two times and four places; that the auricles first contract together, then the ventricles; and that (speaking of the ventricles alone as the heart) these things happen in our bodies at the same instant: the tension of the heart, the pulse at its apex, felt striking against its ribs; the thickening of its walls; and the forcible expulsion of the blood it contains by the contraction of the ventricles.

Harvey has completely mastered the heart's motions. He knows all about them as well as we do now; and, in discovering the truth, sweeps away these errors: that the heart dilating, draws blood into its ventricles; that when it strikes the breast, its ventricles are distended with blood; that its fibres contract (as Vesalius thought they did) like a bundle of twigs bulging in the centre, whereas the fibres

acting together, constrict the heart and make it tense; and that (as Bauhin and Riolan asserted) it has four motions distinct in time and place: two proper to the auricles, two to the ventricles.

I must not stop to notice the multitude of curious facts by which Harvey illustrates this division of his subject; nor what use he makes of the magnifying glass to watch the heart's beat in such creatures as slugs and snails, crabs, wasps, and flies, and that convenient transparent shrimp taken in the Thames and in the sea, in which the heart is seen as through a window; nor, again, those observations, so minute and exact, relating to the first appearance in the embryo of the "pulsating drop of blood", and gradual development of the heart.

From the motions of the heart, Harvey leads us on to those of the arteries, as seen in living animals. He tells us that, at the moment the heart contracts and strikes the breast (the heart's systole), the arteries are dilated and yield a pulse (their diastole); and that this happens with the right ventricle and pulmonary artery equally with the left ventricle and aorta; also that the contraction of the left ventricle and the pulse in the arteries are cause and effect. If the one cease, the other stops; as the one is strong or weak, so is the other. The pulse is small and weak in aneurism, of which Harvey gives a case; for then the blood is diverted into the tumour, and so intercepted. Again, when the artery is punctured or divided, the blood is seen to spout forth with violence the instant the ventricle contracts. This is true of all arteries: of the pulmonary artery; of the vessel which leads from the heart of a fish to its gills.

Here again Harvey finds an error to correct. It was the commonly received opinion, that the arteries are filled by expanding like bellows. He illustrates the true state of the case by the analogy of blowing into a glove. At the same time, he takes occasion to give Aristotle his due, who says that "the blood of all animals palpitates within their veins (meaning the arteries), and by the pulse is sent everywhere simultaneously"; that these vessels "all depend upon the heart", and move with it.

Passing now from the motions of the heart to the large vessels that enter and leave it, Harvey takes in hand the circulation through the lungs, and finds himself freed from the doubts and difficulties which perplexed other men, by enlisting on his side that comparative anatomy and those vivisections which they had neglected; for he tells them that they do amiss when they (as most anatomists do) limit their researches to the human body, and that when it is dead.

First, then, he tells us that in fishes, which have no lungs to embarrass the inquiry, but a sac like an auricle, a single ventricle, and a vessel analogous to an artery, the blood may be seen to be driven into the vessel at each beat of the heart, and, if the vessel be divided, to issue in jets. Again, in toads, frogs, serpents, and lizards, which have lungs in a certain sense, and a voice, the blood is transferred, as in the higher animals, from veins to arteries by the action of the heart; their case being, to all intents and purposes, that of a man in whom the septum of the heart should be perforated or removed, or one ventricle made out of two: a state of things which really does exist in the embryos of those animals that have lungs, as Harvey proceeds to prove in the course of a luminous description of the fetal heart and large vessels, both in man and in animals.

And here, again, Harvey has to correct the errors of others—of those who alleged that the large foetal vessels which are closed after birth, when the lungs take on their proper function, exist only for the nutrition of the lungs; and of others who asserted that the heart of the embryo does not pulsate. This last assertion is plainly false; for he, and Aristotle before him, saw the reverse in the incubated egg, and in embryos just removed from the womb.

In most animals, then, and in all up to the period of their birth, the blood passes from veins to arteries by the action of the heart, and it is obvious that, in creatures which have no lungs, one ventricle (the left) would suffice to distribute the blood over the body; but (and here Harvey, as is his wont, personifies Nature), when she ordained that the same blood should percolate the lungs, she saw herself compelled to add another ventricle (the right), which should force the blood from the vena cava through the lungs into the left ventricle. The right ventricle, therefore, may be said to be made for the sake of the lungs, and for the transmission of the blood through them, not for their nutrition; for it were unreasonable to suppose that the lungs require more blood for this purpose, and that blood more pure and spirituous (as coming direct from the heart), than the brain, or the eye, or the heart itself.

Some there were in Harvey's days who denied that the whole mass of the blood could pass through the substance of the lungs; and to these he opposes admitted facts relating to the skin, kidneys, and liver, especially the kidneys and liver, which have so dense a texture when compared with the light spongy lungs. Drink swallowed by the gallow

will pass off from the body in an hour or two, and yet it must first traverse the liver and the kidneys to reach the bladder. The liver is a special case in point, for there is no propelling power; while in the lungs there is the force of the right ventricle and the movements of respiration to help the onward course of the blood. Columbus, then, was right when he inferred from the size and structure of the pulmonary vessels, and their constant state of repletion, that there was a passage for the blood through the lungs; and Galen might be quoted to the same purport, and especially as insisting on the function of the valves of the heart and great arteries, permitting an onward course of the blood, but preventing all regurgitation.

Having satisfied himself respecting the lesser circulation through the lungs, and taken note also of that other circuit by which the heart itself is nourished, Harvey proceeds to the greater circulation throughout the body, and has something so novel and unheard-of to say about the quantity and source of the blood which passes from the veins into the arteries, that he fears to give it expression, lest he should stir up the envy of a few, and excite the enmity of mankind at large, in whom custom has become a second nature, doctrines once sown have struck deep root, and antiquity inspired respect. Still the die is cast; and Harvey, placing his trust in his own love of truth and the candour inherent in cultivated minds, proceeds to pass in review his stores of knowledge in terms I have already quoted; and, laying special stress on his subtle and profound argument, based on the obvious impossibility of the circulating system—heart, veins, and arteries—holding together, unless there were "A MOTION AS IT WERE IN A CIRCLE", indulges in a lofty flight of poetic expressions. He compares the blood forced by the left ventricle into the arteries, and so distributed to every part of the body, then finding its way through the veins and vena cava round to the right ventricle, which, in its turn, sends it through the pulmonary artery to the lungs, to return by the pulmonary veins to the left side of the heart, to what Aristotle says of the air and rain emulating the circular motion of the superior bodies. As the vapours drawn upwards from the moist earth warmed by the sun, descend as rain to moisten the earth again, so it is with the blood. Cooled, coagulated, and rendered effete by contact with the various parts of the body, it is brought back again to its sovereign, the heart, as to its source or inmost home, there to recover its excellent and perfect state, to resume its due fluidity and natural heat (powerful, fervid, a kind of treasury of life), to be impregnated with spirits, as it were with balsam, and so sent back on the old errand of nourishing, cherishing, and quickening every part of the frame. The heart consequently is the beginning of life, the sun of the microcosm, even as the sun might be called the heart of the world; for by the virtue and pulse of the heart the blood is moved, perfected, made apt to nourish, and preserved from corruption and coagulation. It is the household divinity which nourishes, cherishes, quickens the whole body—the foundation of life, the source of all action.

I stop for a moment to remark that, at the time Harvey wrote, nearly a century and a half was yet to elapse ere the chemical discoveries of Priestley superseded poetry by fact, and transferred to the laboratory of the lungs those life-giving changes which Harvey and his contemporaries thought they saw carried on in the workshop of the heart.

The consideration that inspired this poetic outburst of Harvey's was this: that the quantity of blood circling through the body in some given short space of time is far too large to be supplied by the ingesta, or used up in the process of nutrition. Harvey had gauged the left ventricle of the heart, and found it to hold upwards of two ounces of blood; and, reducing his estimate of the quantity sent out at each contraction, and prevented from returning by the action of the valves, to the absurdly low figure of one drachm (and all the world, he says, allows that with every systole something is projected), he calculates thus: In half an hour, the heart beats more than two thousand times, and so sends forth in that short space of time more blood than the whole body contains. Say that, in the sheep or dog, a single scruple of blood passes with each stroke of the heart; then, in one half-hour about three-and-a-half pounds of blood would be injected into the aorta. This approaches the whole quantity which their bodies contain, for Harvey ascertained that in the sheep this does not amount to more than four pounds.

But, if any one should object that the nutritive fluid derived from the food might quickly pass through the body in the guise of some abundant secretion, such as the milk, Harvey meets the objection by first naming the quantity of milk which an animal will yield in twenty-four hours, and then affirming that the heart by computation sends forth as much or more blood in an hour or two.

Passing over certain details relating to the quantity of blood in the body, and also to the causes which determine the frequency of the

pulse, we come upon certain corroborative facts drawn from the phenomena of hemorrhage. Divide but a small artery, and the whole blood of the body will drain away in some half hour or less; and the same thing occurs very rapidly in amputations and the removal of tumours. When a butcher, again, cuts the throat of an ox, the whole mass of blood will escape in less than a quarter of an hour; and when an artery only is divided, the same thing happens, the blood spurting forth abundantly, impetuously, as if propelled by a syringe. But, if the butcher did not cut the ox's throat, after he had stunned it, till the heart had ceased to beat, he could not bleed the carcass effectually.

That the arteries receive blood from the veins no otherwise than by transmission through the heart, is proved by the simple experiment of tying the aorta at the base of the heart, when, if the carotid, or any other artery, be opened, it will be found empty, while the veins are full. And now we see why, after death, the veins contain so much, and the arteries so little, blood; the right ventricle so much, the left so little; facts which probably led the ancients to believe that the arteries (as their name implies) contained, during life, nothing but spirits. Harvey surmises that this is due to the fact, that the action of the heart outlives the movements of respiration, so that blood is sent to the body, while none is received from the lungs. At this point Harvey makes a direct appeal to the evidence of the senses. He says: "If a live snake be laid open, the heart will be seen beating quietly and distinctly for more than an hour, propelling its contents, becoming pale during systole, of a deeper tint during diastole. Now seize the vein with a forceps, or pinch it between finger and thumb, and the part between the point of pressure and the heart immediately becomes empty, while the heart itself grows paler and smaller, beats more slowly, and at length seems about to die; but remove the impediment, and the heart resumes both colour and size. Now compress or tie the artery instead of the vein, and the part between the obstacle and the heart, and the heart itself, become inordinately distended, take on a deep purple colour, and at length are oppressed, and even choked, with blood; but remove the obstacle, and all things at once resume their pristine state—the heart regains its colour, size, and stroke." All this "may be observed more clearly than the noon-day sun"; and we have before us illustrations of "two kinds of death—extinction from deficiency, and suffocation from excess". The last of these forms of death Harvey recognised several times within two hours of death, and before the colour had left the face, in the bodies of men who had been hanged; and he had shown to many witnesses the right auricle and lungs distended with blood, and the auricle in particular as large as a man's fist, and so full that it looked as if it would burst.

Referring to this vivisection of a snake in his second dissertation addressed to Kiolan, Harvey describes the vivisection of a fallow deer, at which many of the nobility, and his most serene Majesty the King, his master, were present. The internal jugular vein was exposed and divided, when only a few drops of blood were observed to escape from the lower orifice, while "a round torrent of blood" gushed forth from the upper orifice, coming down from the head.

And here, as lending an incidental interest to the life of Harvey, I may remind you of the many occasions on which our great anatomist and physiologist bears testimony to the personal interest the King, Queen, and Court took in his inquiries. Harvey, as is well known, was allowed to make what use he pleased of the royal herds of deer in his studies both of the circulation and generation; and he tells us how he often showed the King the uterus of the doe in the early stages of conception, and the *punctum saliens* beating "beautifully distinct" in the sun's light; and once also to the King and Queen what he describes as "a most agreeable natural spectacle" derived from the same source. When he comes across a most curious specimen of a perfect egg within a perfect egg, he forthwith makes the King partaker of his delight. And when people tell his serene Majesty King Charles of a certain young nobleman who, in consequence of a fracture of the ribs of the left side, had come to have a large opening there, and a sort of sac, within which, as had been supposed, the lung protruded, Harvey is sent on an errand of inspection; and having discovered that it was not the lung but the heart that had been thus strangely exposed to sight and touch, Harvey, instead of taking to the King a verbal answer, takes the young man himself, "that his Majesty might with his own eyes behold this wonderful case"—this "man alive and well", in whom he might, "without detriment to the individual, observe the movement of the heart, and with his proper hand even touch the ventricles as they contracted". Having done so, "his most Excellent Majesty, as well as myself, acknowledged that the heart was without the sense of touch, for the youth never knew when we touched his heart, except by the sight, or the sensation he had through the external integument". Thus did royalty in the least fortunate of its representatives, and science in one of the worthiest of her sons, mutually do honour to each other,

leaving behind them an example which, let us hope, will never fail to influence our kings and philosophers in days to come. Whatever the faults of Charles the First, neglect of science is certainly not to be numbered among them.

The circulation of the blood in parts remote from the heart Harvey demonstrates by the twofold process of describing the exact forms and positions of the valves of the veins, and making a series of simple experiments on the veins of the forearm, swollen by the ligature of the upper arm applied as in bleeding.

As to the valves of the veins, neither Sylvius, their discoverer, nor succeeding anatomists, rightly understood their use. But Harvey, by careful dissection, and passing a probe either way, arrives at the conclusion that "the valves are solely made and instituted lest the blood should pass from the greater into the lesser veins", thus favouring its motion from the lesser to the larger branches, and furnishing a conclusive argument for a circulation.

By applying a bandage above the elbow, as in bleeding from the arm, Harvey shows the site of the valves, and by the pressure of the finger, and "streaking" the blood in one direction and the other, demonstrates their action, and the movement of the blood from smaller veins to larger, always in the direction that leads to the heart. And here, reverting to his favourite argument, based on figures, Harvey bids us select some length of vein, assume it to be able to hold some given quantity of blood, empty it by "streaking"; suppose this process repeated for, say, a thousand times, and then judge for ourselves what quantity of blood must be always passing towards the heart, and what sure evidence its passage affords of a circulation.

We who come to the study of the circulation with minds prepared to accept the evidence of facts and the force of arguments, can scarcely appreciate the difficulty Harvey had in convincing some of his contemporaries, whose minds were preoccupied by certain prevailing errors. I will mention four of them.

The first consisted in imagining a passage for the blood from the right to the left ventricle of the heart through the septum; the second in assuming an equally unreal anastomosis somewhere between the large arteries and veins; the third, that the arteries dilate after the manner of bellows, and so occasion the pulse; and the fourth, that the arteries do not contain and carry blood, but air.

Harvey meets the first of these errors by denying the state of things which they allege, as well as by statements which prove the extent and precision of his anatomical knowledge. As to communications between the two sides of the heart, he does not see them; and as to these anastomoses, he searches for them in vain in all the principal viscera, even when he resorts to the artifice of rendering them so friable by boiling, that he could shake their tissue-like dust from even the capillary filaments.

The third fallacy, which attributed the pulse to "a power communicated from the heart through the coats of the arteries, and not to the shock of the blood contained within them", thus making "the coats of the vessel the cause of the pulse", rested on the experiment of tying the artery upon a tube inserted within it—an experiment which Vesalius and Galen prescribed, but Harvey really performed. They assumed that the part beyond the tube would not pulsate, but he finds that it does; and, by way of confirmation, adduces the case of a nobleman, his "very particular friend", whose "most attentive physician" he was. From the body of this nobleman Harvey removed part of the descending aorta, about a span long, with the two crural trunks. They had been converted into bone, and yet he had often noted the pulse in the legs and feet of this patient while he lived. Here was an experiment of Nature's own making; the bony artery was the exact counterpart of the rigid tube, and yet the facts of the case distinctly contradicted the hypothesis of which Harvey was exposing the unsoundness.

The fourth error Harvey had to combat, instead of being an unfounded assertion, was an inference based upon a fact. I will show you how Harvey refutes this fallacy, and so give you a good illustration of his method of procedure, and bring this, my analysis, to a close.

When Harvey's predecessors opened a dead body, they found the arteries nearly or quite empty, and the veins full; and accordingly they inferred, with Erasistratus, that the arteries contained only "aerial spirits". Harvey begins his work of correction by observing that this empty state of the arterial system occurs only in that kind of death which begins in the lungs, not when the heart ceases to beat and the lungs to act at the same moment of time, as happens in more than one form of sudden death. An universal truth had therefore been assumed from a common, but still only an occasional, occurrence. And these "aerial spirits", with which the imagination had peopled the arterial system, what were they? What their consistency? Are they separate and distinct from the blood and the solids, or mingled with them? Harvey had never been able to find any of them—neither *natural*

spirits in the veins, nor *vital spirits* in the arteries, nor *animal spirits* in the brain or nerves. The ancients, need I say? never found an empty space in brain, heart, or arteries, but, convinced of nature's horror of a vacuum, they filled it with spirits. Indeed, they fancied as many spirits as there are faculties or organs. But Harvey saw in these creations of the fancy "the common subterfuge of ignorance", alleging that "persons of limited information" used them, as indifferent poets do the gods, whenever they have a plot to unravel or a catastrophe to bring about; or as the vulgar and unlettered refer the causes of events they do not understand to the immediate interposition of the Deity. If these spirits of which people speak so confidently are of the nature of the air that issues from the breathing organs of animals, then, if an artery or vein from which blood is flowing be plunged under water or oil, the spirits will show themselves by "a succession of visible bubbles". But this does not happen with the blood, though it does with all drowning creatures without exception.

I have entered thus far into detail, at the risk of being deemed tedious, that I may create in your minds the impression which the study of Harvey's works has left upon my own, that the discovery of the circulation was a discovery in the best and fullest sense of the word. It was no mere hypothesis, suggested by analogy, and supported by a fact or two, destined some day to be cited by some learned man as an anticipation of a discovery rightly so called, but a demonstration complete and perfect up to the extreme limits of our then existing knowledge—a demonstration the more remarkable for as much as the composition of the "fuliginous vapour" discharged from the lungs was then unknown, and the chemical necessity of a pulmonary circulation unexplained; and the magnifying-glass through which Harvey had seen the movements of the heart in the transparent shrimp taken from the Thames had yet to be developed into the powerful compound microscope through which we now see the unbroken capillary circulation in the frog's foot.

The circulation of the blood, then, was not a discovery merely, but a demonstration; and this demonstration was in part a refutation of ancient and prevalent errors, but also a revelation of new truths wrought out by as felicitous a combination of original talent, acquired learning, and unwearied industry as ever met in one man.

Fresh as I am from the study of Harvey's works, I confess myself at a loss which most to admire: his rare endowments, or the use he had made of them. If his natural gifts were great, they were not greater than the resources his industry created. The objects of his study at one time shine in the clear pure light of an unclouded intellect, at another they glow with all the rich tints of a poetic fancy. He is as ingenious in devising experiments, as skilful in performing them. He displays all the logical acumen of an Aristotle, all the industry of a Hunter. He brings to bear on his subject a large and exact knowledge of anatomy, human and comparative, healthy and morbid, and of intra-uterine life, and he makes, for the time in which he lived, an unwonted use of vivisection. And here I may remark that no thought of cruelty, no misgiving as to the lawfulness of the proceeding, ever seems to have crossed his mind.

But what has impressed me most strongly in studying Harvey's works, is the fine logical faculty which, so to speak, pervades and permeates the whole mass, and struggling for distinct and independent expression, breaks forth into clear enunciations of the principles of that philosophy which the great Italian genius Leonardo da Vinci first announced, and Harvey's contemporary Lord Bacon recommended to the world with all the force and eloquence of a practised advocate. Harvey, indeed, seems to have carried on together the demonstration of a great truth, and the vindication of the methods by which all truths must be explored and established. So that we have only to search out, extract, and arrange these abstract utterances of his, in order to construct a complete system of scientific logic; just as we might, if we pleased, bring forth from one part or other of his masterpieces perfect illustrations of all the logical methods which John Stuart Mill arranges in order in his great work on logic.

That Harvey did really claim to be not a discoverer only, but also a teacher of new logic, may be inferred from the very title of the second section of the introduction to his work on Animal Generation:—"Of the Manner and Order of acquiring Knowledge." Indeed he tells us in express terms that, in treating on animal generation, he is anxious not merely to set forth "the sure and obvious truth", but also to exhibit "the method of investigation" which he followed, in order to "propose to the studious" "a new" and "safer way to the attainment of knowledge". And here let it be well understood, that Harvey seeks rather to revive than to overturn the method of the ancients, whose "unwearied labour and variety of experiments, and especially the industry of ancient Greece", he warmly commends. Nor does he ignore or despise the logical teachings of Aristotle; for after giving us his own

views respecting "the manner and order of acquiring knowledge" in one chapter, he presents us in another with a dissertation on "the same matters, according to Aristotle", whom "foremost of all among the ancients" he follows as his leader.

Harvey, preeminently a practical man; the accurate observer; ingenious in devising, skilful in performing experiments, the practised logician and acute critic of the views of others about matters which he himself studies and understands, can appreciate the great Greek philosopher whom Bacon, the man of the closet and study, industriously depreciates. This being so, what, you may ask, is it that Harvey complains of in the scientific habits and methods of his contemporaries? what does he find to reform and amend? Aristotle was in the right. Harvey in the main approves his method and his logic. How, then, have Harvey's contemporaries exposed themselves to rebuke and correction? Simply by lacking the industry for which he gives the ancients credit. For Harvey tells us that it was "the custom, or vice rather, of the age" he lived in, that men preferred going idly "wrong with the many" to become industriously "wise with the few". Hence a method of investigating truth "erroneous and almost foolish", content with asking what others had said, instead of inquiring whether things were so or not: substituting verisimilitudes, and "knotty, and captious, and petty disputations", for truths; passing off other men's discoveries as their own; their ideas, "false fancies and empty visions", their knowledge but "a waking dream, or such a delirium as the sick fancy engenders". From this sickly state, this idleness and indolence, this lazy satisfaction with existing knowledge, this quenching of the spirit of scientific adventure, Harvey would rouse his contemporaries to exertion. He tells them how they may arrive at the "citadel of truth" by following the traces of nature, with open eyes, "through devious but most assured ways", rising from inferior to superior levels, till at length they penetrate into "the heart of her mystery". In this pursuit of truth "it is sweet", he says, "not merely to toil, but even to grow weary", for "the pains of discovering are amply compensated by the pleasures of discovery".

Harvey, then, would fain convert men from idleness to industry. But how is this industry to display itself? Not in inventing words, but in observing things. For as there is nothing in the understanding which was not first in the sense (the well known *dictum* of Aristotle), or, as Harvey puts it, "no certain and definite idea which has not derived its origin from the senses", it is to the senses we must have recourse; first inquiring whether a "thing be or not, before asking wherefore it is", bringing all assertions "to the proof of sense" and admitting or rejecting them according to its decisions. This is the tribunal to which Harvey refers all that he has said respecting the circulation—to the "senses" not to the "reason", to "ocular inspection", not to any "process of the mind"; for "the facts cognisable by the senses wait upon no opinions", "the works of nature bow to no antiquity, for, indeed, there is nothing either more ancient or of higher authority than nature"—nature, as Harvey is never tired of calling her, nature "ever perfect and divine", ever in harmony with herself, never doing anything amiss or in vain, ever acting with admirable skill and foresight.

And here I am again reminded of Harvey's habit of personification—"a habit born and bred of that fine frenzy" which the discoverer shares with the poet, inspiring him with thoughts of the possible, and so setting him on the track of the actual. For the philosopher, with his "scientific insight", is as truly a poet as if he wrote verses—a poet and something more. Hence we hear without surprise that Harvey, the discoverer, who is found studying mathematics, and working geometric problems within a short period of his death, finds in the pages of Virgil a perpetual spring of rapturous delight. And as the sailor personifies his ship and the engineer his locomotive, and all men everywhere the sun, moon, and stars, so Harvey puts not life only, but thought, will, power into the heart and blood. Of this his tendency to personification I have already given one example from his treatise on the circulation. I will add two others from his work on generation. Speaking of the heart, about which he has thought so often and so much, he says: "The vesicle and pulsating point construct the rest of the body as their future dwelling place; "developed into" the heart, it enters and conceals itself within its habitation, which it vivifies and governs, and applying the ribs and sternum as a defence, it walls itself about. And there it abides, the household divinity, first seat of the soul, prime receptacle of the innate heat, perennial centre of animal action; source and origin of all the faculties, only solace in adversity!" Of the blood, which Harvey saw coming into existence in the embryo before the heart itself, he says, there is "a spirit or certain force" inherent in it, superior to "the power of the elements, very conspicuously displayed in the nutrition and preservation of the several parts of the animal body; and the nature, yea, the soul in this spirit and blood, is identical

with the essence of the stars". The blood is "spirit", a something "celestial", "analogous to heaven, vicarious of heaven"!

Here, and not here only, but sometimes when treating of the circulation, often when discoursing on generation, we lose sight of Harvey the discoverer, with his foot firmly planted on the earth, to see in his place Harvey the mystic, floating indistinctly in the clouds, in company with Democritus, Leucippus, and their atoms; Euloxus and his pupil Epicurus, with their theory of pleasure as the chief good, Empedocles and Hippocrates misleading Aristotle by their doctrine of the four elements; Pythagoras and Plato, interpreters of the fantastic notions of the ancient Thebans. But Harvey is not at home in cloud-land. His fine faculties fail him there. He is not only obscure but inconsistent, reproving in others what he allows in himself; over and over again speaking of occult forces as being of the essence of the stars, and yet objecting to other men that "they bring gods upon the scene", that they "encumber philosophy with fanciful conceits", and derive from the stars what is produced at home. Sometimes too, but, it must be confessed not often, Harvey seems to promote to the place of a personal God, whose existence and attributes as creator and preserver he humbly recognises, some mysterious impersonal force. Harvey has also been accused of credulity in accepting the evidence of an eye witness (an intimate friend) respecting the existence in Borneo of a race of human beings with tails; and in attributing the dispersion of certain tumours to the application of a dead man's hand. Our authority for this last statement is Robert Boyle, who says that Harvey told him he had sometimes tried this strange remedy "fruitlessly, but often good success". It is to Boyle, too, that we are indebted for the information, derived, as he tells us, from Harvey himself, that his dissection of the valves of the veins led him to the discovery of the circulation. For my part, I think the account I have extracted from Harvey's works the more feasible.

Need I tell you that Harvey does not stand alone among great discoverers in thus displaying an easy belief in matters that lie beyond the sphere of their own special inquiries; or that in this case, as in theirs, to take no note of such matters would be to substitute an impossible hero for a truly great man. The portrait of the discoverer of the circulation will not be the worse for a few shadows. They will but make it the more real.

What now remains to be said of Harvey must be said in as few words as possible. Let us first weigh his great discovery in his own scales. This is what Harvey himself says of it: "Reflecting on every part of medicine, physiology, pathology, semeiotics, therapeutics, when I see how many questions can be answered, how many doubts resolved, how much obscurity illustrated, by the truth we have declared, the light we have made to shine, I see a field of such vast extent in which I might proceed so far, and expatiate so widely, that this my tractate would not only swell into a volume, but my whole life, perchance, would not suffice for its completion"; and again, after noting some of the leading changes in the circulation brought about by causes bodily and mental, he says:—"Such a flood of light and truth breaks in upon me here; occasion offers of explaining so many problems, of resolving so many doubts, of discovering the causes of so many slighter and more serious diseases, and for suggesting remedies for their cure, that the subject seems almost to demand a separate treatise." These were no idle words; for in his work on generation, where we should scarcely expect to meet with such statements, Harvey says, "I have occasionally, and against all expectation, completely cured enormous sarcoceles, by the simple means of dividing or tying the little artery that supplied them, and so preventing all access of nourishment . . . to the part affected; by which it came to pass that the tumour on the verge of mortification was afterwards easily extirpated with the knife or the searing-iron." And then Harvey gives us a case of a fatty tumour of the scrotum, larger than a man's head, and hanging as low as the knees, which he succeeded in removing without sacrificing the important organs involved in it. This case was but one of many "accomplished in opposition to vulgar opinion, and by unusual procedures";—a statement fully borne out by a perusal of Harvey's works. But even had it not been so, I should have given Harvey credit for being as good a judge of the originality of his methods of treatment as of the justice of his claim to have discovered the circulation. Certain it is that Harvey himself looked upon that discovery as on a very fruitful field, and that his own experience justified him in so doing. And we may take it that he either had written, or was preparing to write, several works on physiology, pathology, and therapeutics, of which the titles only are to be found scattered through his works; but which, had they seen the light, would have proved him to be no idle boaster. His treatise on the circulation would have been enlarged and supplemented by a *Physiology and particular treatise on the Blood, by Disquisitions on the Respiration of Animals*, by an essay on *The Causes, Uses, and Organs of Respira-*

tion, and by a work on *Physiology*; and we should have had the results of his experience as a practitioner set forth in his *Medical Observations, his Medical Observations and Pathology, and his Medical Anatomy, or Anatomy in its application to Medicine*. Add to this evidence, if not of views committed to writing, at least of ample material collected, the preparations and writings which a puritan mob destroyed, and the books, objects of curiosity, and surgical instruments which the great fire of London consumed, to the irreparable injury of this College, and we have before us proofs of an unwearied industry guided by rare intelligence and practical tact, which it is no injustice to the greatest men who have preceded and followed him to characterise as unrivalled.

If we would judge of the spirit and temper in which Harvey worked, we must listen to the language of his old age, as he takes a mournful retrospect of his first great trouble and heavy loss. "Let gentle minds forgive me, if, recalling the irreparable injuries I have suffered, I here give vent to a sigh. This is the cause of my sorrow:—whilst in attendance on his majesty the King during our late troubles and more than civil wars, not only with the permission but by command of the Parliament, certain rapacious bands stripped not only my house of all its furniture, but what is subject of far greater regret with me, my enemies abstracted from my museum the fruits of many years of toil. Whence it has come to pass that many observations, particularly on the generation of insects, have perished, with detriment, I venture to say, to the republic of letters." This language, so self-restrained, so gently sorrowful, reminds one irresistibly of the plaint of Priestley, who suffered a like injury at the hands of a mob, and of the touching apostrophe of Newton to the little pet that had set his papers on fire. Such has ever been the spirit of those who have done and suffered most in the service of mankind; and I may add that I have been irresistibly struck with the curious coincidence between the words of Harvey and Priestley, and in the expressions used by Harvey when he reluctantly gave over his manuscript on Generation to Sir George Ent, and by Jenner when he resisted the first efforts made to transfer him from the modest retirement of Berkeley to the busy turmoil of London life. Nor is the coincidence less complete between the will of Harvey and that of Howard, in which, after making their humble profession of faith, they prove to their friends and poor dependents that not one of them had been forgotten. But I must hasten to a close, leaving unsaid many things which I had noted as worthy of record.

I began this lecture by presenting to you Harvey, the aged philosopher, endowing the College with his paternal estate, and providing for the annual delivery of the oration that bears his name. It is Harvey, the old man, whose words I shall finish by quoting, and it is Sir George Ent, on the errand that secured for us Harvey's Work on Generation, who speaks:—"I found him," he says, "Democritus like, busy with the study of natural things, his countenance cheerful, his mind serene, embracing all within its sphere." In answer to his salutation, Harvey, referring to the miserable distractions of the time, says:—"Did I not find solace in my studies, and a balm for my spirit in the memory of my observations of former years, I should feel little desire for longer life. But so it has been, that this life of obscurity, this vacation from public business, which causes tedium and disgust to so many, has proved a sovereign remedy to me." Again, in one of his letters to Nardi of Florence, in which he treats of some obscure matters connected with generation, he says: "I myself, though verging on my eightieth year, and sorely failing in bodily strength, nevertheless, feel my mind still vigorous, so that I continue to give myself up with the greatest pleasure to studies of this kind."

To incite the fellows and members of this College "to search and study out the secrets of nature by way of experiment" was, you may remember, a duty imposed on the Harveian orator. What better course, I ask myself and you, is open to him to promote this object, than to present Harvey, the discoverer, in his old age, still finding "the greatest pleasure" in his studies, and a solace and balm to his spirit in the memory of his observations of former years; realising to the full the truth of his own words, that the "pains of discovering are amply compensated by the pleasure of discovery".

There sits the aged philosopher, the toil and weariness of the past transformed into tranquil satisfaction, as his mind's eye rests on some spot once dark and barren, now bright and fruitful, bathed in the "flood of light and truth," which he has shed upon it; or peering into the unrevealed future, "dark with excess of light", feeling even then what we know now, that in the sense in which "a thing of beauty is a joy for ever", a truth discovered and established is an everlasting gain, conferring on generations yet to come, in the life that now is, priceless benefits, some by direct application, some through indirect and unexpected developments.

Even in the obscure future, Harvey might have discerned thus much, that through the long stride he had taken among the many steps that

lead from ignorance to perfect knowledge, minds that might have continued to be busied and puzzled with the unsettled problem of the circulation, would be set free to engage in other and more profitable inquiries; that no one could henceforth devote himself to the study of any matter relating to the physiology of the human frame, but must own himself in some degree his debtor; that every physician every time he felt a pulse, would have a more intelligent appreciation of its indications, every surgeon who should staunch a hæmorrhage, or tie an artery, or perform an operation, would do it with a firmer hand, in consequence of his discovery of the circulation.

And these annual orations!—may we not venture to hope that in as far as, year by year, they faithfully pourtray Harvey, in his studious youth, busy manhood, and serene old age, they promote the objects he had in view, supplying with motive, example and encouragement, all who are now striving to render the life that now is longer, healthier, pleasanter, happier, by manifold methods of cure, palliation and prevention; in full assurance that true knowledge is real power; and that, if we make the discovery of truth our motive, and use intelligent industry as our means, we shall not miss some portion of that rich reward which fell in unwonted measure to the lot of him whose “immortal memory” we honour this day, for this among other reasons, that he conferred upon us, in the full practical sense of the words, the *Discovery of the Circulation of the Blood*.

POSTSCRIPT.—It will be seen that, throughout my Harveian Oration, as now published, I have abstained from the use of notes; for I was anxious to present to the reader a continuous unbroken text. But it is the more necessary that I should acknowledge the obligations I have incurred to the elegant and scholarly translation of the works of Harvey made for the Sydenham Society by Dr. Robert Willis. It is his English version that I quote throughout.

For facts and dates relating to the life of Harvey, I am indebted partly to the same source, and partly to the *Roll of the Royal College of Physicians*, compiled by our learned librarian Dr. Munk.

What I have said on the subject of Harvey's belief in the efficacy of the hand of a corpse, and on the origin of the inquiries which led to his discovery of the circulation of the blood, will be found borne out by reference to *The Works of the Honourable Robert Boyle*, published in six volumes quarto in 1772. The passages to which I have referred occur in vol. ii, p. 167 and vol. v, p. 427.

This handsome and complete edition of the Works of the Christian Philosopher will be found in the Library of the College.

CASE OF STERILITY FROM ANTEFLEXION OF THE UTERUS, AND CONSTRICTION OF THE INTERNAL OS UTERI, CURED.

By HEYWOOD SMITH, M.A., M.D.,

Physician to the Hospital for Women and the British Lying-in Hospital.

OF all the causes of sterility depending on malposition of the uterus, that of anteflexion is the most frequent. Other malpositions of the uterus, except marked retroversion, leave the cervix uteri depending into the posterior original *cul-de-sac* in the dorsal decubitus; but in acute (I here use the word acute with regard to the angle, not time) anteflexion, the os uteri is lifted out of the posterior *cul-de-sac*, and placed in a position unfavourable for the imbibition of the semen. Anteflexion, dysmenorrhœa, and sterility, are three conditions so frequently associated, that, when a patient comes complaining of dysmenorrhœa, and is also barren, a vaginal examination more often reveals anteflexion than any other condition. And here it may be noticed that it is the dysmenorrhœa that causes the patient to seek for advice. Among the applicants for relief at hospitals, pain is that for which medical advice is generally sought, seldom barrenness. The latter is either considered a blessing, or women give themselves up to their fate, never for a moment supposing that such a condition is remediable; whereas among the upper classes, when property or name are at stake, medical men are more frequently consulted for relief from barrenness; and in such cases, pain not necessarily being an element of complaint, the sterility may be found to depend on many causes other than flexion. It is therefore, perhaps, more among the poorer classes that favourable results, as far as sterility is concerned, may be looked for from operation and treatment for the cure of anteflexion, and for the relief of obstructive dysmenorrhœa.

E. S., aged 29, married six years, became an out-patient at the Hospital for Women, February 20th, 1871. The catamenia commenced at the age of 18; they were regular, with some pain generally before the flow. The passage of a thick sound before the period lessened the

pain. She was admitted into the hospital on July 3rd, 1871. The uterus was normal in size; a thick sound could be passed after some gradual pressure, and the constriction held the sound rather firmly. On July 13th, Dr. Protheroe Smith's uterine dilator was used to half an inch. On the 17th, the dilator was used to three-fourths of an inch, and the constriction at the internal os divided bilaterally with a straight knife, as well as the external os slightly, and a spring metallic (Greenhalgh's) stem introduced. On the 19th, the stem was extended half its length, with some forcing pains, and was replaced. On the 23rd, the patient was free from pain. A slight blood-stained discharge continued. On the 26th, the stem was removed; and on July 31st, the patient was discharged.

In April of the following year (1872), she was seen again. The external os was divided a little more freely, and the spring stem again introduced. It remained in altogether nearly three weeks. The patient continued under observation from that time, the thick sound being occasionally passed until conception took place, after the catamenia of November 13th, 1873; and she was delivered of a living female child on August 31st, 1874.

The above case is given in order to encourage practitioners not to lose sight of a case after operation for dilatation of stricture of the internal os, because pregnancy does not immediately follow, but to persevere, by the occasional passage of the thick sound, to maintain the cervical canal in a state of sufficient patency.

Moreover, it often happens that, for some time after forcible dilatation, there may exist some chronic irritation of the cervical mucous membrane with or without granular inflammation of the labia uteri, which, giving rise to leucorrhœa of some form or other, may hinder impregnation. And here it may be well to insist on the necessity of not trusting to dilatation alone, whether by tents or by the introduction of graduated sounds, to enlarge the cervical canal. For if dilatation alone be had recourse to, its action is only temporary, for the uterine fibres are thereby merely stretched, as India-rubber might be, and, on the stretching force being intermitted, the cervix returns to its usual condition.

The dilatation must be associated with, and made subsequent to, incision of the canal. After incision of the cervical canal from within, which need not be extensive, dilatation then continues the incision with a slight rupture, and, this being kept from closing, the dilatation remains permanent. Many failures of this treatment are due to the external os being too freely divided, and being thereby rendered too patent; the act of imbibition is greatly interfered with, if not altogether prevented. The object to be gained is slightly to enlarge the cervical canal, and, at the same time, not to destroy the orifice of the uterus.

TREATMENT OF HABITUAL DRUNKARDS.*

By J. W. EASTWOOD, M.D.Ed., M.R.C.P.Lond., Darlington.

THE subject of Intemperance, and the diseases specially produced by the free use of alcohol in its various forms, has occupied my attention, more or less, during the last twenty years. The different forms of insanity, or some morbid conditions of the brain, which have been produced by drinking habits, have especially come under my care. At the annual meeting of the British Medical Association, held at Newcastle in 1870, I read a paper before the Public Medicine Section, on “Intemperance in its Medical and Social Aspects”, when I strongly urged the appointment of a committee to examine the whole question. The difficulty which was found in obtaining men from different parts of the country to meet together sufficiently often to go into this subject seemed a serious objection, although there were not wanting those who by their special knowledge and devotion to the profession, were quite willing to form members of such a committee. I may here particularly mention Dr. Rumsey of Cheltenham, and Dr. Morgan of Manchester. Again, at the Birmingham meeting in 1872, I read another paper on “The Use of Alcohol in Health and Disease”. To those who have paid any attention to this subject, it will be obvious that during the last three or four years the great question of intemperance, and the proper use of alcohol, as well as the treatment proper for some of the individuals who suffer from its excessive use, have made rapid strides both with the public and the profession. It is not, however, this large question which I wish to bring before you now, but a portion of it which has recently been taken up by a committee of the Birmingham and Midland Counties Branch. This has reference to the treatment of habitual drunkards, and the committee recommend the different Branches to consider the subject for themselves. Before I saw this report, I intended to bring this matter before this meeting.

* Read before the North of England Branch.

Those gentlemen who are in any way engaged in the special treatment of insanity, and many others in general practice, will readily bear me out when I state how difficult it is to know what to do with certain cases which come before us, where it is manifest that a morbid desire for intoxicants exists. The essential disease itself, whatever may be its exact pathological cause, is dipsomania. This may produce different results: acute mania, delirium tremens, and chronic alcoholism. The treatment of the first is clear enough; for if the patient cannot be kept at home, as the mania is generally of a noisy and destructive kind, he is sent to a public asylum or private retreat. The second form is likewise very clearly understood; and if the patient cannot be managed at home, he is also sent away for treatment. So far there is suitable provision already existing for the treatment of these cases; for it is of no consequence what the cause is, if the patient have mental symptoms which warrant medical certificates being signed, he can be placed under suitable care and treatment, as an insane person. The cases of chronic alcoholism are the production of the long continued habits of the dipsomaniac. It is most difficult to know what to do with those persons who appear not fit to be placed under care as lunatics. I am frequently appealed to by medical men, who write me letters containing a heart-rending account of some amiable young man, or gifted lady, who would sometimes do anything or submit to anything in order to be cured of their malady. It is with great reluctance that I admit such patients into my house, for they are more trouble than they are worth, and one cannot help feeling that they are not in their proper place amongst lunatics. If I admitted them, I should have more than I could accommodate. Sometimes the good effects of confinement continue for a considerable time, but it is always too brief to be of permanent good to them. The patients can only be kept during the period when they are mentally unsound, and obviously so. Two cases have recently been under my care, but only for a month each. One of them has learned a lesson, and at present keeps sober, but the other relapsed in a very short time. In the case of females, the result of any treatment is very unpromising.

There is another class of drunkards which do not come under my care and notice: the drunken criminals. These are to be found chiefly in a lower stratum of society than the patients to which I have referred, who are often educated and refined, at least at the commencement of their malady. They are more frequently dealt with by the magistrate than the physician, and they belong to that border-land between crime and insanity which it is so difficult to deal with.

What then is to be done with these unfortunate people, who are undoubtedly the victims of either mental or moral deficiency, or actual disease? The cases being properly selected, I think there can be no doubt about their being treated in suitable places or establishments for the purpose, under legal control. They are not fit for asylums generally—at least in the early stages, and they will not, as a rule, go voluntarily to an establishment for dipsomaniacs.

At the time that Mr. Dalrymple's Bill for Habitual Drunkards was brought forward, I advocated its adoption, with some amendments, and I was in correspondence with the late author of the Bill at the time that it came before the House of Commons. I think, however, that the Bill may now be taken as the basis on which to act, and that we should be justified in recommending it to the members of the British Medical Association to support by petitions to Parliament. The chief clause to which I have objections to make is the fifteenth, as the one most likely to be abused, and I should therefore desire some modification of this clause, so that its strictness shall be lessened.

I beg, therefore, to propose that the Bill for the Management of Habitual Drunkards, brought before the House of Commons by the late Mr. Dalrymple, be the basis for any future action on this subject, with a modification of the fifteenth clause, and that the members of this Branch be requested to sign a petition in favour of this Bill, to be presented to the Houses of Parliament.

That a copy of this resolution be forwarded to the Birmingham and Midland Counties Branch.

OBSTETRIC MEMORANDA.

A CASE OF FOOT AND HEAD PRESENTATION.

THE presentation of a foot along with the head is, I believe, of sufficiently rare occurrence in obstetrical practice as to call for a short notice from me of the following case. On June 12th, 1875, at 6.40 P.M., I was asked to attend Mrs. S. in her sixth confinement, six weeks earlier than she expected it. On examination, I found the right foot presenting, and the membranes entire. About an inch above the foot, and entering the brim, a large substance was to be felt, which I was

unable to reach sufficiently easily to decide what it was. Because of this doubt, and as the patient required to change her position, I was anxious not to rupture the membranes immediately. With the change of position and the advent of the next pain, the membranes ruptured just before I again made an examination; but, even after the rupture of the membranes, I could not determine with certainty what was presenting above the foot; I, therefore, immediately introduced my hand into the vagina, when I found that a small head was entering the pelvis with the foot. The presenting foot was immediately returned well above the head; this caused another pain, which sent the head much lower, and converted the labour into a natural one. A small premature child was born at 8.15 P.M., which only survived its birth seven hours. The right foot had evidently occupied the position in which I found it for some time; for, when the child was born, that foot was still very dark in colour, from pressure above the ankle. JAMES SEDGWICK, M.D.

CASE OF PLACENTA PRÆVIA: TURNING: SUDDEN DEATH ON THE EIGHTH DAY AFTER DELIVERY.

A. B., AGED 35, a somewhat stout but well built woman, at the eighth month of gestation with her sixth child, commenced flooding at 8 P.M. on May 6th. Her husband applied to me the same evening, about 11 o'clock, for some medicine for her. He stated that his wife had suddenly commenced to lose blood *per vaginam* without any apparent cause, and that up to this time she had always enjoyed good health. I accordingly sent her a mixture containing ten grains of gallic acid and five minims of tincture of opium, a dose to be given every three hours; and gave the husband instructions to send for me at once should she be any worse. At 4.30 the following morning, I was summoned to the patient, who, it was stated, had been taken much worse about an hour previously. I went at once, and found the woman somewhat blanched. I ascertained that she had lost a considerable amount of blood, and that it was still coming away in "large clots". Her pulse was small and rapid, 120 in the minute. She complained of slight pains in the lumbar region, coming on about every quarter of an hour, and at each recurrence of pain the loss of blood was increased. On examination, I found the os considerably dilated, the membranes still intact, through which could be felt the head and a hand presenting; but posteriorly a portion of the placenta was protruding. Whilst I was making this preliminary examination, a slight pain came on, which caused a considerable gush of blood. I now felt convinced that, unless I used prompt measures, my patient would soon sink from loss of blood. I therefore determined to rupture the membranes and turn the child, which I did with little difficulty; and, having got the breech of the child, filling up the cavity of the pelvis, I waited for more decided uterine action, which up to the present had been both slow and feeble. I therefore gave thirty minims of tincture of ergot in half an ounce of brandy, with some water. The pains soon became stronger and more frequent, and a living child was born about twenty minutes after administering the ergot and brandy. I removed the placenta immediately, and applied pressure over the uterus, which contracted firmly; consequently there was very little more loss of blood. The patient fainted about a quarter of an hour after the birth of the child, but soon revived. Still the pulse was extremely small, and also rapid (120). I now gave her another half-ounce of brandy, and also fifteen minims of tincture of opium. On the following day, I found my patient much better, she having had a good night's rest. Each day now she gained strength up to the seventh day after delivery, when I found her very cheerful, and to all appearance doing well. I gave special directions that she must not sit up at all until I saw her again; which, however, unfortunately, I had not the opportunity of doing, for on the following day (the eighth after delivery), about 4.30 A.M., I was summoned again to see her, as she had been taken suddenly worse. I accordingly went immediately, but before my arrival she had expired. Her husband informed me that she had a light supper the previous evening, and went to sleep apparently well about 11 P.M., but that about 2.30 the next morning she awoke suddenly with a feeling of constriction at her chest and great difficulty of breathing, which became rapidly worse until she died at 4.30 A.M., two hours after the commencement of the attack. Such was the sad end of a case which appeared to be progressing favourably. There had been no *post partum* hæmorrhage. I could not obtain a *post mortem* examination; but I think, in all probability, this was a case of embolism of a branch of a pulmonary artery, due to a clot being carried from the uterus, and so giving rise to the asphyxia. The child, I should have stated, was very weak at birth, and gradually sank; it died the third day after delivery.

J. ASPINALL HUNT, M.R.C.S. Eng., Ockbrook.

GENERAL COUNCIL

OF

MEDICAL EDUCATION AND REGISTRATION.

SESSION, 1875.

DISCUSSION ON THE ADMISSION OF WOMEN TO THE
MEDICAL PROFESSION.

THE Medical Council, having received from Mr. Simon, writing by instruction of the Lord President of Her Majesty's Privy Council, a letter asking their opinion concerning Mr. Cowper-Temple's Bill for legalising the registration of foreign degrees by women, and also asking their observations on the general question on the admission of women to the medical profession, appointed a Committee, consisting of Mr. Turner, Sir William Gull, Sir Dominic Corrigan, Mr. Quain, Dr. Humphry, Dr. Andrew Wood, and Dr. Rolleston, to consider and report on the subject. The letter was as follows.

"Medical Department, Privy Council Office, June 8th, 1875.

"Sir,—I am directed by the Lord President to request that, at the meeting now shortly to be held of the General Medical Council, you will have the goodness to bring under the consideration of that body the bill which has been introduced in the House of Commons by Mr. Cowper-Temple 'to amend the Medical Act, 1858, so far as relates to the registration of women who have taken the degree of Doctor of Medicine in a foreign university', and that you will move the Medical Council to favour his Grace with their observations upon it. It appears to the Lord President that Mr. Cowper-Temple's bill, though very limited in its direct scope, can hardly fail to raise in Parliament the general question whether women ought to be able to look to medical practice, or certain branches of it, as open to them equally with men as a profession and means of livelihood. And I am to say that, as Government may have to express an opinion on this general question, with regard, on the one hand, to women who desire to obtain legal status as medical practitioners in this country, and, on the other hand, to the examination rules, or other conditions, which prevent them from accomplishing their wish, his Grace would be glad that the observations with which the Medical Council may favour him should not be restricted to the particular proposal of Mr. Cowper-Temple's bill, but should discuss, as fully as the Medical Council may see fit, the object to which that proposal would contribute.—I am, sir, your obedient servant,

(Signed) JOHN SIMON."

On Thursday, June 24th, the discussion of the Report of the Committee was commenced. It was printed at page 855 of last week's JOURNAL; and nearly the whole of it is quoted in Mr. Turner's speech.

Mr. TURNER moved, "That the report be received and entered on the minutes." He said: "It is not a motion for the adoption or the approval of the report; but I think this may be the right stage for me, acting as Chairman of the Committee, to explain the report. I may say that the Committee has arrived at the conclusions stated in the report, with a due sense of the responsibility of the task imposed upon them by the Council, and that the conclusions arrived at have not been arrived at hastily. We have had four meetings, and we have spent several hours in the discussion of the various points raised. All the members of the Council, I have no doubt, have read Mr. Simon's letter written by direction of the Lord President, and all are aware that there are two important questions raised in that letter. The first is with reference to the Bill introduced by Mr. Cowper-Temple to amend the Medical Act of 1858, so far as relates to the registration of women who have taken the degree of doctor of medicine in a foreign university, and the opinion of the Medical Council is requested on the subject. Now, I think there can be no doubt at all that the consideration of this Bill falls within the legitimate province of this Council. We are a Council of medical education and registration. The registration of foreign degrees is specially referred to in one of the clauses of the Act under which we are constituted, so that clearly any emendation of that Act or of that clause comes naturally before us. The Committee, therefore, had no difficulty in taking into consideration this part of Mr. Simon's letter; and I think I am right in saying that the Committee came to an unanimous conclusion as to the kind of answer which should be given to the Lord President. "In regard to Mr. Cowper-Temple's Bill, the Council cannot approve of a measure intended to confer on women the privilege of registering certain foreign degrees, from which, under clause 46 of the Medical Act,

men are debarred, and over the education and examination for which the Medical Council have no means of exercising that supervision and control to which all licensing bodies of this country, whether universities or medical corporations, are subjected." With reference to the more general question raised in Mr. Simon's letter, there was naturally room for a much greater difference of opinion. The opinion was expressed at the Committee; and I should observe that it is the opinion, also, of another member of the Council not a member of the Committee (Dr. Storrar) that this is a subject which does not legitimately fall within the province of the Medical Council; that we are a Council of medical education and registration; and that we have nothing whatever to do with the consideration of so wide and general a question as that which has been brought before us. Now, I have no doubt that Dr. Storrar is technically correct in the view which he has taken up, and which he has embodied in his motion. But the question that the Committee had to consider was whether we should avoid, by a mere technicality, the expression of our opinion; whether, when the question is directly submitted to us by an important department of the Government, we should not express some opinion on the question; whether, for example, it would not be a breach of courtesy on our part if we declined to enter into consideration of this matter which has been submitted to us. And I may mention that I have heard complaints expressed that the Government did not sufficiently consult the Medical Council on various questions connected with the medical profession, on which this Council might fairly be asked to express an opinion. Certainly, if we were to refuse to enter into this matter, it is not likely that we should ever be again appealed to by the Government. On this ground, therefore, if on no other, I think it very important that we should, as far as we can, endeavour to give some opinion, whether it be favourable or not, as to the question which has been submitted by the Lord President. The Committee, then, taking this view of the case, considered that we were bound to say something on the general question. But another preliminary question was raised in the Committee before we felt ourselves prepared to go into the consideration of the general matter, and this question has been embodied in a motion, notice of which has been given by Sir Dominic Corrigan. Sir Dominic's idea is this, and he submitted it to the Committee for consideration, "that the members of the Council do not feel authorised in expressing a decided opinion without first submitting the matter to the consideration of the several licensing bodies, whose representatives they are; and, if it seem fit to the Lord President that the members of the Medical Council should obtain the views of the licensing bodies whom they represent, they will, as soon as possible, obtain the information for the Lord President." The Committee considered this proposition, and they decided that if they adopted this proposal of Sir D. Corrigan it would be practically shelving the question for an entire year. The Government do not ask for the opinion of the various licensing bodies, but they ask for the opinion of this Council; and therefore we ought not to hesitate to express our opinion in the matter. We therefore decided on the following paragraphs in our report, which paragraphs, with your permission, I shall read. "The Committee having taken Mr. Simon's letter into consideration, recommend the General Medical Council to adopt the following as the reply to be sent to the Lord President of the Privy Council. *a.* In reply to the communication addressed to them by the Lord President of the Privy Council, the Medical Council have to state that, being thus directly appealed to by the Lord President, they have felt bound to consider the question of the admission of women to the medical profession." Then having decided that we should take up this question, the next point for our consideration was what answer we should give; and this was a much more intricate matter; what answer should be given to the question propounded by Mr. Simon's letter; whether women ought to be able to look to medical practice, or certain branches of it, as open to them equally with men as a profession and means of livelihood. This naturally excited very considerable discussion in the Committee; but after framing several paragraphs in reply, and after much consideration, we at last decided upon recommending the two following paragraphs, which I shall, with your permission, sir, now read. *b.* "After due deliberation, the Medical Council have to express their opinion that the study and practice of medicine and surgery, instead of offering a field of exertion well fitted for women, do, on the contrary, present special difficulties which cannot be safely ignored, and some of which cannot be obviated. *c.* Instead of medicine offering more facilities and less difficulties for women than other professions, the Medical Council believe that, as the whole question is looked into, there will be found peculiar hindrances, moral and physical, to the successful pursuit of medicine by women. Moreover, they desire to add that if it be admitted that women should enter the medical profession, the existence of an equal fitness for other professions must be assumed." Now, sir, perhaps it may not be considered out of place if I should give one or

two reasons why I agree to the statements made in these two paragraphs; and in giving these reasons I do not wish to commit any other member of the Committee to the reasons which I may advance. These are my own personal and individual reasons. Doubtless other members of the Committee will be quite prepared to state why they agree to the admission of paragraphs expressing these very decided sentiments. In giving my reasons, I can assure you that there is no wish on my part to say anything that might hurt the feelings of any one, either man or woman, on this matter. It would ill become me who, throughout all my life, have had domestic relations with the opposite sex, which are all that could be desired, to say one word which might be regarded as depreciating the sex which we all value and esteem so highly. Still, however, there are certain general facts which, I think, ought not to be ignored in discussing this question; and facts which, I am sorry to say, have been too much ignored in looking at the important bearings of this question. I have heard it argued that men and women are alike in capacity; that what is open to the man to do, ought to be open to the woman to do; that woman has no distinctive sphere. I have heard that point broadly stated; and I have heard great ridicule thrown upon those who have asserted that woman has a distinctive sphere. Now, sir, to my mind, all such statements as these are mere idle talk. No amount of special pleading or ingenious argument can break down the physiological barrier which separates the two sexes from each other. Woman is not man, any more than man is woman. The sexes are not on a footing of equality. They ought not to be rival claimants for the same object. Each has its own excellences, and one is the complement of the other. I believe, sir, that it is a perfectly sound physiological doctrine when I state that the physical framework of a woman is inferior in its capacity and power to the physical framework of a man. Her muscular apparatus is less powerful, her bones are more slender, her skull is smaller, and, if I might say so, exhibits a smaller amount of departure from the infantile condition than is to be found in a man. Her brain, also, is smaller and lighter. Now, clearly, sir, these important anatomical differences find some physiological expression. The difference between the weight of the brain in a man and in a woman is, on an average—and I am referring only to averages, because there are exceptions, of course, in both cases—the difference between the weight of the brain in a man and in a woman is as much as ten per cent., and that difference is in favour of the male. Now this, I think, is a fact of great physiological significance. If we regard, as we all do, the brain as the centre of the intellectual faculties, and as the centre of the sensori-motor activity, it is clear, I think, that this lower brain-weight implies a smaller capacity for concentration of thought, for intellectual capacity, and for prolonged exertion, either mental or bodily. But, sir, it is not merely in connection with the physical attributes that the two sexes differ. In woman, the emotional qualities greatly preponderate over the logical. Now this is one of the most valuable characteristics of women—the preponderance of the emotional qualities. It gives them all those characteristics which we value so much in a wife and a mother, and which are also of the greatest importance in connection with the functions of a nurse, which she is often called upon to perform. These qualities, therefore, are those which make her truly a helpmeet for man. But the preponderance of the emotional qualities in woman's nature, I submit, ill adapts her for the performance of those duties which are entailed upon those who enter into the profession of medicine. In the profession of medicine, what is so much desired is the clear exercise of the logical faculty. If medicine is to be advanced as a science, it can only be by the application of scientific principles to the study of disease. Now, while the pages of history bristle with the names of men who have added to our scientific knowledge, I am not aware that the name of a woman occurs in connection with the discovery of any leading scientific fact or scientific theory. Hence I think that the whole history of our race shows that, in this matter of the possession of logical or scientific faculty, women have not yet shown that they possess any power of coming to the front. I put forward these considerations as arguments in support of one of the statements contained in one paragraph that I have read: that there are peculiar hindrances, moral and physical, to the successful pursuit of medicine by women. It may be said that all men do not possess the logical faculty. It may be said that there are many members of the medical profession who have not this faculty; who have not power of eliminating, in the consideration of a case, all sources of error, and of limiting themselves merely to the consideration of those facts which are based upon a correct consideration of the case in question. Undoubtedly this is true. But I doubt very much with the introduction of a new element into our profession—an element as to which, I think, experience has shown us that the logical or scientific faculty has not yet exhibited itself—I doubt very much whether this would tend to improve the standard of medical practice in this country. I would especially direct attention to that part of the

paragraph which states that "if it be permitted that women should enter the medical profession, the existence of an equal fitness in women for other professions must be assumed." This was carefully considered by the Committee before it was introduced into our report; and I think I may say that it was felt that the medical profession had been made a sort of battle-field, upon which was to be fought out this question, which has come prominently forward of late years, as to the equality of the two sexes; and many of us felt that it was not right or fair to our profession that it should be made the battle-ground on which this great question was to be fought out. Those, then, were my reasons for agreeing to the introduction of the two paragraphs to which I have referred. It will be seen, therefore, that we had many weighty objections to bring to the consideration of the Lord President against the introduction of women into the medical profession. Still, we felt that, if the Government and the legislature should in their wisdom see fit to give facilities and offer encouragement for the introduction of women to the profession of medicine, it would be seemly for us to indicate how this might be done, and to lay down certain propositions or conditions that we thought ought to be carried out, if possible, in connection with this matter. Accordingly, you will find in the report certain recommendations of the Committee. The first of these recommendations is to the effect "That, in the interests of public order, the education and examinations of female students of medicine should be conducted entirely apart from those of males." All of us who are sitting round this board know exactly what a medical education is. We know what medical students have to go through in their endeavours to obtain such an education; and we know that circumstances are constantly arising which render anything like a mixture of the two sexes extremely improper; so that I do not apprehend that there should be any difficulty at all in the Council agreeing to a condition of this kind. Then, in the second paragraph, we say: "With regard to the 'examination-rules or other conditions', which prevent women from obtaining a legal status as medical practitioners in this country, it would be sufficient if an Act of Parliament were passed which should enable the Medical Council to recognise the examinations of the licensing bodies under schedule (A) of the Medical Act separately or conjointly, or such other examination or examinations as the Medical Council may from time to time deem sufficient for the purpose of granting admission of women to the *Medical Register*, under the title of 'Licensed Practitioners of Medicine'." Well, now, we had considerable difficulty indeed in coming to the conclusion as to how women should be admitted to the *Medical Register*. That was obviously a matter of great difficulty, and, also, one of great importance: whether women should be allowed to present themselves for the usual examinations for licenses and memberships and degrees of universities, and so on; or whether there should be some special license created for the purpose of granting admission to the *Register*. You will observe that we have recommended that a special license should be created for their special behoof. It seemed to us that, if they were allowed to obtain the ordinary licenses and degrees, not only should we be giving them power to be inserted on the *Register*, but we should also be giving them certain rights and powers in connection with the corporations or universities from which these degrees were obtained. Now, it seemed to us that we had no right to recommend any such course to the Medical Council, but that that was a matter that went beyond the remit that had been made to us; and we thought the proposal we have made was the best mode of meeting the difficulty. Then there is the paragraph numbered 3: "That the examinations of female candidates for a license entitling their names to be placed on the *Register* should be of the same character as those of males." As to the inclusion of this clause, there was some difference of opinion. One member, if not more, of the Committee thought that there was no need for it; but it was felt by the majority that it was advisable to put forward a public declaration of this kind, so that it might be seen that we did not wish imperfectly educated persons to be put on the *Register*; that is to say, persons who had received a lower standard of education than the men. We considered that the standard of education for the two sexes should be the same. Then we have the fourth paragraph: "That the education and examination for these licenses should be under the supervision of the Medical Council in the same way as is required for the other licenses of this country." We were all agreed as to that. I do not think that there was any difference of opinion in the Committee, and I should apprehend that there ought to be no difference of opinion in the Council, because the clause merely recommends what is provided by the Medical Act for the supervision of the licenses at present granted. The next paragraph (e) is one which includes one or two principles of importance. I will read the first sentence. "As to other than mere legal difficulties which prevent women from accomplishing their wish to engage in the practice of medicine and surgery, the Council are of opinion that such difficulties must be overcome by private exer-

tions, and that no special legislation is called for, except, perhaps, in the case of midwifery." We found that all those questions connected with the providing for the education of women, and providing schools and teachers for them, should be left, as in the case of male medical students, to private exertions. I understand, for example, that in London all the hospital schools are organised and kept up by the private exertions of those that are particularly interested in them; and we felt that the women and their friends might fairly be asked to undertake all this part of the necessary work for themselves. The last clause of this same paragraph is one of very considerable importance. "Moreover, the Council are of opinion that any course of legislation which would interfere with the free action of the universities and corporations mentioned in schedule (A) in respect of the medical education of women, is undesirable." I think that, if this clause be adopted, I should suggest a little addition to it. I would suggest the addition of the words "examination and licensing" after the words "medical education"; so that it would read, "In respect of the medical education, examination, and licensing of women". We felt that there should be nothing done by the legislature to interfere with the free action of corporations in this particular. Then the last part of our report is one which bears upon the question of a special register, especially in connection with recognising the competency of women to practise midwifery. It is as follows. "It is understood that there are women who would prefer to have a special qualification, and to be entered on a special register, recognising their competency to practise midwifery. The Council believe that the education and examination of persons with such views will not be found to differ greatly, upon the whole, from those required of candidates for ordinary licenses to practise. Nevertheless, women might be fit for registration on a special register, without passing examination, in various parts of surgery and, indeed, of medicine. The decision of this question of a special register does not affect the question of admission of women to the general register, but would require an alteration in schedule (D) of the Medical Act." I think I am right in saying that this last paragraph embodies very much the spirit of the report of the Committee presented to the Medical Council in the year 1873, of which you, sir, were the chairman; and it was with special reference to the report of this Committee that the last paragraph was inserted by us in our report. It was the intention of one member at least of the Committee that we should have a clause authorising a copy of this report to be sent to the Lord President, along with the communication from the General Medical Council, to be made in reply to Mr. Simon's letter; and, perhaps, if the Council should decide upon adopting this report, which I am now submitting to you, we may add to it a clause authorising the report of the Committee to be forwarded.

Mr. QUAIN: I have great pleasure in seconding the reception of that report.

The motion was carried unanimously.

Mr. TURNER moved: "That the Council resolve itself into a committee to consider the report on Mr. Simon's letter, paragraph by paragraph."

The motion was seconded by Sir WILLIAM GULL.

Dr. STORREAR moved as an amendment: "That the duties to which the General Medical Council are appointed are defined by the Medical Acts, and the Council consider that their appointments do not empower them to represent to the Government any authorised opinion on the large social question of the expediency or otherwise of admitting women to practise medicine." He said: My opposition to this report does not arise from any essential difference of opinion from Mr. Turner as to the proper function of women, but from a difference of opinion as to the expediency of the Council taking up this question at all. My view of the matter is that this Medical Council is a corporate body acting under a common seal for definite purposes. What are those definite purposes? They are defined by the Medical Acts before us. Certain persons are appointed by the Queen, and by the various medical bodies, to administer these Acts; and what we are to administer is contained in the body of the Act. What are these points? They are very few. There is the registration of medical practitioners, with the power of omitting names from the Register; then there is the power of supervising the education of medical practitioners; and, thirdly, there is the authority to make a *British Pharmacopœia*. In these three, with very small exceptions, are comprised all the duties of this Council; and I apprehend that we have no capacity whatever to discuss any question outside the area of these matters. The medical bodies that sent us here reserve to themselves the duty of deciding, if they choose, upon questions that are not within the scope of these Acts, and we have no right to enter upon their province. Take my own case. I speak of it because it is the one with which I am most familiar. I represent the University of London, and I am the representative to administer what is contained in these Acts.

But we have had this women's question before the University of London, and the popular house (Convocation) passed a resolution in favour of admitting women to the degrees; but the Senate, which is the administrative body of the University, has decided that they will not take any steps to enable them to confer degrees upon women. The question, therefore, is so far decided as regards the University of London; and the members of the Senate of the University of London may fairly turn round upon me, and say: "What right have you to take up this, or to take a share in the settlement of a question possibly in an opposite direction from the settlement which we had made, when we, in fact, so far as we are concerned, have settled this question already?" It is on that ground that I propose this amendment. I feel that we as a Council are not here as a promiscuous body, thrown together to fire at every object that happens to be thrown up in the air; but we are here for a definite object, and nothing can be more distinct than the duties assigned to us. But it seems that some members of this Council are impressed with the honour of the distinction that has been conferred upon them by the reference of this question by the President of Her Majesty's Privy Council to us. I cannot say that I entertain so strong an impression of the distinction conferred upon us by the reference. I cannot help recollecting all that has transpired in past years between us and the Privy Council office. It would be a long story to go back to all the transactions that have occurred between us in successive Governments; but I will only go back to the time when we were discussing a Medical Bill which the Privy Council undertook to carry through Parliament. They did carry it through the House of Lords, and they withdrew it in the House of Commons. And they have shown a disposition to push us aside on any occasion when we happened to appeal to them on this particular subject. Two or three years ago, we waited upon the Marquis of Ripon to ascertain whether he, as the head of that department, was prepared on the part of the Government to introduce a Medical Bill. We were kept with him for the better part of an hour, and I think that you will agree with me that, when we were outside the room on the pavement, we knew just as much of the intentions of the Government as we did when we entered the room. We found it utterly impossible to ascertain from the Government what the intentions of the Government were; and all these difficulties have spread over a series of years. Governments have changed. At one time it was the Duke of Marlborough in office; at another time it was the Marquis of Ripon; and now it is the Duke of Richmond. But, whatever Government may be in office, and whatever the source of authority, whatever has been communicated to us has passed through the same channel. The letters have always been signed "John Simon", and whatever may be the sources, it is impossible not to see that the views of the Government had received peculiar expression in passing through the channel of communication. In whatever hand the department has been, we can see that, though the hand is Esau's hand, the voice is Jacob's voice. I must say I am not one of those who are impressed with the sense of the honour which has been conferred upon us by reference of this question to the Council. I look upon it in quite another light. I look upon it as a "Trojan horse". It contains the elements of disputation in this Council; and I can very well conceive the members of the Privy Council saying among themselves: "What are we to do with this Bill of Mr. Cowper-Temple? The House of Commons is not very clear about it. The country is not very clear about it. Nobody seems to have very definite ideas about it. It will be a very nice bone of contention to send down to the Medical Council. Let them worry over it for a few days." We have worried over it, and we have got no less than three reports out of a small Committee, and Mr. Turner speaks of the difficulty that he had in the preparation of the report. In these difficulties I sympathise with him heartily. Now what I feel is, that, if we once get into the entanglement of a discussion on this great social question, with which in my opinion we have nothing to do, we shall find ourselves probably at loggerheads with the bodies we represent here—the universities and medical corporations. They will ask us what right we have to supersede them. What authority, for instance, have we to step in and exercise a function which is no function assigned to us under the Medical Acts? And they will think that they have a right to an independent opinion upon it. I confess I could not defend myself against a charge of this kind. Then, as regards the point itself; if we decide in favour of the admission of women, the chances are that we shall have a very considerable number of persons finding fault with us, laughing at us, discussing the matter with us, and as I say, telling us that we are interfering with matters with which we have no concern. On the other hand, if we decide against the women, it will be said of us as has been said already, "Of course, you decide against the women because you are a trades union". That is the remark that has been made, and, I suppose, will be made again. But from the commencement—from the year 1858 to the present year—we have kept clear from

these subjects. We have never questioned the right of women to be registered if they will produce the certificate of any of the bodies that we are authorised to recognise. There are Mrs. Garrett-Anderson on the *Register*, and Miss Blackwell, and there may be many others. Let me make my position clear in another respect. I do not call in question the very great propriety of the Privy Council appealing to us as to what is to be done with regard to the registration of foreign degrees. That is another thing. Apart altogether from the admission of women under these degrees, the question of registering foreign degrees is one regarding which there is a good deal to be said; but I am anxious, as far as my own views are concerned, to condense them as much as possible. I dare say there are many points into which I might diverge; but I am exceedingly anxious to take my ground upon principle, and simply to state, in the narrowest possible terms, what that principle is. I beg, therefore, to propose this amendment.

Dr. PARKES: I do not think it is fair to the Marquis of Ripon that a statement such as that made by Dr. Storrar should remain without my saying one word. Perhaps it is hardly a matter that should occupy the time of the Council; only I think it is a little unfair to a nobleman who has taken the greatest possible trouble with regard to medical Acts. What took place was shortly before the medical bill which was introduced by the Marquis of Ripon had been dropped by the House of Commons.

Dr. STORRAR (reading from the minutes of Council): "The deputation appointed on March 28th to ascertain from the Government whether they are willing to aid the Council in the removal of any legal difficulties that may exist in carrying out the objects of Clause 19 of the Medical Act, reported that they had waited, by appointment, on the Marquis of Ripon, Lord President of Her Majesty's Council, and that two other cabinet ministers, Earl Granville and Mr. Bruce, Secretary of State for the Home Department, were present at the interview, and took part in the conference. That the conference lasted an hour and a quarter; that there was no difference of opinion as to the desirability of the medical authorities in each division of the kingdom combining their examinations, so as to reduce the number of entrances into the profession; but the Lord President was not disposed to introduce into Parliament for this purpose a measure which would be limited to conferring on the medical authorities a merely permissive power to combine."

Dr. ANDREW WOOD: Go on.

Dr. BENNETT (reading): "His lordship was favourable to the introduction of a measure of this limited kind by some private member of Parliament, but with the understanding that it would not preclude his consideration of a larger measure, if, on further thought, he should find it expedient."

Dr. STORRAR: Precisely so. He simply said, "Take what course you please, and I shall reserve to myself the right of opposing or supporting"; so that it amounted to absolutely nothing.

Dr. PARKES: I submit that that is very inconsistent indeed with the statement that Dr. Storrar just made about the Marquis of Ripon.

Dr. THOMSON: In seconding Dr. Storrar's amendment, it is not my intention to offer any observations upon the wide question that threatens to come before the Council, but merely to explain the grounds upon which I rise to second the amendment. He has so clearly explained those grounds, that I may say, in the first place, that I thoroughly agree with him in the reasons he has given, showing the propriety of such a motion being introduced at this stage of our proceedings. I do not think it comes within the province of the Council to give any general declaration upon the subject which has been proposed. I think it is altogether beyond the province of the Council to express, either for themselves or, as it might appear, for the profession at large, any opinion on this subject. The admission of women to the rights of practitioners is a question that can only be settled by the licensing bodies or by the Government. If it cannot be settled by the licensing bodies, then it is a large question that must be settled by the legislature; I do not pretend to say by which. I have no hesitation in seconding the amendment, because I think this is a stage at which it should be brought forward. At the same time, I should like to say that, in any answer which is given to the letter of the Lord President, the utmost courtesy should be shown to the Lord President and to Mr. Simon. I quite feel that the amendment, in its present state, does not meet all that is required. I am aware that an answer must be given to that part of the letter which refers to the registration of foreign degrees; and I hope that, in the course of our proceedings, such a motion may be framed as will combine the sense of Dr. Storrar's amendment with that amount of courtesy which I am sure we all desire to show to the letter from the Privy Council.

Dr. ROLLESTON: I have listened with pleasure to what Dr. Thomson has said. He has taken a large view of this matter. If it is to be

settled by the legislature, it cannot be settled by the licensing bodies. Now, since 1858, the licensing bodies have taken no step whatever. Between that time and 1875, public opinion has been declaring itself not only by means of clever and able writers, who (following the method adopted in this country) do not sign their names, but by others who have forced their names upon the public, and through the public upon the legislature. We have had, for example, Mr. Mill's book on the *Subjection of Women*, one of the wisest and best books that he has written; and that is the sort of reasoning that we have to deal with; that is the sort of reasoning that influences the legislature at the present moment. And what is the legislature going to do? Is it going to act without advice? Will it take the advice of these clever writers, or, as Sir William Gull suggested to me, is it coming for counsel to the Council? It wishes to act upon the best advice; it is acting with more wisdom in the matter than some other governments have done; it wishes to get advice from the very best source. I feel very strongly that the Council should not run away from what is its duty. I care comparatively little whether it says yes or no upon this question whether a couple of dozen females shall have what some think justice done to them; but I do say that it would be a slur upon the Council if it failed to consider the question, and give its opinion respecting it. With reference to what Dr. Storrar has said, I used to think that the older universities had practised the art of how not to do it. We have rather dropped that art during the last ten or twelve years. Let me remind the members of the University of London that they owe their *raison d'être* to the way in which we practised that art. We refused to do justice to one-half the males of this country—the dissenters—and the result was, that the London University was established. Now, some persons are refusing to do justice to one-half of the human species.

Dr. STORRAR: It is assumed that we are doing them justice.

Dr. ROLLESTON: That is an assumption of which I shall speak presently. With reference to this matter, let me say that, if the London University send here its representative, whom, by the way, it can scarcely call a representative, but rather a delegate—

Dr. STORRAR: I am elected, in the highest sense of the word, to exercise my judgment on matters that form the proper function of this Council; but I have no right, by delegation or election, to deal with any other matters.

Dr. ROLLESTON: I am sorry I cannot entirely agree with Dr. Storrar in that matter either. If you will look at the report of the Committee, you will see it says: "Moreover, the Council are of opinion that any course of legislation which would interfere with the free action of the universities and corporations mentioned in Schedule A, in respect of the medical education of women, is undesirable." Now, whether the London University choose to do what we did a generation ago—that is, not do it—or do what I believe the older ones will do now—that is, do it—it will make no difference one way or the other; but it is a serious matter entering upon this line of not doing things unless they have something absolutely wrong about them. Holding your tongue when you are asked to speak is one of the very worst things you can possibly do. If we older bodies had not studied that art, I am sure we should not have had a representative of the London University present at this Board, for there would have been no London University but for our refusing to do justice to one-half of the Queen's subjects; that is, the dissenters. Now, let me say what I have to say. "Strike, but hear", should be our motto. We know that this proposed admission of women has been tried elsewhere. Again, we know that we had such a person as Queen Elizabeth; we know that we had such a person as Queen Caroline (the first, not the second); and we know that we have at this time Queen Victoria on the throne of this country. Nevertheless, women are totally unfit; their brains are smaller. Mr. Turner omitted to add, their bodies also; and we know that there is a good deal of relation between the size of the brain and the size of the body. Let us say all this, if we like, but do not let us run away from our duty. Let us take for our motto that of the fine classical novel of Ivanhoe, *Adsum; Cave*. Do not let us run away, but let us do the duty that lies before us.

Dr. THOMSON: In consequence of what has fallen from Dr. Rolleston, I wish to say that, in seconding Dr. Storrar's motion, I did not express any opinion one way or the other. That will be for the future.

Sir WILLIAM GULL: I think the whole of Dr. Storrar's argument falls to the ground when I ask myself, why am I here? Why is Dr. Stokes here? Why is Dr. Sharpey here? Why is Dr. Parkes here? Why is Dr. Quain here? Whom do we represent? Where do we get our authority? If we have none, why has Dr. Storrar any? If he have none, neither have we. It seems to me that that consideration cuts away all the ground from him. I cannot take the position of a delegate, for I have nobody to delegate me but the whole country. I

have to consider what are my duties to this country at this board. Dr. Storrar says our duties are alike. What defines my duty equally defines Dr. Storrar's. We are not delegates at all; we come here to give counsel on the great affairs of this country, with respect to medicine and medical practice. That is the view I chose to take. I am not sent here merely to act the part of a policeman, which I dearest any tolerably respectable man, at £3 a week, could do as well as I could, and perhaps a great deal better. The Government have taken me from my important duties to do what? Not to do next to nothing. They have sent me here to consider the whole question. I read in the first line of the Medical Act: "Whereas it is expedient that persons requiring medical advice should be enabled to distinguish qualified from unqualified persons." The *Register* is only subordinate to that. It is for us to consider what the *Register* shall include. Dr. Storrar seems to think that the *Register* can only be of a certain character; but I think that the Council is here to determine what the *Register* shall be, what shall be its extent, and what the conditions under which people shall be put upon it. That takes in the whole question whether it is expedient for women to look to medical practice as a means of livelihood; and, if they may so look, then we shall consider the conditions upon which they shall be put upon the *Register*. The Government has sent representatives here having equal power with other members; and, therefore, our duty is to the country above all things, and not to the corporations: our duty is to help the public to determine who are fit persons to consult; and, if the public say, "We wish to consult women", we are bound to consider under what conditions they may consult them safely. If that be not consecutive and logical, I am inconsecutive and illogical. If that be the fact, we cannot escape from our duty. What is the meaning of the word Council? I ask the President if he can tell me the scope of it. If this be a Council, surely it has some function beyond looking after the registration of medical practitioners. Dr. Storrar says that Government has not treated us well. Then let us give them good for evil; let us be ready to offer them the best of our services in the best way we can, and they will treat us better in future. I cannot see that that is any argument. Then he says that the letter has come from Mr. Simon. Well, let it be taken *quantum valeat*. I have an intense personal respect for Mr. Simon. I do not know why his name should have been introduced. We are bound to consider the letter as coming from the Privy Council. The Lord President said to me to-day (I am at liberty to use his name): "I am much interested in the matter" (he knew we should be discussing it), "and I shall be happy to confer with the Medical Council at any time they may desire." So you see the Government is interested in this question. This is not a corporate question at all. The report states that the corporations should be left free to do as they like. It is said that we ought to inquire what the profession has to say. Does any man pretend that he does not know what the profession will say? It has been discussed again and again. I should like to know how you will get at the voice of the profession. How can it be got at better than it is at present? We have the public journals, and the whole thing has been discussed there. We have talked of it on all occasions. Does this Council represent the profession or not? If it be a representative Council of the medical profession, let us act for ourselves, and not adopt the policy which was referred to yesterday: the policy of waiting, putting off, and going back to the corporations. I say, if I am here for any purpose, I am sent by the Government to fulfil a large and important duty; to give the advice to the Government that they may ask for in the best way I can, and to take as large and constitutional views of the whole question as I can. We are not sent here for the mere limited purpose of keeping the *Register* as it now stands. We ought to help the public in every way we can to know whether they are consulting qualified or unqualified persons.

Dr. QUAIN: There are two questions before us: one a question of law, and the other a question of expediency. No one can doubt that Dr. Storrar is perfectly right in saying that, by law, we have no right to express any opinion such as is asked of us. Our duty is to carry out the Act of Parliament. Then there is the question of expediency as to whether we should send a suitable answer to the question that is put to us. I agree with every word Dr. Storrar has said, but I shall be obliged to vote against him, because I think it is expedient that we should give an answer to the question. There is only one other word I wish to say. I cannot understand why the question of delegates or universities should be introduced. Dr. Storrar merely asked what right we had to express an opinion about the functions of those bodies. Considering the expediency of answering the President's letter, I shall vote against Dr. Storrar's amendment. I do it with regret, because I think that he is right.

Dr. WOOD: I shall vote against Dr. Storrar's motion for a different reason, and that is because I disagree with every word he has said. I

consider that we are not sent here as delegates by any body. I would not sit here as a delegate. When my College appoint me to come to the Council, they leave me at perfect liberty to deliberate upon all matters coming before the Council; and if they be not pleased with the way in which I do that, they can act upon their own judgment and turn me out, and put in somebody else. Therefore, I do not consider myself a delegate; I consider myself a representative, and I believe this Council to be a representative Council. If it is a representative Council, what does it represent? It must represent the medical profession. We are all medical men here. We are all sent in the interests of the public, in order that the public may get the best medical aid that can be got. I am astonished that a slur should be thrown upon the Government; because they come with courtesy and kindness, and a deference which I am glad to see, and ask us for our advice. There have been occasions when they have not treated this Council with the deference they deserve, "but many things have happened since". When the Duke of Richmond, who is most anxious to do what is right, asks our opinion, why should we not give him an answer? He may ask the opinion of any one. He may go to ask the opinion of Miss Jex-Blake if he likes. He may ask the opinion of the Royal Society as of any other body whom he wishes to consult. But he says, "Whom shall I consult with the greatest hope of getting good advice? Shall I not consult the men who are assembled in London at this time, and who represent the medical profession?" And shall we say to the Duke of Richmond, "Oh, your Grace, we are much obliged to you for communicating with us, but really decline to give you an answer upon the subject, because, forsooth, it is not within the clauses of the Medical Act that we are to give advice to the Privy Council upon the education of women"? I say when a great revolution is threatening our medical profession—for I consider the introduction of women into it would be a great revolution—and when it is pressed upon the Government to take up this question, and when the Government are anxious to have the best advice before taking any steps one way or the other, shall the Council say, "Your Grace, you have asked our opinion; we will give you no opinion; we are a mere Council for registering practitioners, and, therefore, we do not consider ourselves a Council to whom you should refer"? I am thankful to the Duke of Richmond. He has treated us with the utmost courtesy—he and the other ministers, the Marquis of Ripon among the rest—and we ought to give them the best advice we can. We are not to be considered the infallible advisers of the Government; but the Government will consider the arguments we lay before them, and if they approve of them they will adopt them; if not, they will reject them. I hope the Council will not adopt Dr. Storrar's amendment, because, if it do, it will lose an amount of influence which can never be restored.

Sir D. CORRIGAN: With a very slight alteration in Dr. Storrar's resolution, I should feel bound to vote for it, although I consider the motion of which I have given notice is very much better. I quite agree that we are not authorised to take up this question. Dr. Storrar says that we never could take it up; but I do not go so far as that. For myself, I feel that I am not justified in coming here to decide upon so important a question without going back to my constituents and consulting them as to what are their opinions. What I, therefore, propose is, that the answer should be deferred until we have had time to consult our constituents. Dr. Wood has said that we ought not to delay, and the same doctrine has been preached by Mr. Turner. It amounts to this; the Government has treated us badly for a series of years. It has snubbed us; there is no question about it. They would not tell us what they were going to do, and now that they evince a desire to throw themselves into our arms, forthwith we are to accept their repentance and suddenly answer the question that is sent to us. I cannot assent to the proposition that we are to answer the question suddenly without consulting our constituents. Dr. Wood has said that we are representatives of the profession. Technically speaking, we are not. We are representatives of nineteen licensing bodies, and there is a wide difference between representing the profession and representing those bodies. You know that there has been a struggle going on for many years between the British Medical Association and this Council with regard to getting admission to this body. I do not want to take one side or the other, but I say that technically we are not representatives of the profession. The question is a very important one, and it has been decided on by a committee which, I must observe, was not at all unanimous. We differed on nearly every proposition, and we are called upon now suddenly to bring forward those propositions, every second one of which is inconsistent with the one before it. I regret that I must vote against Dr. Storrar's amendment, although, to a certain extent, I agree with him.

Mr. MACNAMARA: Clause 18th of the Medical Act enables us to take into consideration generally the requisites for obtaining qualifica-

tions. It seems to me that that entitles us at the present moment to take into consideration whether the male or the female sex is requisite for the license.

DR. SHARPEY: I must vote against Dr. Storrar's amendment. I heard, with some pain, the introduction of the word "delegates" as applied to members of this body. I have had the pleasure of sitting on this Council many years now with Dr. Storrar, and I must say that the whole tenor of his conduct and proceedings in this Council has been anything but that of a mere delegate. But let that pass. My reason for rising is to point out to Dr. Storrar that he is mistaken in supposing that our function is restricted to the carrying into effect the provisions of the Medical Act; because we are frequently called upon to propose amendments of the Medical Act, and we have again and again proposed amendments of it to Government. That is quite a different thing from merely carrying into effect existing provisions. I beg to remark further, that in the report which was read and commented on by Mr. Turner, there are proposals which would involve amendments in the Medical Act. The report proposes that certain additional powers should be granted to the Council—powers which they have not now under the Medical Act. I think, therefore, that the technical objection of Dr. Storrar is not sufficient. Independently of the question of expediency, I think it quite competent to give an answer to the Government on the question which they have submitted to us. Sir William Gull has very properly pointed out that some of us are not directly commissioned by any medical body in the kingdom, but are understood to represent here the public interest. No doubt it is understood that we all do that more or less directly, and I think we should be shrinking from an important duty to the country if we declined to aid the Government in this matter.

The amendment was then put and lost.

On the motion for the adoption of the report,

SIR DOMINIC CORRIGAN said: With regard to the question now being put from the Chair, I beg to propose the following amendment:—"That the following letter be forwarded to Mr. Simon in reply to his of the 8th June." [The letter referred to was printed at page 856 of last week's JOURNAL.] In taking up Mr. Simon's letter, it is necessary to start with a very short analysis of the questions he asks. As to the questions which he asks concerning Mr. Cowper-Temple's Bill, I think there is not a second opinion on the Council. I know that on the Committee we were unanimous in the opinion that the Bill would admit on the Register the names of women with foreign degrees, given by universities over whose course of education and examination we have no control whatever. While men are denied the privilege of having those degrees recognised, women are to have that privilege. That part of Mr. Simon's question I consider to be decided; and I may state that that part of my proposed answer which conveys our views with regard to his letter coincides with the reply in the Report of the Committee which Mr. Turner has read. With regard to Mr. Cowper-Temple's Bill, I believe the sentiment here is in accordance with the views of the Council. Now, the next question which is in Mr. Simon's letter is that of general practice; that is, whether women are to be entitled to look to general practice as a means of livelihood, and, of course, to be registered. And then he puts a question which, I think, has been ignored in the report of the Committee. He puts the question whether they are to be admitted to general practice, and then the question as to whether they are to be admitted to certain branches of it. I do not think this last branch of the question is sufficiently and distinctly dwelt on in the report. The last part of the letter to which I will direct your attention is this. He goes on to inquire what are the conditions with regard to women who desire to obtain legal status as medical practitioners in this country; and, on the other hand (I will ask your attention to this), to the "examination rules or other conditions which prevent them from accomplishing their wish". Now, there is not a single word in the answer with regard to that. He simply asks for information as to the conditions or circumstances which prevent them from accomplishing their wish, and what is our answer? Why, the report of the Committee passes that by, and it says, "In order to accomplish their wish, such and such regulations ought to be passed". That is not an answer to the question of the Lord President. The Lord President, or Mr. Simon for him, asks what are the conditions which prevent women from accomplishing their wish, leaving to the Lord President and the House of Commons to devise what are to be the means by which those objections are to be removed, or what course the House of Commons might follow. But instead of informing the Lord President as to the conditions which prevent women from accomplishing their wish, the report of the Committee passes that by totally, and simply lays down a plan for the government by which they may be enabled to gain admission. The Lord President asks one question: we have answered another question which has not been put. He never asks us in that

letter what are to be the means by which those objections or obstacles are to be removed. He simply asks the question, "What are the examination-rules or other conditions which prevent them from accomplishing their wish?" That is what he asks for, and that we have passed over completely; for we have not acquainted him with what are the conditions which prevent them from accomplishing their wish. Now this forms, in my mind, a very serious objection to this answer from the Committee; for I think it is a very good rule that you should answer, as fairly and as fully as you can, the questions asked; but I do not think that it is a proper course to evade a question asked and give an answer to a question that is not asked. The Lord President has not asked us what is the Parliamentary measure that he ought to introduce, or what is the Parliamentary measure that we should recommend. He has asked us no such question, and yet we have gone into the question of what it ought to be, and what the House of Commons ought to do. Now this, I think, is the most serious objection to the whole answer, and the whole course proposed by the Committee. The letter of the Committee says, "In reply to the communication addressed to them by the Lord President of the Privy Council, the Medical Council have to state that, being thus directly appealed to by the Lord President, they have felt bound to consider the question of the admission of women to the medical profession." I feel myself bound to consider it, and in that I differ from Dr. Storrar; but I am not bound to consider it on so short a notice as four-and-twenty hours, and without consulting the university which I have the honour to represent. In my answer I do not propose at all that we should evade the question. I simply propose that we should have an opportunity of going back to our constituents to put the letter of the Lord President before them; and then, armed with their opinions and their views, give an answer. It is said by Dr. Wood that we ought to give an answer immediately. Well, how long have we had a conjoint scheme before us? Three years; and we have not felt ourselves bound to give an answer up to the present moment. There comes before us from the Lord President, and very properly, a most important question: first, as to Mr. Cowper-Temple's Bill, on which we have given an answer, because we know distinctly the opinion of the whole profession on that point; and next, with regard to the other bodies admitting women; and next, with regard to their entering certain branches of the profession. I cannot think that the Lord President, who knows of what consequence it is to have due deliberation even upon the most minor considerations that come before the House of Commons, would hurry us or should be imagined to hurry us, into a decision upon that very important question. Now we come to an opinion expressed, and it may be right or wrong; but I do say that we have come too suddenly to it. It is in paragraph 5 of the Report of the Committee. It says, "After deliberation, the Medical Council have to express their opinion that the study and practice of medicine and surgery, instead of affording a field of exertion well fitted for women, do, on the contrary, present special difficulties which cannot be safely ignored, and some of which cannot be obviated." Well, I think, that, after the many avocations which we have had to go through in London in relation to professional questions, and the hospitality which has been exercised towards us, we have been unable to give the matter due attention. Now I come to the next paragraph, which I think the most objectionable. "Instead of medicine offering more facilities and less difficulties for women than other professions, the Medical Council believe, that as the whole question is looked into, there will be found peculiar hindrances, moral and physical, to the successful pursuit of medicine by women. Moreover, they desire to add, that if it be admitted that women should enter the medical profession, the existence of an equal fitness in women for other professions must be assumed." I do not think that is common logic. Are we to assent to such a ridiculous proposition as that, if we admit women into the medical profession to study medicine and practise it, therefore, forsooth, a little girl of thirteen or fourteen may be sent as a "midshipman" upon a ship of war? That paragraph appears to me to be utter nonsense. Then it says, "If notwithstanding such objections, it should appear expedient that women should not be debarred from obtaining that status". We have in the paragraph a few lines before this, a statement that there are special difficulties which cannot be obviated. "If, notwithstanding such objections, it should appear to the Government and the Legislature expedient that women who desire to obtain the legal status as medical practitioners in this country should not be debarred from obtaining that status, the Council recommend that it should be under some such conditions as the following." I think that, instead of favouring the progress of a measure which we have distinctly stated objectionable on moral, professional, and social grounds, and as to which there are difficulties which, we have said, cannot be obviated, the more straightforward, independent, and proper course is this: that, instead of the paragraphs which I have

read, we should say that, having expressed our opinion so strongly upon women pretending to go into the profession of medicine, and considering that there are special difficulties which cannot be safely ignored, and some of which cannot be obviated, it is our duty, as men who are advocates of social order and propriety, to say to the Lord President that we are obliged to decline being a party to any compromise, or to any measure that would admit women into the practice of the profession. That appears to me to be our proper course. There are, to my mind, two objections which cannot be got over with regard to paragraph *d*. In the first place, we take up a question which has not been asked at all, and we give the Government advice as to what they are to do. The Government does not ask us for it. The Government has simply asked us to state for their information what are the conditions which at present impede the way of women who desire to obtain legal status as medical practitioners in this country. That is the only question that they have asked on the point; and we have evaded that question, and advised them to pass an Act of Parliament. Now let us come to this wonderful Act of Parliament. We have been for years working on a conjoint scheme. Well, I think that all our exertions in that way have not hitherto been successful; but what are we now proposing? It is to pass an Act of Parliament which, to say the least of it, will make three or four examining bodies in addition to those already existing. So that we are blowing hot and cold. We are saying, on the one hand, that the licensing bodies ought to be diminished in number, and here is a proposal that the Government should give this Medical Council, on certain conditions, power to grant admission to women. (I am quoting from condition 2.) It proposes to grant admission to the *Medical Register*; and the examination is to be "such examination or examinations as the Medical Council may from time to time deem sufficient". Do you think that, if that were admitted, three months would pass over in London, or Dublin, or Edinburgh, or Glasgow, or any such places, without the women coming forward and having a meeting in St. James's Hall or somewhere else, and saying that they were not fairly treated; that they did not get proper examinations? Now we come to condition 3: "That the examinations of female candidates for a license entitling their names to be placed on the *Register* should be of the same character as those of males". If that mean anything at all, it means that it should be the same examination; it cannot mean anything else. But in paragraph *f* we find an observation that is utterly inconsistent with it. It is, that "the Council believe that the education and examination of persons with such views" (that is, with a view to practise midwifery) "will not be found to differ greatly, upon the whole, from those required of candidates for ordinary licenses to practise". Well, so far it is in accordance with the paragraph which I have just read, namely, that the examination should be of the same character; but it goes on: "Nevertheless, women might be fit for registration on a special Register without passing an examination in various parts of surgery, and, indeed, of medicine". Now, it is impossible that those two things should stand. One says that the examinations ought to be of the same character as those of men; and the other says that women might be fit for registration on a special Register without passing an examination in various parts of surgery, and, indeed, of medicine. I now go back to a paragraph (*e*) that I do not understand at all. "As to other than mere legal difficulties which prevent women from accomplishing their wish to engage in the practice of medicine and surgery, the Council are of opinion that such difficulties must be overcome by private exertions, and that no special legislation is called for except, perhaps, in the case of midwifery." But you have not stated what those difficulties are. You say "other than legal difficulties". I do not know any other than legal difficulties. I do not recognise anything but legal difficulties; nor does this paragraph point out in what direction the special exertions of women are to be directed to attain the end in view. Now, I have shown, I hope, sufficient reason for the course I have taken in taking this report paragraph by paragraph. I do not think that it is a report worthy of this Council. I do not think that it is a report worthy to go before the Lord President of the Privy Council. I do not believe that it is a report that can be amended so as to make it, as I have said, worthy of us. I believe that, if my amendment be thrown out, the proper course will be to withdraw the report. My letter goes, in the first place, to answer the first question which relates to Mr. Cowper-Temple's Bill. Then I say: "The second part of your letter resolves itself into two questions: firstly, whether women ought to be able to look to medical practice, or certain branches of it, as open to them, equally with men, as a profession and means of livelihood? The branches are not enumerated, but the question as to women looking to certain branches of medical practice as open to them equally with men, may be considered, the Council suppose, as specially referring to midwifery." Well, I do

not know any other branch that may be considered to come under that view. "On this the Council have to observe that, by established usage, women from the earliest times have practised midwifery." The practice of midwifery at all times, as far as we know, has been pursued by women. In Ireland, at the present moment, midwives are licensed by private individuals, and on those licenses salaries are awarded to them. I think that this is a very improper course; and, if the system of midwives attached to Poor-law medical appointments be continued, for the sake of the public, the licenses ought to be issued by bodies who have no pecuniary interest in selling their certificates. I will tell you what has occurred within my own knowledge. A man who had never attended a case of midwifery bought his license: I will not say where. He went to the country to practise as a dispensary doctor; and, when the first case presented itself, he did not know what to do. It was a foot presentation; and, when he found that the head was in the vagina and the feet outside, he twisted it round and round till he left the head in the vagina and had the body in his hand. Similar instances might be multiplied in England, Ireland, and Scotland. That is a thing that has occurred, and it ought to be put a stop to; and we ought to prevent midwifery licenses from being granted except by the legitimate corporations. Dr. Storrar says that the Medical Council was appointed under the Act of 1858 to carry out the provisions of that Act. Now, I have said, and I say again, that the question of the education of women as midwives has not come before this Council; and yet we are asked in twenty-four hours to give an answer to it. In 1873, there was a Committee appointed to draw up a report on the special education of women, and I think our respected President was the Chairman of that Committee. They drew up a report, which never came before the Council. Two years have passed away, and yet it is said that we ought at once to give an answer to that important question, while the report of the Committee on the same subject has been published and handed about, but the Council have never had the courage to take it up. Therefore, I hold that we ought not to be asked to decide in a great hurry upon such an important question. My letter continues: "The Council may, in the meantime, append these observations: First, they are aware that there exists a diversity of opinion in the profession, and among the licensing universities and corporations, as to the admissibility of women to general medical practice." I know that that diversity exists, for the subject came before the Queen's University, and, as a preliminary step, we had the opinions of the law officers of the Crown. I cannot say what the decision might have been; but the discussion was stopped in consequence of the law officers of the Crown declaring that we had not the power to give a license to women. There was a diversity of opinion in the senate of the university, and there is a diversity of opinion in the corporations; and, where that exists, I think that we ought to go back to those corporations and get an authorised statement of their opinions. The next observation I have appended is this: "There appear to exist very great difficulties with regard to the details of education and examination of women desirous of entering the medical profession, on social, moral, and professional grounds; and it does not appear that the Council can at present do more than bring the whole subject under the consideration of the licensing bodies of the United Kingdom, and obtain their views as to the admission of women 'who may desire to obtain legal status as medical practitioners', or to practise certain branches; and also the information desired by the Lord President as to 'the examination rules or conditions which prevent them from accomplishing their wish'." That is the pith of the whole letter from Mr. Simon, and that we have not answered at all; "and then forward the communications to the Lord President with such observations as the Council may deem it necessary to add". Now, does anyone believe or think that there is any very great necessity for any one extraordinary hurry at this present moment? Does anybody think that either Mr. Disraeli, or anybody else, will take up this question. Now, when we are almost in the month of July, and after the Government have declined to take up measures of great consequence, such as, for instance, the holiday question and the Brighton Aquarium, is it likely that they will take up the consideration of this matter? I do not believe that the delay will do any harm if we simply pass a resolution that the members of this Council be directed to obtain the views of the corporations on Mr. Simon's letter, and bring those views forward at the next session of the Council. There can be no real delay by postponing it; and, if that course were adopted, I should have no objection to withdraw my amendment. If the report be persevered in, I shall take the opinion of the Council upon it.

THE PRESIDENT: I think it is my duty to the Council, as having been formerly the Chairman of the Committee to which Sir Dominic referred, to state that I feel I owe an apology to the Council for not having prosecuted the matter; but it hardly represents the exact state of the case to say that this report never was before the Council. On

the contrary, I find that, on April 2nd, 1873, a motion was carried re-appointing the Committee, and empowering it to proceed with the subject. It would hardly be desirable that the Council should suppose that nothing had been done, and that this report had not been received. If there were a motion on the subject, I could explain why nothing was done.

Sir DOMINIC CORRIGAN: It remains as I have said; namely, that the Committee was appointed in 1873; but the Council never gave an opinion upon that report. They never had it before them.

Dr. AQUILLA SMITH: I rise to second the amendment of Sir Dominic Corrigan; and one reason for my doing so is, that it differs very materially from Dr. Storrar's amendment, which has been discussed. Sir Dominic Corrigan's amendment does not ignore the question, and does not take the power from the Council of considering it in future. I concur that it is the bounden duty of this Council, when we have been honoured by a communication from the Privy Council, to entertain the question and, at any rate, to return a becoming and courteous answer to the head of the Government on any question that could be discussed by the Council. But I also support this amendment because I take it that Sir Dominic's object in proposing it is, that it should supersede the report that has been received from the Committee. I shall not go over the matters to which Sir Dominic has so fully drawn the attention of the Council; but I shall just state very briefly my reasons for objecting to that report, and objecting to the motion which is now before the chair. I was very much struck this morning by the very remarkable contradictions in the report: contradictions as flat as can be. In the latter part of the report, the Committee suggest that an Act of Parliament should be passed to introduce women into the profession, after expressing in very clear language that they believe that women are utterly incompetent to compete with men as medical practitioners. In paragraph *e* we find: "Moreover, the Council are of opinion that any course of legislation which would interfere with the free action of any of the universities and corporations mentioned in Schedule A, in respect of the medical education of women, is undesirable." Those appear to me to be such contradictions in the report, that I cannot give my sanction to it. To recommendation No. 3 also I have a very great objection. "That the examinations of female candidates for a license entitling their names to be placed on the *Register* should be of the same character as those of males." Now, I will ask those who are teachers, would they feel themselves warranted in going into the very important and wide subject of syphilis and all its consequences? Would the ladies be instructed in that? I have reason to know, from a document which by accident has come into my possession since I arrived in London, that there is one lady who aspires to medical honours who would not shrink from the inquiry into syphilis in its most revolting forms. I have great pleasure in seconding Sir Dominic's motion, because it is a most important matter. I take the view of Sir Dominic, that this subject has certainly never been brought under the consideration of the body whom I have the honour to represent, and I should not feel myself warranted to state an opinion that females should be admitted according to the suggestions of the report.

Dr. ANDREW WOOD: I beg to recall the attention of the Council to the actual subject under debate on this motion. We have had a long discussion on the report of the Committee; but the great question involved in Sir Dominic Corrigan's amendment is, that we should tell the Privy Council that we are not ready to give answers to this question that they put to us, and that we must send the matter down to the licensing bodies. That is the whole question; and I say that a great many of the statements that have been made are quite outside the question; therefore, I hope that we shall now go to the vote and say whether we shall go on to consider this question in Committee, or whether we shall agree that we are not ready to take up the question. On that subject there may be difference of opinion, though the question is certainly not new to us. It is not new to me, certainly, in Edinburgh; and all through the country there has been nothing going on for a great many years that has excited so much attention as this subject of female doctors. I therefore hold that, to go to the Government and say that we have not had time to consider the question when we have been considering it for years, would be a great stultification; therefore, I hope that we shall throw out Sir Dominic Corrigan's amendment and come to the question, whether woman ought to be doctors or not, for that is the question at issue. I hope we shall vote without further delay.

Sir WILLIAM GULL: If we are stopped here, we are stopped altogether. This is not in the least a question of corporations or universities; they have nothing whatever to do with it; it is a question for the public, the Medical Council, and the Government. We particularly say in the report, that the medical corporations and universities

shall be left free, and that we deprecate any interference with their system. Women are outside these bodies. The Government wants to know whether women are to have this freedom that they desire, and what will you do? Go and ask people who have nothing at all to do with the question. The London University has nothing to do with it unless it likes to take it up. Sir Dominic Corrigan thinks that he and others who represent corporations have as much power as we have who do not. Then they have power outside their corporations; but to send this question back to the corporations, is to admit that there are in this Council members who are nothing but nominees and representatives of different bodies.

The amendment was then put and negatived.

Dr. WOOD: I shall not intervene between the Council and the Committee by proposing what I have put upon the programme, because a large part of it is actually in Mr. Turner's report, and I shall have an opportunity, in the course of the discussion upon the different clauses, of moving any parts of my report that seem to be different from it, and also of discussing the general question which has not yet been touched on.

Mr. TURNER: I should like to ask in what position we are placed with reference to Dr. Bennett's motion? If we agree to certain propositions in this report, it then becomes the report of the Council.

Dr. BENNETT: I see the difficulty. My proposed report is in the hands of the printers; but if it be desired, I can read it, so that the Council may know what is to come before it. I assume that our answer will come in the form of a letter from yourself, sir, to the Lord-President; and the letter I propose is this.

"Sir,—*a*. In accordance with the request of the Lord President, as conveyed in your letter of the 8th instant, I have the honour to inform you that I have brought under the consideration of the General Medical Council the Bill which has been introduced in the House of Commons by Mr. Cowper-Temple, 'to amend the Medical Act (1858) so far as relates to the registration of women who have taken the degree of Doctor of Medicine in a foreign university'.

b. "To this Bill of Mr. Cowper-Temple, as well as to the collateral and wider questions to which your letter refers, the Council have given full and careful consideration.

c. "With regard to Mr. Cowper-Temple's Bill, considered by itself, and apart from its bearings on the 'general question whether women ought to be able to look to medical practice, or certain branches of it, as open to them equally with men, as a profession and means of livelihood', the Council have found no difficulty in forming an opinion. By the Medical Act (1858), the Council are precluded from granting admission to the *Medical Register* to persons holding foreign degrees, and, consequently, have been compelled repeatedly to refuse to register foreign degrees held by men.

d. "The reason for this is obvious—viz., that the Council have no means of exercising that supervision and control over the education and examination required for foreign degrees to which the licensing bodies of this country, whether universities or corporations, are, by the Act of 1858, subjected. But this privilege, which the Medical Act refuses (and, the Council believe, very properly refuses) to men, Mr. Cowper-Temple's Bill proposes to grant to women. To such a proposal the Council feel bound to offer a respectful but decided protest, as being subversive of the main principle of the Medical Act, and, though in appearance of very limited scope, calculated to be productive of serious evils.

e. "With regard to the general questions referred to, and on which the Lord President desires to have the observations of the Medical Council, they would in the first place remark, that it is a very wide subject, and one that appears to them to involve the discussion of very grave questions—moral, social, and political—which appertain to the Legislature, rather than to a council of medical education and registration. If the Legislature should determine that the learned professions, and, therefore, that of medicine among them, should be thrown open to women as well as men, and that a legal status should be given to women as medical practitioners in this country, it would be the duty of this Council to offer every assistance in their power to the Government in framing rules for the education and examination of women, and in suggesting conditions for giving them admission to the *Medical Register*. The Council, however, cannot conceal from themselves the serious difficulties that would attend the framing of such rules and conditions, involving, as they would, the peculiar, and, in the opinion of many, almost insuperable hindrances, moral as well as physical, to the efficient education and successful pursuit of medicine by women, and demanding, in the interests of public order, that both the education and examination of female students of medicine should be conducted entirely apart from those of males.

f. "The Council have already had their attention drawn to the im-

portance of securing more efficient instruction for women who engage in the practice of midwifery, and whose services are largely employed, especially by the poor of this country. The Council feel very strongly that it is desirable that some means should be adopted for securing a better education, and granting certificates of competency to women who act as midwives. For, whilst fully admitting that for the safe and efficient practice of midwifery as a branch of medical science, a full and complete education both in medicine and surgery is required, the Council believe that a much more limited and less expensive education might be afforded to women, who, after due examination, might, as midwives, render valuable service to the community, and supply a deficiency long felt and expressed. For women thus educated and certificated, it might be desirable that a special Register should be provided, which the Council think might be secured by an alteration in Schedule (D) of the Medical Act.—I have the honour to be, etc.”

After a brief discussion as to the mode of proceeding,

The Council went into committee on the report.

Mr. TURNER moved the adoption of the first three paragraphs (a, b, and c) of the proposed reply to Mr. Simon's letter.

Sir W. GULL seconded the motion.

Dr. PARKES moved the omission of the paragraphs. He thought that they expressed a great deal too much, and yet too little. They gave no real answer to Mr. Simon's question, and were likely to land the Government in great perplexity. It was stated that there were special difficulties in the way of women which could not be safely ignored, and some of which could not be obviated, and yet it was well known that there were women practising in various countries. No answer was given as to what the "special difficulties" really were. No doubt there were certain portions of medical practice in which women would never be able to compete with men, but there were other portions in which, on the whole, he believed they had a superiority over men, especially with regard to diseases of women and children. The paragraph as to the "peculiar hindrances, moral and physical", to the successful pursuit of medicine by women was extremely objectionable, and he should feel it his duty to vote against it. He also objected to the statement of the report that, if women entered the medical profession, it must be assumed that they were equally competent to enter other professions: a most illogical conclusion to arrive at.

Dr. BENNETT seconded Dr. Parkes's amendment, and suggested that the different points in Mr. Simon's letter should be taken up in the order in which they were there stated, instead of being dealt with as in the report of the Committee.

A long discussion then took place as to the form in which the question should be brought before the Council.

Mr. QUAIN said he accepted the paragraphs proposed by Mr. Turner as a kind of compromise, there being a strong opposition in the Committee to the recommendations being carried, unless they were prefixed with some such statements as those contained in the opening paragraphs of the proposed letter.

Dr. ROLLESTON opposed the amendment, and urged that the paragraphs in question should be retained for the purpose of securing something like unanimity in the Council.

The amendment was then put and carried by a considerable majority.

On the motion that the amendment be carried as a substantive resolution, an amendment was moved by Dr. ROLLESTON, and seconded by Mr. TURNER, that the report be remitted to the Committee, and brought up next day, and that Dr. Bennett be added to the Committee. After some discussion, this amendment was carried, and it was also agreed to as a substantive motion.

The Council then adjourned.

On Friday, June 25th, the discussion of the subject was resumed. It was agreed, on the motion of Dr. ANDREW WOOD, seconded by Dr. QUAIN, "that the Council resolve itself into a Committee for the consideration of the report."

An amended report was presented by Mr. Turner, the Chairman of the Committee; and the Council agreed to consider the report, paragraph by paragraph. The report was as follows.

The Committee, having taken this (Mr. Simon's) letter into consideration, recommend the General Medical Council to adopt the following as the reply to be sent to the Lord President of the Privy Council.

a. In reply to the communication addressed to them by the Lord President of the Privy Council, the Medical Council have to state that they have felt bound to consider the whole question of the admission of women to the medical profession.

b. The Medical Council are of opinion that the study and practice of medicine and surgery, instead of affording a field of exertion well fitted

for women, do, on the contrary, present special difficulties which cannot be safely disregarded.*

c. With regard to Mr. Cowper-Temple's Bill, considered by itself, and apart from its bearings on the "general question whether women ought to be able to look to medical practice, or certain branches of it, as open to them equally with men as a profession and means of livelihood", the Council have found no difficulty in forming an opinion. By the Medical Act, 1858, the Council are precluded from granting admission to the *Medical Register* to persons holding foreign degrees, and consequently have been compelled repeatedly to refuse to register foreign degrees held by men.

d. The reason for this is obvious; viz., that the Council have no means of exercising that supervision and control over the education and examination required for foreign degrees to which the licensing bodies of this country, whether Universities or Corporations, are, by the Act of 1858, subjected. But this privilege, which the Medical Act refuses (and, the Council believes, very properly refuses) to men, Mr. Cowper-Temple's Bill proposes to grant to women. To such a proposal the Council feel bound to offer a respectful but decided protest, as being subversive of the main principle of the Medical Act.

e. If it should appear to the Government and the Legislature expedient that women, who desire to obtain a legal status as medical practitioners in this country, should not be debarred from obtaining that status, the Council are of opinion that it should be under some such arrangements as the following.

1. That, in the interests of public order, the education and examinations of female students of medicine should be conducted entirely apart from those of male students.

2. That, with reference to the "examination rules or other conditions" which prevent women from accomplishing their wish, the Medical Council have to state that, under the provisions of the Medical Act, those persons only can be placed upon the *Medical Register* who have been admitted to Medical Degrees in the Universities, or who have been admitted Fellows, Members, or Licentiates of one of the Medical Corporations of the United Kingdom. It appears that most or all of the Universities and Corporations are unable or unwilling to admit women to their degrees, or to admit them as members of the respective corporations. The Council are of opinion that sufficient provision would be made to enable women to obtain a "legal status as medical practitioners in this country", if an Act of Parliament were passed which should enable the Medical Council to recognise such examination or examinations as the Medical Council may from time to time deem sufficient for the purpose of granting admission of women to the *Medical Register* under the title of "licensed practitioners of medicine". But the Council are of opinion that any course of legislation which would interfere with the free action of the Universities and Corporations mentioned in Schedule (A), in respect of the medical education, examination, and licensing of women, is undesirable.*

3. That the education and examinations for these licenses should be under the supervision of the Medical Council, in the same way as those required for the other licenses of this country.*

4. That the examinations of female candidates for a license entitling their names to be placed on the *Register* should be equivalent to those of males.

5. That the education and examinations for these licenses should be under the supervision of the Medical Council, in the same way as is required for the other licenses of this country.

f. The Council have already had their attention drawn to the importance of securing more efficient instruction for women who engage in the practice of midwifery, and whose services are largely employed, especially by the poor of this country. The Council feel very strongly that it is desirable that some means should be adopted for securing a better education, and granting certificates of competency to women who act as midwives; for, whilst fully admitting that, for the safe and efficient practice of midwifery as a branch of medical science, a full and complete education both in medicine and surgery is required, the Council believe that a much more limited and less expensive education might be afforded to women, who after due examination might, as midwives, render valuable service to the community, and supply a deficiency long felt and expressed. For women thus educated and certificated, it might be desirable that a special Register should be provided, which the Council think might be secured by an alteration in Schedule (D) of the Medical Act.

g. It is right to observe that the Committee were not unanimous on some of the propositions in this report.†

WM. TURNER, *Chairman*.

Mr. TURNER moved the adoption of paragraph a.

* These paragraphs were altered in the course of the discussion.

† This paragraph was withdrawn.

The motion was seconded by Dr. QUAIN.

Dr. BENNETT moved as an amendment, "That instead of paragraph *a*, as now read to us, the following be adopted :

"Sir,—In accordance with the request of the Lord President, as conveyed in your letter of the 8th instant, I have the honour to inform you that I have brought under the consideration of the General Medical Council the Bill which has been introduced in the House of Commons by Mr. Cowper-Temple, 'to amend the Medical Act, 1858, so far as relates to the registration of women who have taken the degree of Doctor of Medicine in a foreign university'."

The amendment was seconded by Mr. MACNAMARA.

Dr. ROLLESTON : If the Council accept Dr. Bennett's amendment, it will cause a very large amount of rearrangement in the report, without any real advantage whatever. A very great deal of what Dr. Bennett has given, as I said yesterday, was an improvement in many particulars. The whole of the paragraph *f* is in Dr. Bennett's words.

Dr. BENNETT : My objection was to the words "feel bound to consider the education of women". It is not a rearrangement ; but I object to the main sentiment which underlies the first paragraph.

Mr. TURNER : Dr. Bennett suggests that this letter be addressed to Mr. Simon. The Committee propose that the reply should be addressed to the Lord President, and I submit that he is the proper person to whom it should be addressed.

Sir WILLIAM GULL : I agree with Dr. Bennett that this is not a mere matter of rearrangement, and that we know quite well. Mr. Cowper-Temple's Bill lies at the very bottom of the whole question. Mr. Cowper-Temple will come before the House of Commons, and say, "In England, a woman can obtain no education in medicine, and no recognition of her knowledge. Therefore, you must enable women to register foreign degrees"; and he has good ground for that. I think there can be only two courses open : to admit Mr. Cowper-Temple's Bill, and shelve the whole question as regards England ; or to take up the whole question, and take the pith out of Mr. Cowper-Temple's Bill. That Bill comes in to remove a hardship upon the public, as they think. The public say, "We wish to have women to practise medicine, and we wish to know whether they are fitted to practise medicine"; and the medical corporations and schools all say that they cannot take any part in this matter. Some women go abroad and get a degree, and they come back and say, "Now, we want to be put on the Register." It is a very hard thing for us to say, "You shall not have your request granted". Dr. Bennett's proposition takes up Mr. Cowper-Temple's Bill first. The Committee have raised the whole question ; and they say that we ought not to debar women from getting a medical education in this country to fit them for the Register. We do not say how it is to be done ; but we say that we ought to take away the hindrances that exist at the present time.

Mr. MACNAMARA : Where do you say that ?

Sir WILLIAM GULL : We imply it all through, and we state actually that they ought not to be debarred. I will only offer one consideration. Either adopt the principle of Mr. Cowper-Temple's Bill, which is reasonable, and say, "England shall register women"; or, on the other hand, get rid of Mr. Cowper-Temple's Bill, and say, "They shall neither come in from England nor from anywhere else." That seems to be a strange conclusion, and unfair to the public.

Dr. QUAIN : I do not quite go with Sir William Gull in his observations. There is an opening paragraph in Mr. Simon's letter, in which he makes a reference to Mr. Cowper-Temple's Bill, and asks that the President will move the Medical Council to favour his Grace with their observations upon it. Surely we can do that alone without moving a step beyond it. He asks us definitely and distinctly in a separate paragraph for our opinion on Mr. Cowper-Temple's Bill ; then, he says, that will open the whole question. We are quite prepared to go into the whole question ; but it would be simply more systematic to answer his question, and then take up the whole thing afterwards. It is perfectly competent to anybody to employ women with foreign degrees. All that they can gain by being placed on the Register is that they can recover fees.

Dr. ANDREW WOOD : The Council have not *proprio motu* originated a discussion of the question of the admission of women to the profession, but they have been consulted by the Government, who have asked them to give an opinion, not only upon the Bill, but upon the whole question of the admission of women. I think that there cannot be a better opening to this report than this paragraph. I therefore hope that the Council will, by a large majority, adopt it.

Sir D. CORRIGAN : Dr. Bennett proposes that the reference to Mr. Cowper-Temple's Bill shall stand in place of paragraph *a*. The reference to Mr. Cowper-Temple's Bill was agreed to in paragraph *c* ; and I think it matters exceedingly little whether it is put under *a* or under *c* ; but I do agree with Dr. Rolleston that, if we begin to overturn the order of

the paragraphs, we shall not know where to stop in the way of amendments. For this reason, I hope we shall follow the paragraphs as they are inserted.

Mr. MACNAMARA : I seconded the amendment of Dr. Risdon Bennett, because I think that it is most important that this Council should send forward a document that would be worthy of them. I ask you, if any of us received a letter on any matter of business, and if it were an important letter, and required a serious answer, whether we should not go to the first paragraph of the letter and answer it, and then go to the second paragraph and answer it, and so on. We should apply ourselves at once to discuss the letter of Mr. Simon.

Dr. THOMSON : I feel that the paragraph suggested by the Committee is not in accordance with the usual form of business. As far as I know of business, it is usual, in referring to any letter which a public body has received, to recite—perhaps shortly, but to recite clearly—the points upon which the answer is required. There are clearly two points which are suggested by Mr. Simon's letter. One is with reference to the foreign degrees, and the other is with reference to the more weighty question. Those two points are not referred to in the first paragraph of the answer. I think it is an unbusinesslike mode of proceeding to omit to recite them.

After a little further conversation, the amendment was put to the vote and lost. The original motion for the adoption of paragraph *a* of the report was then carried.

Mr. TURNER moved the adoption of paragraph *b*.

Sir WILLIAM GULL seconded the motion.

Dr. PARKES : I move as an amendment to leave out the words "which cannot be safely disregarded", and insert the following : "But the Council are not prepared to say that women ought to be excluded from the profession."

Dr. PYLE seconded the amendment.

Sir WILLIAM GULL : I see no objection to the admission of those words.

Mr. TURNER : I cannot accept those words.

Mr. QUAIN : I may state that words of that kind were used originally, and that it was to conciliate support that they were afterwards altered as they now stand.

Mr. TURNER : There is no statement in the report that women ought to be excluded from the profession. The amendment moved by Dr. Parkes does not add anything to the strength of the position that he takes up.

Dr. PARKES : The sentence as it stands speaks of "special difficulties which cannot be safely disregarded". That may be taken as, practically, an exclusion.

Dr. SHARPEY : I feel bound to vote with the amendment. I should not recommend women to enter the medical profession. I should dissuade them from doing so ; but I am not prepared to say that they ought not to do so. Persuasion is one thing ; denial is another ; and I am not prepared to stand in the way of women entering a career which they think they can safely and properly enter.

Dr. ANDREW WOOD : If the amendment be carried and put as a substantive motion, or if it be thrown out, I shall be prepared to propose an amendment carrying out my own views ; but, in the meantime, I will speak on the question whether women should be admitted to the medical profession or not. We have a specific question put : whether women ought to be able to look to medical practice, or certain branches of it, as open to them equally with men as a profession and means of livelihood ; and it is expected that we should discuss, not only Mr. Cowper-Temple's Bill and any collateral questions, but the whole question as to whether women are fit. From the beginning of this agitation with regard to women, I have always taken up one, and a consistent and honest course. I have always held that women are not adapted to the medical profession, and that the medical profession is not adapted to women ; and I have had to stand considerable volleys of abuse from that faction which carries on the agitation for the advancement of women's rights, because I have sturdily stated my opinion on the subject. I have given them and their supporters all the credit of honesty and good motives ; and I think it hard that they will not, in return, give us the same credit. If we were to judge from the noise and the dust which have been made in regard to the question, it might be imagined that the whole country, or a large majority of it, was in favour of the admission of women to the medical profession. I cannot admit that. I believe that if the population, and especially if the women of the country, were polled, it would be found that there is an immense majority against it. When we venture to advocate these opinions we are told, "You are putting yourselves in opposition to public opinion". I deny that public opinion is in favour of it. Many of those who advocate the admission of women into the medical profession do not know anything about either the profession, or what its practice involves. They

do not know what toils and dangers and perplexities and constant anxieties there are in the medical profession. They do not know all the repulsiveness of the dissecting-room. They do not know the bloody scenes of the operation-room. They do not know a great many of those things which are even so repulsive to men, that they refrain from entering the medical profession. I do not know whether it is the case here; but in Edinburgh we have ventured, in our ignorance, to talk of women having a particular sphere. I had always thought this was an axiom; but when we venture to talk about it we are sneered at. "Woman's sphere!" they say, "woman has no sphere which is less than that of man." I say that that is utter nonsense. God never meant woman for the sphere of man, and never meant man for the sphere of woman. If a woman be pushed into a man's occupation, she is as much out of place as a man when he is pushed into the occupation of a woman. Woman has a sphere—a very important sphere. She has the sphere of her own home. She has the bearing and suckling of children. She has the training up of the young, and she has a great many feminine occupations with which she ought to be as largely employed as possible. "But," it is said, "she is now at this time of day to begin to enter upon a profession into which she never entered before." Why does she go to the medical profession? The medical profession, of all others, is one that places most difficulties in the way of a woman. Why does she not go to the law or to the church? Why does she not go to a great many other occupations that would be far more congenial to her? She will have no dissecting-room to go into there. She will have no blood to encounter there. She will not have to exercise brute strength, such as a woman very seldom has, and which is required in many important operations. Fancy a woman called to reduce the dislocation of a hip-joint! Could a woman do that? And there are a great many other things that she might be called upon to do, on an emergency, that I really think it would be painful for her to attempt, and not only painful as regards herself, but painful as regards her poor patients. It has been said, "You are a trades-union. You are like the silversmiths at Ephesus. You are afraid that your craft is in danger, and you cry, 'Great is Diana of the Ephesians!'" I repudiate with scorn these insinuations. I have been a member of the medical profession for forty years, and I believe it to be an honourable and unselfish profession—a profession which lavishes its skill and its labours gratuitously in a greater degree than any other profession in England; and I say, therefore, to call us a trades-union and all that sort of thing is not the way to force us into adopting any scheme that may be laid before us. There is another set of people with whom I wish to deal: those who think that it is the very worst profession that women could take to; and who would rather, if possible, keep them out of it. But they say, "Although we think all that, if it be inevitable we must bow before the inevitable; and, since it must come, is it not far better to take measures to make it easy?" Is that consistent? Then other people say, "Do not make such a noise about it. It is a mere farce. It is only a few women who will enter into the profession. Nobody will care much about it, and in the course of a few years it will die out. They will not succeed. They will be miserable. They will be quite uncomfortable in their new position. We would strongly advise you to say nothing about it. The more you say against it, the more they will want to be allowed to enter." What! are you going to tempt these women to their ruin? I contend that I am the most honest friend of these women, when I say to them: "Do not enter a profession which I know is not suited to you." I say that honestly; and I add to that: "I cannot give you any help in getting into it." How can I logically and consistently do so? I think we have had a little experience in Edinburgh as to the evil of leading women into a wrong position. Some of our professors in our University of Edinburgh led these women upon the ice. I will appeal to any who know about the case of Edinburgh whether there was not constant turmoil. The women's question was brought into everything. If it were a meeting of the Infirmary or of the University, there cropped up this ladies' question. Such was the rioting, that we were very thankful that a court of law put an end to it, and that the women took flight to London, where they found a more congenial atmosphere; and I congratulate the London members on having them, if they like them. Then it is said: "If women like to enter the profession, why not let them do so?" Dr. Sharpey does not think that they are very fit for the profession. He says that they will find out their mistake before they go much further. Why not tell them clearly that they had far better not enter a profession for which they are not adapted? We have been told over and over again that women demand women-doctors. I deny that women call for female doctors; and I believe that, in opposing the admission of female doctors, I am, in fact, the champion of nine-tenths of the women of this country. I have taken the opinions of a great many women in all classes of the community, and of all

ages, and, with one exception only, I was never told by a woman that she would employ a female doctor, "as long," they say, "as we can get an accomplished, skilful, and proper medical man". Women are themselves, therefore, the most inveterate and sturdy antagonists of this movement, and are we to disregard the women? The age of chivalry has not gone yet. Let us chivalrously stand up for the women, and keep them from having their sex discredited by women becoming doctors of medicine. Another argument is, that women shrink from telling their ailments to men. I have never found this. I believe that there are some women who would not tell their ailments to anyone, either male or female; and I have had frequent conversations with some of our most accomplished and most largely employed accoucheurs, and they have all told me that they never found any difficulty in having from women a full detail of what was the matter with them. When you find a considerable difficulty in getting a knowledge of the ailment, you do not find that it is always the most delicate woman that gives that difficulty. I come to another point. It is said: "Well, perhaps women may not be up to all the different departments of medicine and surgery; but surely you will allow that the natural thing would be, that they should practise in midwifery": just the department of practice for which they are least fitted. That may appear an anomaly; but just look at it as it is. Would you like to entrust your wife to a female midwife if there were a case of embryulcia? Would you like to see a woman with the crotchet in her hand, or with the long forceps, pulling with all her might, and with the sweat running down her face? Would you like to see a woman in charge of a case where blood was gushing out in torrents from the womb, and do you think that she would have the readiness and nerve which would save the patient from being lost? I say that these cases of midwifery are just the very cases which are least adapted for female doctors; and it is a very curious fact, and an undeniable fact, that, whereas in the last century, and in the beginning of this century, very few women were delivered by any but women in Edinburgh, even the very poorest woman in the poorest close of Edinburgh would now infinitely prefer a man to attend her, and always does employ a man. The next argument is an appeal of political economy. We are told that there is a great excess of females, and that there is a lack of employment for them; that they cannot earn their bread properly; that you should open up to them every field of exertion that you can. I agree with it; but then, in opening it up, you must see that you open up that for which they are adapted. There are very many things for which they are far better adapted; such as the teaching of young children and of grown-up girls. The public offices have been gradually opened up to females, such as the post-office and other offices, where they can sit quietly at their desks, and not be called to encounter any of those dreadful things that they must encounter if they become doctors. They are also employed in the telegraph-office. Many women write for the press, and others become compositors; others are artists, and I do not know why there should not be many more. These are feminine occupations; but, as to practising medicine, I say that it is by no means so. Then I will just make this *argumentum ad hominem*: I would ask any member of this Council whether he would like to see his sister or daughter embracing the practice of medicine. He would not like to go into the dissecting-room, as I have gone, and see five or six ladies dissecting a body, and five or six male students dissecting another body two or three yards from them. He would not like to see them liable to be called out at all hours of the day and night. He would not like to see the noise, discomfort, and disquietude to which they would be subjected. Why should we encourage the sisters and daughters of others to enter into a profession that we would not like our own daughters and sisters to take up? If there be not anything in the arguments I have brought forward, and if the Government come to us and say, "What do you think about it?"—if they put the question directly in this form, whether women ought to be able to look to the medical profession, or to certain branches of it, as open to them equally with men as a profession and means of livelihood, say "Aye". But, if you believe that women ought not to be doctors, then, come what may, you are bound to tell the Government so. I do not think that, in this question, there can be any compromise. Supposing you send any uncertain reply to the Privy Council, and supposing, even by inference, you give the Government to understand that you think that women might be employed as female doctors, you are not uttering the sentiments of your profession. I am quite sure that your opinion which is given and your action which is maintained will meet with the disapproval of nine-tenths of our profession; and I think that there must be some truth in the objection, when you find that nine-tenths of an honourable profession are so much agreed in this. From a knowledge of their profession, and from a knowledge of all that is to be undergone in the practice of it, they are not inclined to think that the public would be safe with female doctors,

or that the female doctors would be a comfort to themselves, if they embraced the profession. I say, then, in conclusion, leave the female sex to be what God made them, and what Nature intended them for. Leave them to command our esteem, our deference, and our love, and do not put them in a position in which you would not like to see them; for we, on our part, all feel what we owe to the female sex. When I say that they are not fit for female doctors, I do not wish to disparage them; I love the female sex, and it is because I love them that I wish to keep them from this "mockery, delusion, and snare". Let us continue to regard them as women, who, in the language of our immortal Scotch poet, are to us in our hours of perplexity and sickness and sorrow nothing less than "ministering angels".

Dr. HUMPHRY: After the remarkable and most honest and admirable speech of Dr. Wood, I think it is necessary to call the attention of the Council to the fact that the question before us is not whether women are to be encouraged to enter the profession, but whether they are to be excluded from it. I have always felt regret that that question ever came before us. I have always felt that the profession of medicine was the one of all the professions least adapted for women; but I do not feel that they ought to be absolutely excluded from it. I apprehend that there is no man at this table, and perhaps no man in the whole profession, who has felt more than I have done, the difficulties and the annoyances of the medical profession. There is, perhaps, no one present who can feel more strongly than I do the disadvantages that women will incur who enter the profession of medicine, and far would I be from encouraging or advising any woman to enter it. Far would it be from me to encourage any daughter or sister of mine to enter the profession; but it would also be with much hesitation that I should encourage a son to enter it, and, indeed, I have never done so. The disagreeables which met me were so great that I would not encourage anyone else to enter. I quite admit that there are vast counterbalancing advantages. The enormous opportunities of doing good to our fellow men in the greatest difficulties and the most trying circumstances, are advantages which ought to have compensated myself long ago to a greater extent than they have, and they are advantages which fortunately have compensated others more than they have done myself. I should be unwilling to preclude any class of society, or any sex, from the opportunity of doing great good to their fellow men. Dr. Wood has alluded to the bloody scenes of the operating-room. I have never witnessed an important operation without a woman being present. I have often observed them, and I have often observed, too, men not of my own profession present; but I confess that I have thought none of the women who were present had so much feeling of dislike for the thing as I had myself. If women of one class are regularly admitted into our operating-rooms, I do not see that there is anything in the thing itself to preclude other women from being present there. It appears to me that their line on this occasion must be determined by the consideration, whether there is anything in women distinctly rendering them unfit for the practice of the medical profession. If we feel that there are mental and physical disqualifications on the part of women to prevent their entering the profession and their being useful in it, I think our bounden duty at once is to negative the amendment of Dr. Parkes; but, unless we do think that they are distinctly and physically disqualified, and unless we do feel that a distinct and serious evil to the community would be incurred, I think we have no right to declare for the exclusion of that sex. Dr. Wood has alluded to the reduction of dislocation; and I think that Dr. Wood will admit that in the present day reduction is not a matter of force, but pre-eminently a matter of skill. Is there anything in woman to preclude her from exercising skill as great as that of a man? If there be, then I admit we ought at once to forbid her entering the profession. If there be not, I do not think it is our duty to exclude her. Is there any mental disqualification? Mr. Turner has alluded to the smaller size of the woman's brain; but, relatively to the size of the man, there is very little difference in that respect, and I think that we all of us have sufficient knowledge of woman to feel that her mental power is very little below our own. Doubtless, in some respects it is; and I think that the examinations which have taken place at Cambridge indicate in a remarkably clear manner the difference of woman's faculty from man's. They indicate that, perhaps, in some of the most serious and harder branches of education, the woman does fall a little inferior to the man, and the girl falls a little inferior to the boy; but in many other points—in facility of attention, in tenacity of memory, in readiness of application of herself, not unfrequently in accuracy and precision of statement—the girl is considerably superior to the boy; nay, in looking over, as I have often done, the reports of the examinations, I have found it rather difficult to avoid the conclusion that the girl is mentally rather superior to the boy, and I believe in these earlier periods of life it is so; but, at any rate, the boy does overtake her and advances somewhat in front, but I do

not believe that there is really any disqualification on the part of woman. Then, looking at the question morally and socially, I think it is not easy to say that the practice of medicine by women upon men is a greater moral evil than the practice by men upon women. Indeed, I am sure that it is not altogether unattended by its great moral evils. Although Dr. Wood has said that women do not desire the assistance of women, I think, nevertheless, it is certain that some do. Dr. Wood has mentioned that we tempt women to their evil; that is not the purpose directly or indirectly of this resolution. Its object is simply not to preclude women from the opportunity of entering upon a certain course which she and her friends think it advisable she should take. Dr. Wood has asked whether we would like to see women enter upon the more severe cases of midwifery. He has alluded to embryulcia. Happily, the cases are rare; and the men who are fitted for that work are very few. I am not prepared to say that women in great emergencies are much worse than men. The woman has remarkable readiness. I may say that personally I have often been surprised, I may say put to shame, by the readiness of resource and the courage of woman in some of the greater emergencies and some of the more serious positions of life. I have always said—"Oh, enter not that profession, and think not of it; it is one of the most unsuited to you"; but, nevertheless, with all that feeling, I do say that, as a matter of public justice, and forming one of this Board, which is a public body who have not to be influenced by a majority of any kind, either the majority of our own profession, or the majority of women, or the majority of the country, but to state seriously, and in a responsible manner, our own feelings upon this great question—I come to the conclusion that we ought not, as representatives of the medical profession, to say that women should be excluded from it.

Sir DOMINIC CORRIGAN: The question before us is, as Dr. Humphry has explained it, simply that women ought not to be excluded from the profession. He does not say one word of their fitness, or their being fit for it; he says simply that we ought not to exercise the powers that we have in order to exclude women from the medical profession. In the senate of the Queen's University, the question was discussed, until an opinion was obtained from the law officers of the Crown that we had not the power of granting degrees to women; and on this discussion I was the advocate of women's admission into the profession, but I also distinctly stated that, supposing women obtained their medical degrees, no consideration should induce me to meet them in practice. Those two things may seem inconsistent; but, while I advocated the principle that there should be free admission for women in competition for whatever honours or distinctions were open to them, I could not conceal from myself that I could not go into consultation with a woman and discuss with her the particulars of cases that must occur in hundreds every week, without losing totally that respect for her sex which I have no wish to lose; and, if I were asked as regards the members of my own family whether I would advise either one or the other to go into the medical profession, my answer would be that I would rather see them buried. Suppose we pass the original resolution. Women will say, "You have passed such a resolution; but what are you, or who are you? You are all men, and it is your personal motives that have induced you to pass that resolution and to exclude us from a profession for which we are fitted." In my mind, there is nothing that keeps up agitation so much as permitting a grievance to continue. I well remember, many years ago, attending a Board in Ireland, and there was some grievance, and the person who was concerned in the agitation lost all command over himself. He rose at the table and dashed all the papers over it, and said, "Will you give me nothing to fight about?" Now, supposing we come out decided oppositoinists. Suppose we say, "You shall not be admitted to our profession." We generously help them in hoisting the flag of grievance, and they will apply to us the remark of the lion to the sculptor. The sculptor, to show that man was superior to the lion, showed the lion in a prone condition and the man standing over him. The observation of the lion was, "Let the sculptor be the lion, and see what position both would be placed in." I would remove their grievance. I would say, "You shall have the degrees if you can earn them." I do not believe that one out of 10,000 women would look for the degrees, and I know that the opinion of the women themselves is in accordance with what Dr. Wood has stated, namely, "That those who are most opposed to them are the women themselves." It has been stated in one of the works which have been issued from the press in favour of the movement, and in the most pathetic language, that there are thousands of women's lives lost in Ireland from their disinclination to employ male doctors; and it is said that in the nunneries hundreds of women sink annually on that account. I have a very fair share of opportunity of knowing what the opinions of the women in convents are. I have asked hundreds of them whether they would like to have women-doctors, and

the invariable answer has been, "We would not have one of them near us." Now that is the opinion of the most modest women possible in any community. Supposing there was a resolution brought forward to prevent their going into other professions. Does anyone think that if the office of trombone player or big drum player in a regiment were open to women, they would offer themselves for it? Perhaps some would do so, but I am sure they would soon find that they were unfitted for the office. I remember a scene in one of our Dublin hospitals, where a woman was admitted as a student. As soon as this female student made her appearance in the ward, the women pulled the sheets over their heads so that they might not be detected, and they gave one continued hiss until the female student left the ward. With regard to the question of midwives, I think that is not before us at present. The question simply before us is Dr. Parkes's amendment whether we should express an opinion that women ought to be excluded from the profession. I will simply repeat what I said: While I stand up as the advocate of admitting women to degrees, I would never meet one in the practice of my profession; and, as regards their fitness, I would see the dearest member of my family in her coffin rather than following the medical profession. But, taking those principles as those which are guiding me now, I would say "Give them a fair field, they will soon find that they are out of their place, and the agitation will disappear."

Mr. MACNAMARA: I think it is exceedingly to be regretted that the question of women's rights has been thrown upon this Council, as it were, for solution. If we decide here in favour of admitting ladies to the medical examinations and to the *Medical Register*, we are but introducing the thin edge of the wedge into the solution of a most difficult problem. If women be admitted to the medical ranks, why should they not be admitted to the franchise? and if admitted to the franchise, why not to the House of Commons? But, much as I think a great deal may be said against our doing anything which would attempt to solve such a question as that, still I feel coerced to vote for the amendment, which strikes me as being one of the most guarded that I have ever seen since I became a member of the Council. It guards us in the most marked manner from expressing any opinion. I have heard a good deal said upon the question of the physical disabilities of women. I was rather astonished to hear that the physical disabilities of women would prevent their entering our profession. We have not, in this report before us, added one word as to the special difficulties which are alluded to; not one of them is enumerated: there is only a general mention of "special difficulties". I hear from one gentleman something about brain; from another, something about muscle. I suppose that it is meant that physically women are not strong enough to discharge the duties required of them. If necessary, I think I could produce 20,000 women who would try that conclusion with one half of the medical profession, and the question would be decided in favour of the women. It is merely begging the question to speak of physical force. There is not much physical force required to handle the stethoscope or the urinometer, or the thermometer, so far as medicine is concerned; and as to surgery, I do not know that in that case either very much physical force is required. As to the mental question, it has been said that women have not done much towards the advancement of scientific problems. "Well", they answer at once, "we have not had the opportunity. Our studies have not been directed to that quarter"; but I would like to know how many of our profession have done much for the advancement of scientific problems. If I were very ill, I would prefer the practical physician who had devoted himself to his profession, and not to the solution of scientific problems. It has been said that the study would have a lowering effect on the nature of women. The most delicate-minded women that I know of are at this moment employed as nurses in the hospitals: I refer to the sisters of charity in the city of Dublin. It would be a calumny to say that the finer feelings of these ladies have been blunted because they have attended in the most serious and critical cases of surgery. They are found discharging their duties well, and ably, and modestly; and I cannot believe that a lady could not discharge the duties if she received a larger honorarium than is accorded to the sisters of charity. I think that it is most unfair to use the *argumentum ad hominem*, and to ask whether we would like our own sisters and daughters to engage in the profession. There are many pursuits that are exceedingly noble, but to which probably we should not like to put our own sons or our own daughters. I think that it is a great mistake that we should decide the question upon such a small argument as that. The Government have asked us a most important question: whether women ought to be able to look to medical practice.

We are asked now to state that there are special difficulties which cannot be safely disregarded. Of course, the inference is that women ought not to look to general practice. Then we are asked as to their fitness for certain branches of it. I think that there are certain branches as to

which there could not be a word of cavil, in which women might be well employed, and as to which we find great difficulty at the present moment. I think that they might be well employed in pharmacy; they might earn an honourable income in dispensing and compounding physicians' prescriptions. That has not been alluded to at all. It is well known that there are about ten or twelve thousand women in this division of the kingdom employed in attending women in their confinements. What we would propose would be to improve their education. That is one question, I think, to which we might apply ourselves. Let them be well educated on that point. But in this report the Committee say, "The Council are of opinion that sufficient provision would be made to enable women to obtain a 'legal status as medical practitioners in this country', if an Act of Parliament were passed which should enable the Medical Council to recognise such examination or examinations as the Medical Council may from time to time deem sufficient for the purpose of granting admission of women to the *Medical Register*, under the title of 'licensed practitioners of medicine'." On one side, the report goes absolutely to assist in doing it, and, on the other side, it goes to say that there are special difficulties. I feel bound to support Dr. Parkes's amendment, because I think that it will relieve us of a very great difficulty.

Dr. STOKES: We are asked to advise the Government upon this matter. The question is one of extreme difficulty. There are questions raised as to the physical powers of women, and as to the moral view of the case. Is the unsexing of women, which certainly would be threatened by a large surgical or medical education, a desirable thing? That is the question which the Government in any future communication with us will in all probability ask. Then, to go back to the question of the physical incapability of women to perform every operation in surgery. I remember the case of a lady who was attacked with peritonitis, she before having suffered from a large abdominal tumour. She recovered from the peritonitis, and in the course of a year afterwards, she was seized again with the disease with great severity. She came to London, where a large ovarian tumour was diagnosed, and an operation was performed by one of the most eminent operators in such cases. That gentleman told me that, owing to the two attacks of peritonitis, strong adhesions had formed. I must tell you that the disease was double. It was found that both ovaries were affected, the adhesions were so strong that it took the entire force of the operator's body to tear them out, and so much force had to be used that after the operation he was obliged to sit down, and remained in a fainting condition for some time. That patient recovered, and for years was a very beautiful woman. Well, I doubt very much whether we can anticipate that women will be able to meet such an emergency as that. In obstetrics, there are conditions in which the full force of the most muscular men is absolutely necessary. Then comes the moral question. Is it not very much better that a certain number of women should not make the profession of medicine and surgery a source of employment to them, or that the moral condition of the female should, more or less, be damaged by having to attend to matters which are in fact antagonistic to the delicacy of a woman? Is it not contrary to nature that such things should be? The feelings of women are opposed altogether to these pursuits. I think that I can confirm in every respect what Dr. Wood has said upon that point. I have made it my business ever since the agitation began, to inquire of every intellectual woman with whom I happened to come into contact, what were her views upon the subject; and they have uniformly treated the attempt to transfer any portion of operative surgery or medicine to women as a grand mistake. I think that, as we have been consulted by the Government, it might be well that we should lay before them the difficulties of the subject in the first instance.

Dr. BENNETT: I think it desirable that I should say why I cannot accept Dr. Parkes's amendment. It is not really sufficiently cognate with what precedes in the same paragraph. The paragraph consists mainly of a statement that medicine and surgery would afford a field more fitted for women; and then it properly ends by saying that there are special difficulties which cannot be safely disregarded. Dr. Parkes would introduce a specific statement, having no absolute and necessary connection with either of these, and would affirm that women ought not to be debarred from entering the medical profession. Secondly, I object to it because it goes a step further in giving our views to the Government in favour of breaking down the barrier that at present exists and favouring the introduction of women to the medical profession. We have not excluded women from the practice of medicine. In corporations and universities, which by their regulations exclude them, the question is, whether the barriers should be thrown down, and whether we and others should give them assistance in entering on a legal status into the profession. I am not prepared to say that it is our duty as a profession or as a council of medical men to assist in breaking down those barriers, and permitting the entrance of women upon a

legal position into the medical profession. I think, quite apart from the physical and mental incapacity of women, about which much has been said with which I do not heartily agree, there are other serious objections to justify us in coming to a conclusion that their admission is undesirable in the interests of the community at large, in the interests of women themselves, and in the interests of this profession as a scientific profession. I will assume their physical capacity for it, and that there is no insuperable mental and moral objection to it, but I should still feel that there were many considerations that would make it exceedingly desirable for the maintenance of woman's high, rightful, and honourable position in the community, that she should not enter into such a profession as ours. I think we are going considerably beyond what we are called upon to state, if we specifically set before the Government modes by means of which these barriers should be broken down, and reasons why they should be broken down.

Mr. TURNER: I do not see my way to accept Dr. Parkes's amendment, so as not to divide the Council, because he cuts out certain words which I think it is important that we should put before the Lord President, and he adds certain other words which I think unnecessary.

Dr. QUAIN: We are asked to pronounce upon the admission of women to the medical profession, because we are supposed to know their constitution and their fitness for great mental and physical labour, and also because we know the amount of physical and mental labour required for the medical profession. We come forward and say that we believe that the medical profession is one of the most arduous to learn, one of the most difficult to follow; and if we state that a woman by her mental constitution and physical powers is fit to enter upon this profession, the women who lead the present agitation will say, "Is there any position in social or professional life from which she should be excluded?" and that may lead to the withdrawal of a large number of women from the position in which they have been placed since creation. It is not necessary for me to state in this Council what that position is—it is the comfort of the household, the bearing and the education of children. This is a question which bears on the relation of the sexes; it is a wide and important question; and I think it would be a wiser thing for the legislature to seek to determine it; and then, if they resolve that women shall enter the medical profession, this Council can be asked how best they shall be adapted to the change.

Dr. ANDREW WOOD moved the adjournment of the debate.

The motion was seconded by Dr. BENNETT, and carried.

On Saturday, June 26th, the Council again went into Committee, and proceeded with the adjourned debate on Mr. Simon's letter.

Dr. ROLLESTON: I should have been glad to have voted yesterday on this question; for there was, as it seemed to me, very little to be said after the speeches of Dr. Wood and Dr. Humphry, which, for straightforwardness and sincerity, left nothing to be desired. But, apart from that, I think that every member of the Council must have thoroughly possessed himself of the bearings of this question; at any rate, they ought to have done so, for the question has been before us since 1858, and we are now in 1875, and we really ought to have made up our minds upon it. With regard to the speech of Dr. Andrew Wood, there was no need for him to vindicate his honesty or defend himself against public opinion. But, if there were no need for Dr. Wood to vindicate his honesty, there is some need for me to vindicate the credit of anatomy. Why should anatomy be repulsive? Why should the dissecting-room be repulsive? It need not be so. If the thing be done properly, it need not be repulsive or loathsome. Dissections, like all operations in surgery, can be done badly. Even such a thing as the administration of an enema can be done in a vulgar disgusting way, or in a way quite the reverse. There is nothing that cannot be done in two different ways; a coarse way and a refined way. If students dissect in an untidy fashion, it reacts on all their work from beginning to end. Then there is the *argumentum ad hominem* which I would apply in another way. Dr. Wood is too good a scholar not to know that the sentiment, "Homo sum, nihil humanum a me alienum puto", applies to women as well as to men. Now, what are the arguments in the matter? The first great argument, against which all opposition seems to me to count for nothing, is, that a large number of persons do wish for this thing. Some women wish to be doctors; others wish to have women-doctors. Now, if you have a large number of the community who desire this, I say that it is itself a reason. This feeling of people who wish to be doctors and of people who wish to have doctors of their own sex to attend them is a growing one, and has been growing from those savage times when woman was treated as a mere instrument of lust or a beast of burden. It is said that the very refined and delicate people are really quite content with men. I have not only had the advantage of coming on the Medical Council and meeting with a large number of refined and cultivated men, but I

have had even the greater advantage of meeting with a fair share of cultivated and delicately minded women. I am happy to think that there is one person here who is acquainted with some of the same women, and who will rise and speak on the same side. I know many most refined women, the aspect of whose refinement has taken first the form of a desire to give the largest and freest scope to the energies of all, and, secondly, a feeling of sensitiveness which, in the course of ages, has developed itself as to the two sexes being kept apart in those matters which are peculiar to women, such as midwifery. The women of the greatest cultivation, women of at least as great cultivation as many of the cultivated men around this table, have had just that positive feeling in favour of this enactment. As it happens, I am not in relation with any female doctor; I do not know one personally; but a great number of highly refined women are strongly in favour of this great movement. It is either a great thing or a small thing. If it be a great thing, you should not oppose it, if it have a root of goodness in it and concerns the happiness and development of the species. If it be a small thing, why make all this fuss about it? I believe that, of the few women who will attempt this, if you throw open the gates, many will succeed. It will not be, as in many other professions, that many will attempt and few succeed, but of the few who attempt it many will succeed. There is one point which has not been touched upon at all. We here in this United Kingdom are responsible for the good government of a very large part of the world; and the great want of India, for example, is to have female doctors, who may bring civilisation into the zenanas and other places of that sort where men are not admitted. Would it not, then, be better that such women should be thoroughly educated, and have a trade-mark put upon them, so that the Indian Government can trust them, than to have them going about without examination? Then comes the question, Are women equal to these things? Louis XI said: "Let the women try; there is nothing like trying;" but I should say: "Let them try, because many of them will succeed." I do not believe a large number will try, but a proportionately large number of them will succeed. Just see what some women have done. Look at Queen Christina of Sweden, who used to watch Descartes's experiments, physiological and otherwise; or look at women of our own time—Mary Somerville, Harriet Martineau, Dr. Garret-Anderson. Those are persons who possess intelligence of which I should be glad to have a small fraction. I do not mention other distinguished women, such as our present Queen or Queen Elizabeth, but such as in our own age have been fitted for this particular work. We should not be "the first to have new things tried"; but, on the other hand, I hope we shall not be the last "to lay the old aside". Let me close what I have to say with a sort of parable or apologue, which has often been used by people who have had, as I have now, to oppose an argument of this kind. It was used about the removal of the Jewish disabilities and the disabilities of dissenters. Dr. Andrew Wood made me feel young again, because I heard, twenty years ago, *mutatis mutandis*, precisely the same argument about the Jews and the dissenters. This is a good instance of it. You are told by persons like Dr. Andrew Wood just as you were told about the removal of the disabilities of Jews and dissenters, "This is a great change, a great revolution, an enormous *bouleversement*." I will tell you this story. A man was taken by his enemies. He was blindfolded, a rope was put into his hands, and then he was swung into the air, and told to hang on to the rope, because there was a precipice beneath him, and, if he did not hold on, down he would go, and there would be revolution, smash, and utter destruction of him and of public morality and public order. So he held on for many hours, till his muscles were cramped and his ligaments were all stretched, and, in one word, he tasted the bitterness of death. Then they removed the bandage; he opened his eyes, and found his feet within two inches of the ground.

Dr. THOMSON: Allow me, as a teacher as well as a member of this Council, to express my opinion in regard to this matter. It is an opinion which, as will be felt by all, I have been required to consider for a long time, and therefore, as I believe is the case with all the members of Council, I do not by any means approach this question for the first time; for I have long had it before me. I would speak first upon the wider question with which we have to deal. I think it is obvious that, among the points suggested by the letter sent to us are, first of all, the suitability of women for the medical profession; next, whether they are more suited to one branch of the profession than another; and, in the third place, the more formal question, What are the circumstances connected with examination-rules, and so forth, which prevent those who wish it from accomplishing that wish? It is quite obvious that our answer should embrace the whole of these three topics in connection with the general question. On the suitability of women to the profession, and what should be the answer referring to that point, I must say that I agree entirely with the observations which first of all

fell from Dr. Sharpey, expressed with all that wisdom and simplicity and clearness which we know to belong to all he says. I cannot allow myself to speak without also referring with similar pleasure to that which Dr. Rolleston has expressed, to what fell from Dr. Humphry. I think we are obliged to Dr. Parkes for presenting to us in the most temperate form the opportunity of correcting the too strong expression which is contained in that report of the Committee. That, I think, is the sole point now before the Council. In conceding, as I do most fully, the right of women to enter the medical profession, and in saying at the same time that I do not think them altogether suited for it, I do not shut my eyes to the difficulties that present themselves in connection with it, nor even to the objections that may be made to it. I am not influenced in this by any consideration of what has been called the question of the rights of women, or by any of the moral considerations that have been put before us; but simply by a sense of justice, of what is right and proper under the circumstances. It seems to be incontrovertible that attendance on females by females is, upon the whole, more decent and appropriate than attendance of men upon women; and I am quite sure that I am right in following Dr. Rolleston's assertion with mine, that there are a great number of refined and delicate and cultivated women in this country, who would prefer to be attended by women rather than by men. But when I say this, I must recall to the attention of the Council that they have scarcely ever hitherto had the opportunity of being so in this country. The time has not come when women will be so educated that all others will be able to derive benefit from their services; but when it does come, I am quite sure it will be found that the most superior women in this country, the most delicate and refined and best-informed, will be most glad to avail themselves of the services of those females who enter the profession. I do not in the least share in the somewhat exaggerated fears expressed by Dr. Wood. I do not, any more than Dr. Rolleston, think that a large number of females will rush into the profession after entrance is conceded to them; and I have still less fear that those who do so will attend principally upon men. My belief is, that they will devote themselves more especially to childbirth and attendance upon women and children; and can anyone doubt that, with their knowledge of the expressions and the habits of infants and children, with all their care and gentleness, if they be properly educated they will be better attendants upon children in illness than men can be? At the same time, I think it is quite right that we should face the difficulties that undoubtedly exist, and of course it is with these that I, as a teacher, would have principally to contend; but I apprehend that they are not so much of a moral or general as of an administrative kind. I have no special liking for this measure; I have no desire to see any of those connected with myself entering the medical profession; I do not look upon it in that light with great satisfaction; but I do not see why we should deny the right to any person who may feel it to be her mission, and that she has it in her power to carry it out. With reference to teaching, I may say that such is my feeling, that I would object very strongly to teaching males and females together in any subject of anatomy; but, on the other hand, if the legislature should pass the measure that is suggested, and if the body to which I belong should, after full consideration, think right to confer their license upon females, I should regard it as my duty to make the best of it, and to take measures to instruct those females in the manner that might be best for their advantage and for that of the public. If the general question be conceded, I think it is quite obvious that females may practise in any branch of the profession; but it will be very readily admitted that there is one branch which is more immediately suitable for them, as I have already said, the care of childbirth and the diseases of women and children. We have already considered what has taken place in regard to nursing in recent times, and what improvements have been introduced in that direction. Is there anything connected with the profession that nurses do not do for men; and has any inpropriety arisen from that or any difficulty? Certainly not. With regard to the improvement of nursing, we know what we owe to Miss Nightingale in the way of advancement of our knowledge and views upon that subject; and everyone who has come into contact with these skilled nurses who have been trained according to her suggestions, knows what a prodigious advantage it is in a hospital, or in practice of any kind, to have to do with cultivated gentlewomen who have been properly trained to their duties as nurses. If that be true of nurses, is it not still more strongly true with regard to women who choose to enter the profession? Can anyone doubt that if delicate, well-informed, well-educated, and accomplished women shall also acquire, under proper regulations, that skill and knowledge which is necessary for the practice of the profession, their entrance into the profession will not only be a great benefit in the individual instances in which they have been employed, but, I must take leave to say, will be a means of introducing more delicacy into the medical profession and

their relations to the public than often belongs to it? As to the question of examination-rules or other conditions at present preventing women from entering the profession, I think it is scarcely necessary to offer any observation, because I dare say the Council will see the propriety of the suggestion made by the Committee, that, supposing the general suitability of women to enter the profession is conceded, or measures are taken to make it possible for them to be entered upon the *Register*, there should be a full reservation of the rights of all universities and licensing bodies with respect to their powers to grant such licenses. About the special question also, which is contained in the letter, as to foreign degrees, I presume we are all as one, and there will be no difficulty there. Before I sit down, I may be excused for referring again to the point of form. Notwithstanding the decision of the Council with regard to the first paragraph, I do still feel that the report of the Committee is not exactly the answer which ought to be given to the letter from Mr. Simon. I said before, and I repeat it, that I think the custom in such cases is to answer the letter in the same form as that in which it is sent. I quite understand the objections which might be made to Dr. Bennett's proposal, because it, too, did not entirely meet my views with respect to the form of the answer; at the same time, I thought it the most suitable. While I consider the whole of this discussion as most useful, in fact necessary, to the formation of the opinions of the Council, I do hope that the President will be allowed to write this answer to the letter which he has received, embodying in any way which may be proper the opinions which have been expressed.

Sir W. GULL: I am exceedingly glad to find that the question is raised beyond the circle of corporations and universities. We have admitted that we have entire power here to consider the question on its full merits. Then comes another thing. I think we have also raised the question, at least I hope we shall be able to raise it, out of the sex relation, which seems to me to have already occupied too much consideration. Dr. Andrew Wood's admirable address had reference chiefly, I think, to the difficulties and inconveniences, and doubts, and disgusts, which beset this question as a sex question. I do not think that is a matter for us to consider. We are not recommending to Government a conscription of women; if Dr. Andrew Wood will bear that in mind, I think the whole of his argument went against the conscription of women for the medical profession. As I understand, there is to be no conscription of women; they are not to be taken *volens volens*, and made to attend some horrible results. I think, if that be considered, it is entirely for the persons about whom we are talking to consider themselves whether they are fit to do it, or whether they have a mind to do it. That is a personal question with which we have nothing to do. I think, therefore, we might leave that sexual part out of consideration, except so far as Dr. Humphry put it; for he has all the tenderness of woman, and yet has all the distinction of a most admirable surgeon; and I think he answers the question in his own person, as far as that goes. It seems to me, if we wanted an answer at all, there is an answer. But I think women must determine that for themselves. Let us consider that we are not now passing a vote, or any opinion, as to whether women shall enter the profession. If so, I must confess I should go dead against it; and I think I express the opinion of every man at this board when I say that we rather think it undesirable; and that if they could occupy themselves in some other way, we could occupy the field equally well. Still, I do not think that is a full answer; for I consider there are some parts of the medical profession that a highly trained woman could do better than a man. There are certain sex relations which might be avoided in that way with great advantage to the public. I need not say that there is a quiet scandal in certain parts of our profession about women's diseases, which probably will be got rid of by introducing high-minded, well-trained women into the practice of medicine. That is rather an important point; and the question then becomes narrowed to a very simple issue: whether we shall advise the Government that permission may be given; but I think we must give that permissive opinion with a slight *caveat*, that the entrance of women is rather dangerous. If you will look over the history of this woman's question in London, where things spring up and produce their fruits very quickly, you will see that considerable social mischief has sprung up from women of a low tone of mind entering the profession. I remember there was a letter in the *Lancet* about six years ago, giving the social history of about 150 or 160 women who had entered the profession; and I must say I think it was anything but a creditable history; and it is right to state that there are physical as well as social dangers besetting the question. I therefore do hope that we may vote for the first clause as it now stands. I do not think there is much in Dr. Parkes's addition, for it is not an amendment, but an addition. I think it is a fair concession to the strong views that are entertained by some members of this board, that we should enter a slight *caveat* in the first sentence.

Mr. QUAIN: The words "That women should not be debarred from the study and practice of medicine and surgery" were in the draft of the report to which we agreed, but we found that others differed so much from us that we thought it better to omit them; and though I agree with Dr. Parkes's addition, I think it would not be judicious, and I cannot vote for it. I think it is better to consult, in some degree, the variations of opinion in the Council, and not to include those words, for their introduction certainly created very great opposition in the Committee. I myself would not advise any female member of my family to enter the medical profession; but I confess also I agree entirely with Dr. Humphry in what he said about men. I would dissuade any male of my family from entering the profession by every means that I could. Yet I would not hinder a male from entering, nor would I hinder a female from entering; but when they had once made up their minds to do it, I would assist them by every means in my power.

Mr. TURNER: I wish to point out that Dr. Parkes's amendment on paragraph *b* in the report, the adoption of which I had proposed, contains both a subtraction and an addition. The words which he proposes to cut out are not many in number; but I think it is the opinion of many members of this Council that it is right that we should put before the Government that the special difficulties which surround this question (for it is surrounded by them), cannot safely be disregarded. I feel, therefore, very strongly indeed that it would not be right to consent to the deletion of those words. Then with regard to the addition recommended by Dr. Parkes, "But the Council are not prepared to say that women ought to be excluded from the profession", I should like to know not merely what the interpretation the members of this Council may put on these words, but what the interpretation of the public outside may be. The interpretation that will be put upon them will be that this Council are prepared to say that women ought to be allowed to enter the profession, and many arguments will be founded upon them in the light of the interpretation. I, therefore, hold that these words ought not to be inserted.

Dr. PARKES: With regard to this amendment, I shall not occupy the time of the Council very long. Its object and its purport have been most fully explained in the speeches we have heard, and especially in the admirable address of Dr. Humphry. That speech has laid down the exact reason why these words have been introduced. The fact is, as the clause now stands, it gives a direct negative to women entering the profession. I do really think it can be taken in no other light than that the Council are opposed to the introduction of women into the profession. The object of the amendment is to state that the Council will not oppose the admission of women under such regulations as may be thought proper. I think it is unnecessary to say anything more. The case is in a nutshell, and is perfectly clear. I believe that no wider question has been raised or can be raised in the Council at any time, and it is of the very greatest importance that the Council should raise itself above all party and petty considerations, and judge this on the broad principles of right and justice; and on those principles I believe from my heart that the Council cannot do otherwise than support the amendment which I now offer.

Dr. PARKES then asked permission to alter his amendment so that it might stand as follows:

"That, after the words 'which cannot be disregarded' in paragraph (*b*), the following words be inserted, 'but the Council are not prepared to say that women ought to be excluded from the profession'."

This permission was granted, and, on being put to the vote, the amendment was carried by 14 votes to 7.

Dr. ANDREW WOOD required that the names and numbers of those who voted for and against the amendment, and of those who did not vote, should be taken down. Majority, 14: Mr. Quain; Dr. Rolleston; Dr. Humphry; Dr. Pyle; Dr. Thomson; Dr. A. Smith; Mr. Macnamara; Dr. Lect; Dr. Apjohn; Dr. Sharpey; Dr. Parkes; Sir W. Gull; Dr. Begbie; Dr. Stokes. Minority, 7: Dr. Bennett; Mr. Bradford; Dr. Haldane; Dr. Andrew Wood; Dr. Fleming; Mr. Turner; Dr. Quain. Declined to vote: The President; Dr. Storrar; Sir D. Corrigan.

The amendment was then put as a substantive motion.

Dr. ANDREW WOOD: If this motion goes forth to the country, it will state that there are difficulties in the question, that in the interests of the public cannot be disregarded; and, after saying that the profession is not fitted for women, you go on to say that they should be admitted—that you are not prepared to exclude them, that is to say, that you are prepared to admit them. It amounts to that, and will be so read out of doors, and by the women doctors. I move as an amendment that paragraph *b* read thus:

"One of the questions submitted to the Medical Council by Mr. Simon is, 'Whether women ought to be able to look to medical prac-

tice, or certain branches of it, as open to them equally with men as a profession and means of livelihood?'

"With regard to this question of the admission of women to the medical profession, the Council, after mature deliberation, have to express their opinion that, considering the nature of the studies requisite to be gone through in order to attain that knowledge of the various branches of medicine and surgery necessary to constitute a safe and efficient practitioner; and, considering that the practice of the medical profession infers, even in men, peculiar moral and physical qualities, as—bodily strength, nerve, and endurance to face much toil, anxiety, responsibility, perplexity, and danger, and that by nature women have not been so constituted as to fit them for such a profession, it is inexpedient to encourage and give facilities to women for entering the medical profession. The Medical Council, therefore, do not recommend legislation with the view of removing the difficulties in the way of women entering the medical profession."

Dr. QUAIN: I have very great pleasure in seconding Dr. Wood's amendment, and, if I wanted any reasons for doing so, I would appeal to the arguments of those who voted for Dr. Parkes's amendment. Better or stronger reasons for not allowing women to enter the profession I never heard than those offered by some members around this table. But I go a little beyond that, to the report of the Committee which was produced to us. To my mind, no objections that can be raised to the admission of women to the medical profession can be more convincing than those given in the report which Dr. Parkes most cleverly got us to rescind. I confess, when I voted for rescinding the first paragraph of the report, it was with the hope that something much stronger would be inserted; and I believe it was the opinion of all those who voted the same way, or certainly of a very considerable number. I shall vote for Dr. Wood's amendment.

Dr. A. SMITH could not support Dr. Wood's amendment, because it ignored the whole question.

Dr. FLEMING regretted that Dr. Wood should bring forward such an amendment, when it was evident that it had no chance of passing.

Dr. Wood's amendment was put to the meeting and lost, 4 voting in its favour, and 12 against it.

Dr. Parkes's motion was then put and carried, the numbers being—For, 14; against, 7.

Mr. TURNER proposed the adoption of paragraphs *c* and *d* together.

Mr. QUAIN seconded the motion, which was carried *nem. con.*

Mr. TURNER proposed the adoption of the first clause of paragraph *e*.

Mr. QUAIN seconded the motion.

Dr. BENNETT objected to laying down regulations for what might never take place; and therefore moved: "That the whole of paragraph *e* of the report be omitted."

Sir D. CORRIGAN seconded the amendment.

Dr. ROLLESTON supported the motion.

Dr. A. SMITH expressed his intention to vote for the amendment.

Dr. HUMPHRY was in favour of the paragraph being retained.

Dr. Bennett's amendment was put to the meeting and lost, and the original motion for the adoption of paragraph *e* was carried.

Mr. TURNER moved the adoption of Section I of paragraph *e*.

Mr. QUAIN seconded the motion.

Sir D. CORRIGAN moved the omission of the words "in the interests of public order".

Mr. MACNAMARA seconded the amendment, which was put and negatived; and the paragraph as proposed was adopted.

Mr. TURNER moved the adoption of the next section, but after a short discussion it was resolved to incorporate section 3 with it, and after some verbal alterations, they were passed as follows:—"That with reference to the 'Examination-rules or other conditions' which prevent women from accomplishing their wish, the Medical Council have to state that under the provisions of the Medical Act, those persons only can be placed upon the *Medical Register* who have been admitted to medical degrees in the Universities, or who have been admitted Fellows, Members, or Licentiates of one of the Medical Corporations of the United Kingdom. Should the Universities and Corporations be unable or unwilling to admit women to their degrees, or to admit them as licentiates or members of the respective corporations, the Council are of opinion that sufficient provision would be made to enable women to obtain a 'legal status as medical practitioners in this country', if an Act of Parliament were passed which should enable the Medical Council to recognise such examination or examinations as the Medical Council may from time to time deem sufficient, for the purpose of granting admission of women to the *Medical Register* under the title of 'Licensed Practitioner of Medicine'. The education and examinations for these licenses should be under the supervision of the Medical Council in the same way as is required for the other licenses

of this country. The Council are of opinion that any course of legislation which would interfere with the free action of the universities and corporations mentioned in schedule (A), in respect of the medical education, examination, and licensing of women, is undesirable."

Mr. TURNER proposed the adoption of Clause 4.

Mr. QUAIN seconded the motion.

Dr. BENNETT opposed it as being unnecessary, and as binding the Council to a particular kind of examination.

Sir WM. GULL supported the clause, and maintained that the ladies themselves and the profession ought to know that the examination of female candidates was equivalent to that of males.

The clause was adopted.

Mr. TURNER moved the next clause relating to midwifery, which (with the omission of a few words at the end) was also adopted.

It was unanimously agreed to omit the last paragraph of the report, stating that on some points the Committee were not unanimous.

The Council then resumed.

Mr. TURNER moved, Sir WM. GULL seconded, and it was agreed :

"That the report, as amended by the Council in Committee of the whole Council, be received, entered on the minutes, and adopted."

It was moved by Dr. ANDREW WOOD, seconded by Dr. ROLLESTON, and resolved : "That the President of the Medical Council be directed to transmit to the Lord President of the Privy Council a copy of the report on Mr. Simon's letter, adopted by the Medical Council."

Sir DOMINIC CORRIGAN moved, and Dr. STORRAR seconded : "That the Minutes of the Council, and of the Committee of the Council, relating to Mr. Simon's letter, be forwarded to Mr. Simon, for the information of the Lord President."

Sir WILLIAM GULL moved as an amendment, and Mr. QUAIN seconded, "That the president be requested to send the report of the Council to Mr. Simon to be transmitted to the Lord President without further remarks."

The amendment was negatived. The original motion was then put to the vote and carried.

It was moved by Dr. ROLLESTON, seconded by Mr. BRADFORD, and agreed, "That Dr. Bennett's letter of June 24th (see page 16) be placed upon the minutes of this day, and be forwarded together with the other minutes already ordered to be sent to Mr. Simon."

COLUMN FOR THE CURIOUS.

WATER OF WORMWOOD.—A correspondent of the *Chemist and Druggist* gives the following account of water of wormwood :—"This is mentioned in 'The vertuose boke of Distyllacyon of the waters of all manner of Herbes with the figures of the stillatoryes Fyrst made and compyled by the thyrte yerres study and labour of the most conyng and famous master of phisyke Master Jherombryunswyd, now newly translated into English, etc. Imprynted at London in Southwark by me, Peter Treveris, dwelling in the sign of the wodows. In the yere of our lord god MDXXVI the xxvii day of July.'

"chapter cclxxv.

"Water of wormewode.

"Absinthium in latyn. . . . The same water hath the right merue-louse great vertues, for it is sayde of dyvers persones that the iuce or water of the same herbe hath he geuen for a token in maner of incantacyon unto gret captaynes or conductours of an hoste ovarmey belevynge that thrugh suche a token they sholde haue victorye against their enemyes.' Also recommended for 33 other complaints and purposes."

SNAKE-HEADS STEEPED IN SPIRITS A CURE FOR EPILEPSY.—A correspondent of the *Melbourne Record* states that he is acquainted with a person who has been cured of epilepsy by taking three tea-spoonsful of rum in which the heads and necks of black snakes had been infused for ten days. The influence of imagination is so great, that the remedy might be worthy of a trial in nervous epilepsy, and many other nervous affections. The proportions were a pint of strong rum—any other spirit would do as well—to the heads of three full-grown snakes. In all countries where poisonous snakes exist, infusing the head or heads, according to the size of the snake, in spirits, and taking some of it daily, is considered of service in many diseases. This man was told to try it by a negro from Jamaica. There is a notice of its being used in that island in some of the early English medical journals.

BRITISH MEDICAL ASSOCIATION : SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 3RD, 1875.

THE PRACTICE OF MEDICINE BY WOMEN.

THE debate in the Medical Council on the admission of women to a legal status as medical practitioners in this country, is one of the most important which has been held since the formation of the Council. We have reported it, therefore, at length ; and we feel no doubt that it will be read with very great interest. The general conclusions of the report adopted, with Dr. Parkes's amendment, are such as we have expressed more than once as those which seem to us most fairly to accord with the general balance of opinion, with the conflicting rights of the public and of the existing corporations. There are many who think that women are unfitted for practice in any department of medicine ; there are others who think them peculiarly fitted for some departments of practice ; there are others again who, irrespective of either opinion, consider that it is unjust to prevent those women who can fulfil the required tests from entering on this means of honourable and remunerative exertion ; and there is a large section of the public which claims the right of employing qualified women as medical attendants, and desires to be enabled to distinguish the qualified from the unqualified persons, as in the case of men. In view of these varied opinions and requirements, we think the Council have adopted a very moderate and prudent course. As we present the report at length, we may abstain from further comment.

THE ROYAL COMMISSION ON VIVISECTION.

THE recent appointment of a Royal Commission "to inquire into the practice of subjecting live animals to experiments for scientific purposes, and to consider and report what measures, if any, it may be desirable to take in respect of any such practice", will probably be welcomed by those who are engaged in the performance of such experiments, as well as by those who consider them unlawful and detestable ; for, while the latter hope that the inquiry now beginning may lead to the total abolition of vivisection, the former feel confident that, whatever else it may or may not do, it will at least clear English physiologists from the grievous charges brought against them. As an example of these charges, we may fairly take the following extract from an advertisement daily inserted in the *Times* by the Society for the Abolition of Vivisection, and accompanied by the offer of a reward of twenty pounds for information leading to the detection and conviction before a magistrate of any one engaged in the practice.

"The hideous cruelty of dissecting living animals, or inflicting on them, though innocent and defenceless, multitudinous deaths of excruciating and protracted agony, has secretly grown up in this nation—a nation which for ages past has been nobly distinguished by the courageous and unsanguinary character of its people. This moral ulcer has spread widely, and (whether it be or not a dreadful form of insanity) become dangerous and demoralising to society—a blot on civilisation—a stigma on Christianity. The public has little idea what the horrors of vivisection are ; its crimes in studied, ingenious, refined, and appalling torture, in wantonness, uselessness, and wickedness,

cannot be surpassed in the annals of the world. It therefore calls for extirpation by the legislature, cruelty being not only the worst of vices in itself, but the most retributive to mankind, more especially when perpetrated by the refined and educated."

Now, it is exceedingly unpleasant for any one, however thoroughly he may be convinced that his experiments are productive of the utmost good to mankind, and prevent a thousandfold more pain than he inflicts, and however conscious he may be of the purity of his motives in making these experiments, to see his doings thus stigmatised in the daily papers; to see a reward offered for his conviction; and, worse still, to know that many good men and women, for whom he has the greatest regard, and for whose opinion he has the greatest respect, misled by such erroneous statements as the preceding, look upon his actions with horror, and class him in their own minds with the vilest of criminals. Such notions as these will, no doubt, be removed by the Report of the Royal Commission; but still differences enough will remain between the opponents and supporters of vivisection to render a reconciliation very difficult. It is quite impossible that the proceedings of the Royal Commission should prove quite satisfactory to both parties; it is by no means improbable that they will satisfy neither; but, at any rate, the names of the members composing it afford a guarantee that a fair hearing will be given to both, and such measures recommended as are likely to be approved by the British public. The antivivisectionists will be represented by Mr. Hutton, the interests of medical teaching by Mr. Erichsen, and those of science by Professor Huxley. The experimental physiologists have no representative; but we have no doubt that they will willingly trust their cause to the sound common sense of Lords Cardwell and Winmarleigh and Mr. Forster, when once these gentlemen become acquainted with the facts of the case, which Sir John Karslake will assist them in obtaining. Their first feeling, on commencing their inquiry, will probably be one of astonishment to find how few men are engaged in performing experiments on animals in this country, and to see how little pain is, thanks to anaesthetics, actually inflicted. In comparatively few of the medical schools are experiments on animals shown to students for purposes of demonstration; and those which are shown are performed, we believe, invariably under the influence of anaesthetics. The feeling is, we believe, universal amongst British physiologists, that it is unjustifiable to put an animal to pain for the purpose of demonstrating some fact already ascertained; but it will be one of the duties of the Commission to decide whether or not an experiment may be performed on an animal under the influence of anaesthetics, and a perfectly painless death inflicted, for the purpose of impressing some important physiological fact upon the memories of medical students; for it must be borne in mind that knowledge is a thing of degrees, and many a fact which the student knows sufficiently well to describe in an examination-paper has not made that impression upon his mind which will enable him properly to utilise it as he stands, perhaps years afterwards, in unfamiliar circumstances by the bedside of a patient, and when a thorough grasp of it in all its bearings may enable him to decide on a proper course of treatment. Knowledge of the former kind is readily acquired by lectures and diagrams; but few will deny that knowledge of the latter kind is more readily imparted by demonstrations.

The main question, however, with which the Royal Commission will have to deal, is the infliction of pain on the lower animals by physiologists in their attempts to discover new facts regarding life and the various functions which constitute it. The Commission will have to determine how far the infliction of pain for such purposes is justifiable, and where and by whom experiments involving it may be performed. Dr. Playfair, in the address which appeared in our columns, pointed out what is well known to men of science. It is only series of experiments which lead to beneficial results, while a single experiment for the determination of some doubtful point must commonly be useless as a link in a chain. The truth of this statement it undeniable; but his argument has been adopted and overstrained by a recent writer,

and the value of isolated experiments as links has, we think, been underrated. Onlookers often see most of the game; and a third person is not unfrequently able to detect the reason of the discrepancy between the opposite conclusions drawn by two observers from researches of the same kind, and, by making one experiment more, to reconcile the conflicting statements. Occasionally, too, a physiologist proves a fact to his own satisfaction by a series of experiments, while his very interest in the question prevents him from seeing the possible fallacy which may entirely vitiate his conclusions. Here again an outsider has the advantage, and, after noting the weak point, may by a single experiment overturn the conclusions, although the facts remain; or may confirm them beyond the possibility of doubt, by supplying the missing link, and rendering the chain of evidence complete.

An example of this may be found in the researches of Schiff and Heidenhain on the secretion of bile. Schiff discovered that, when he injected bile into the duodenum, the secretion of bile from the liver was increased, and he therefore concluded that the bile had been absorbed from the bowel, and was again passing out unchanged through the liver. This occurred so quickly, that Heidenhain could not believe there had been time for the bile to pass round in this way; and he was therefore inclined to suppose that its presence in the bowel stimulated the liver to increased action, and the formation of more new bile. A single experiment, in which he injected rhubarb into the duodenum, and found it reappear in the bile from the liver in less than a minute, was sufficient to resolve his doubts (although he might repeat it, to avoid any risk of error), and to establish on a firm basis the doctrine of the reabsorption of bile, so important in practical medicine. So intimately entwined are the processes of life, that it is impossible at any time to say of what importance the knowledge of an apparently trivial and isolated fact may afterwards be, any more than the immense potentialities involved in the rattle of a kettle-lid caused by the escaping steam could have been foretold at the moment when it was first observed by James Watt. But so long as facts, whether isolated or connected, remain simply scientific curiosities, they have comparatively little attraction to the English mind, which is unusually practical, and, as a rule, delights more in applying knowledge to the wants of daily life, than in acquiring it simply for its own sake. It is in this practical nature of the English character, that we must seek for an explanation of the recently awakened thirst for physiological knowledge, and the consequently increased number of experiments upon animals. As long as physiology appeared to be only an interesting study, having but a remote bearing on practice, we were content to leave it in the hands of the French and Germans; but now that it has progressed far enough for us to see how all-important it is becoming in the advance of the kind of exact knowledge to which we must look for progress, the prevention, recognition, or treatment of disease, we have begun to pursue it with an eagerness that may in a few years again place Englishmen, as in the days of Harvey, Hales, and Lower, in the foremost rank of the students of life and the benefactors of humanity.

Absolutely dependent on experimentation as physiology is, the question so often asked by the opponents of such experimentation, "Of what good is it?" might well be answered by Faraday's "Of what good is a baby?" for physiology is undoubtedly still in its infancy, although it is rapidly growing and beginning to be useful. The services it has already rendered to medicine are too numerous to be catalogued here. What further services it may yet render it is impossible at present to say; but, whether its future development will go on in England, or will be confined to continental countries where laboratories are built, professorships endowed, and the expenses of experiments defrayed by the governments, will in no small degree be determined by the proceedings of the Royal Commission just about to begin its work.

An antivaccination society exists in Dresden. It has recently published a programme in which it announces its intention of resisting, by all lawful means, the law on vaccination issued last year.

THE DUCHESS OF TECK has laid the foundation stone of a children's infirmary at the Princess Mary's Village Home at Addeleston.

THE specimens added to the Museum of the Royal College of Surgeons during the past twelvemonths are now exhibited in the theatre of the College, where they will remain until Thursday, July 8th.

IN a recent published list of Waterloo survivors, the name of Dr. G. S. Jenks, who served as assistant-surgeon in the 10th Hussars, was omitted. Dr. Jenks is now living at Bath. He is the senior Vice-President of the British Medical Association.

WITH her usual thoughtful kindness, Her Majesty the Queen has commanded that a considerable quantity of cast off linen for surgical purposes should be sent from Buckingham Palace to the London Hospital for the use of the patients.

DRS. KAPOSÍ, Auspitz, and Neumann, have been appointed extraordinary professors of Dermatology and Syphilis in the University of Vienna. They have hitherto held the position of *privat-docent*. Dr. Carl Störk, *privat-docent*, has been appointed extraordinary professor of Laryngoscopy in the same University.

A MOVEMENT is on foot for the purpose of teaching swimming systematically to the pupils of elementary schools in the metropolis. An organised system of teaching this useful art has long been wanted, and, if carried out effectually, will be the means of saving many valuable lives annually.

A SOCIETY, under the name of *Società di soccorso agli Afossati*—having, as its names indicates, the same objects as our Royal Humane Society—has just been founded at Florence. Among the promoters are Sir James Hudson, Professor Pacini, and other professors in the University, and a number of the principal inhabitants, medical and non-medical.

A NEW hotel, under the name of the Hôtel du Lac, was opened at St. Moritz on June 15th. It is described as being in a beautiful situation, with a commanding view, in the neighbourhood of the baths and opposite the lake. It is provided with every modern comfort; it contains 25 rooms and 240 beds, a ladies' saloon, a reading-room, a conversation-room, with coffee, billiard, luncheon, and dining-rooms. There are douche-baths in the hotel.

THE LATE DR. DEMARQUAY.

OUR Paris correspondent writes, under date June 27th. It is with unfeigned regret I have to announce the death of M. Demarquay, which took place somewhat suddenly on Monday, the 21st instant, at Longueval, his birthplace, a small village in the department of the Somme, in the sixty-first year of his age, from cancer of the stomach. The name of Demarquay is familiar to the medical world, as he not only distinguished himself by his writings, which proved him to be a *savant* in the true sense of the word, but was also one of the ablest and most practical surgeons of the day. M. Demarquay was surgeon to the "Maison Municipale de Santé", more familiarly known as the Maison Dubois, where he had made himself very popular. He was far above political influences, which is a rare thing for a man of his position in France, so that he had none but friends in the ranks of all parties. This he showed during the siege of Paris, and subsequently during the Commune, when, as surgeon and one of the founders of the "Ambulance de la Presse", he rendered the most unreserved and signal service. M. Demarquay was a member of the Academy of Medicine, and, had he lived, would doubtless have one day taken his seat at the Institute. His professional services were rewarded by the State by promotion to the dignity of Commandant of the Legion of Honour. His funeral took place at Longueval, and, among the mourners, was observed a man with a pair of wooden legs, his own having been removed by M. Demarquay, as they were shat-

tered by a Prussian shell during the war. Born of poor parents, M. Demarquay died a millionaire. He was never married, and, consequently, bequeathed a portion of his large fortune to his poorer relations, and the remainder was distributed as follows: £4,000 to the Paris School of Medicine for the foundation of an annual prize; £400 was reserved and made over to one of his friends and disciples for the purpose of putting together and publishing his loose manuscripts. A man of literary pursuits, M. Demarquay possessed a very extensive library, which is to be distributed among his friends, who will also inherit the various articles of curiosity with which his apartments in the Rue Taitbout teemed.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

THE numbers polled at the College on Thursday last for the candidates for the Council were as follows:

Mr. Prescott Hewett . . . 127	Mr. Spencer Smith . . . 97
Mr. Cooper Forster . . . 110	Mr. Alfred Smeë . . . 30
Mr. John Birkett . . . 109	Mr. E. L. Hussey . . . 29

The first three gentlemen were thereupon declared duly elected members of the Council. Many Fellows of the College who put in an appearance late in the afternoon, were unable to vote; since, no vote having been tendered for ten minutes, the President, in accordance with the bye-law of the College, soon after 4 P.M. declared the voting ended. It will be seen that the strong combination in favour of Mr. Birkett and Mr. Forster was successful. Mr. Spencer Smith, however, polled a very large number of votes, and we cannot but regret that his just and high claim to a continuance of his career at the College should fortuitously have been cut short, when he was within grasp of those high honours which he would most worthily have borne.

DISCUSSION ON PUERPERAL FEVER.

THIS discussion will be brought to a close on Wednesday next, when Dr. Fordyce Barker of New York, who is at present in London, will make some remarks in favour of the specific nature of the disease. Mr. Spencer Wells will reply upon the whole debate. Dr. Newman of Stamford is expected to show the uterus of a woman on whom he successfully performed Cæsarean section some years ago.

SCARLATINA IN SOUTH KENSINGTON.

WE publish in another column a note from "the medical attendant" concerning the mysterious outbreak of scarlatina among the guests at the recent entertainment in South Kensington. This outbreak, to which he refers as "unparalleled in suddenness, variety of age, numbers, and rapidity", caused no small excitement, since nearly half of the guests at a large dinner are understood to have been subsequently attacked with scarlatina proper, and others with the less defined symptoms of abortive scarlatina-poisoning. The hosts and the members of their family were entirely free from any source of infection. Circumstances at present point to a mode of infection such as that which has more than once been traced in these columns, viz., the conveyance of fever-poison by milk; but the investigation, which is being carried on by the highest sanitary authorities, with the assistance of the parties concerned, is not yet completed. When concluded, it will probably form a very instructive episode in sanitary history.—Dr. T. O. Dudfield, the able and active Medical Officer of Health of Kensington, writes on this subject: "I am acquainted with several cases of illness from this disease in South Kensington, some of which have arisen under peculiar circumstances that are now undergoing rigorous investigation. So far, no death has occurred, and, although nearly three weeks have elapsed, I believe the disease has not spread from any of the persons originally attacked to any other persons. This subject will continue to receive the most attentive treatment in my department; but I need hardly remind your vestry that I have no power to compel disclosure of the occurrence of cases of infectious disease, and that it is often only when death has taken place, and the cause of death has been registered, that information reaches me. Although in the special outbreak to which I have referred these remarks do not apply, there is usually considerable difficulty in obtain-

ing information in these cases among the wealthier classes; and this would be a source of greater regret, and a greater evil than it is, were it not that medical men are fully alive to the importance of measures for isolating the sick, and preventing the spread of the disease. As an illustration of the exaggerated statements abroad, with reference to scarlet fever, I may mention that, not many days since, I was gravely informed that a number of persons, variously stated at from two to seven, were lying dead in one house in which I ascertained, by personal inquiry, that there had not been a single case of the disease! Nevertheless, it behoves us to be alive to the probability of a sharp epidemic. In my Report, dated October 21st, 1874, I informed you that an epidemic was due. We had a foretaste of it last year. The disease abated in the usual manner after a time. The greatest severity of the epidemic may be expected this year, after which the disease will probably relapse into a state of quiescence for a few years."

THE DEATH-RATE FROM ZYMOTIC DISEASES.

THE weekly return of the Registrar-General states that not a single death from either of the seven principal zymotic diseases was registered last week in Portsmouth, whereas more than 25 per cent. of the deaths in Salford were referred to them. The high zymotic death-rate in Hull (8.2) was caused by whooping-cough and diarrhoea. In London, the 1,413 deaths registered during the week, included 2 from small-pox, 25 from measles, 62 from scarlet fever, 12 from diphtheria, 62 from whooping-cough, 27 from different forms of fever, and 77 from diarrhoea; thus to these diseases 267 deaths were referred, against 224 and 221 in the two preceding weeks. These deaths exceeded the average by 2, and were equal to an annual rate of 4 per 1,000. The fatality of diarrhoea begins to show more than its accustomed increase at this period of the year, notwithstanding the recent low temperature. The deaths referred to this cause, which had been 31 and 54 in the two previous weeks, further rose to 77 last week, and exceeded by 17 the corrected average number in the corresponding week of the last ten years; 56 were of infants under one year of age. The deaths of three adults and of two infants were referred to simple cholera or to choleraic diarrhoea. There were 13 deaths in London during the week "in childbirth", which much exceeded the average number. The Registrar-General observes that the greatest precautions are required on the part of both medical men and nurses during the prevailing epidemic of scarlet fever.

ROYAL COMMISSION ON VIVISECTION.

THE following are the names of the gentlemen appointed to act as her Majesty's Commissioners to inquire into the practice of subjecting live animals to experiments for scientific purposes, and to consider and report what measures, if any, it may be desirable to take in respect of any such practice:—Viscount Cardwell, Lord Winmarleigh, the Right Hon. W. E. Forster, M.P.; Sir J. B. Karlake, M.P.; Mr. T. H. Huxley, Professor of Natural History in the Royal School of Mines; Mr. John Eric Erichsen; and Mr. Richard Holt Hutton.

A NEW LUNATIC ASYLUM FOR SURREY.

AT a meeting of the Surrey magistrates on June 29th, it was decided, in consequence of the inadequate accommodation for lunatics which at present existed, to erect an additional asylum for 1,000 patients. A committee was appointed to purchase a site, and carry out the plan at a cost not exceeding £120,000.

THE DISCOVERER OF ANESTHESIA.

THE Americans have erected a colossal bronze statue in honour of Horace Wells, the discoverer of anaesthesia. The legislatures of Connecticut and the City of Hartford having each voted a sum of 5,000 dollars some years ago for that purpose. Funds are being now collected for the purpose of providing a bronze pedestal for the statue.

A NEW METROPOLITAN SICK ASYLUM.

ON June 24th, the president of the Local Government Board was present at the opening of a new asylum for the sick poor, which has

recently been erected by the managers of the Central London Sick Asylum District, on the site of the old Strand Union workhouse, in Cleveland Street, Fitzroy Square. The managers of the same asylum district already possess a similar institution at Highgate, both having been erected under the provisions of the Metropolitan Poor Act of 1867, for the purpose of receiving from the workhouses of the co-operating unions of the district cases of acute sickness. The new asylum has accommodation for 281 patients, exclusive of the necessary staff. The total cost of the asylum, including its site and the furniture, amounts to £32,458, equal to £115 10s. per bed; the necessary provision for the staff is included in these amounts. The president of the Local Government Board having expressed his entire satisfaction with the institution, its arrangement, and fittings, the hospital was formally declared to be open by Sir Sydney Waterlow, the chairman of the board of managers of the Central London Sick Asylum District.

SCOTLAND.

ON Saturday last, the old lunatic asylum at Montrose was struck by lightning and damaged considerably.

THE death of Dr. Paterson of Rothesay is announced. He was the first to introduce the system of hydropathy into Scotland, and his establishment, opened in 1843, was one of the largest of the kind in this country.

ON Wednesday the 23rd ult., Mr. Annandale ligatured the external iliac artery, in the Edinburgh Royal Infirmary, for a large femoral aneurism. The patient is so far reported as doing well.

PROPOSED ENLARGEMENT OF THE EDINBURGH MEDICAL SCHOOL.

THE extramural lecturers in Edinburgh, feeling themselves cramped in their present incommensurable class-rooms, have been considering for some time what steps should be taken in order to obtain accommodation more suitable to the size and number of the classes. Nothing definite has as yet been agreed upon, but an architect has been consulted as to the best means of providing what is wanted. One difficulty is the large outlay required for a suitable building, and the matter at present stands adjourned for future decision.

GLASGOW ROYAL INFIRMARY: PROPOSED MEDICAL SCHOOL.

THE proposal, frequently advocated in these pages, to have a school of medicine in connection with Glasgow Royal Infirmary, has at length taken practical shape. The Royal Infirmary is about to apply to the Crown for a new charter or a modification of their original one; and, among the things embodied in this charter, is the power to form a medical school in connection with the hospital. At a meeting of the subscribers, at which the draft of the charter was approved, some discussion took place as to the form which this school ought to take. Professor Gairdner strongly deprecated the idea that the infirmary should attempt to endow, in any form, lectureships on the various subjects of medical education. The draft charter presented to the meeting distinctly sought powers "to institute, and aid by pecuniary assistance and otherwise" the proposed medical school. Apart altogether from other considerations, it is very doubtful whether an hospital depending on the yearly contributions of the charitable would be warranted in giving any direct pecuniary assistance to a medical school. But there is this further objection. The University has always refused to recognise the Andersonian University; in great part, no doubt, because of its objectionable name, but also because it presumes to be a rival institution. If the infirmary also propose to set up and endow a medical school, to make as it were a third medical college, then it is exceedingly doubtful whether the University will recognise its teachers. It seems that no such direct endowment is contemplated. The secretary of the infirmary writes that the phrase, "by pecuniary assistance or otherwise", should have been struck out of the draft before it was presented. But this hardly alters the matter. They may still con-

template having a set of teachers, one for each branch, who, if not endowed, will be favoured with the use of class-rooms, etc. Now, this would be very much like the Andersonian over again. Dr. Gairdner's proposal, that the matters should be arranged on an entirely open basis, seems a much better way. Let the teaching of the several subjects be open to any young man who thinks he can attract an audience, instead of appointing some one specially for the subject, and, if that be the case, then the University can hardly refuse to acknowledge the individual teachers. If the infirmary directors venture to arrogate to themselves the power of appointing lecturers, whom they may call even professors, they can hardly expect the University to homologate their appointment by recognising their nominees. It would be an assumption of powers for which they have no kind of qualification, and introduce into the directorate a patronage which they will be much better without. In the meantime, it may be noted that two gentlemen who have received permission to give courses of lectures in the infirmary, have applied to the University for recognition. We understand that there is every likelihood of this recognition being granted. It is rumoured that two others contemplate taking a similar step.

ACCIDENT TO THE SIMPSON STATUE.

MR. BRODIE, R.S.A., has now finished his design for the Simpson statue, and on Saturday the model was to have been sent to London to be reproduced in bronze. The figure, which is eight feet high, is represented in a sitting posture; this, with the pedestal, making a height of about twenty feet from the ground. Sir James is represented in academic robes, as if in the act of lecturing to his students. It was expected that in six months at the latest we should have seen the statue in its place in the East Princes Street Gardens, but, unfortunately, while being raised in a crane at Leith docks, for the purpose of packing it on board ship for transference to London, the crane broke, and the box containing the statue fell a distance of about six feet. The amount of damage done is not yet known, as it was at once taken back to the artist's studio. The head and hands are safe from injury, as they were, as usual, packed separately from the rest of the figure.

THE NEW UNIVERSITY BUILDINGS.

A DEPUTATION of the University Extension Committee waited upon the City Road Trust of Edinburgh, last week, in support of an application for leave to extend their building operations so as to include the footway on one side and a part of the carriage-way of Park Place, to the extent of thirty-five feet. They propose to give up to the Road Trust, in return, a piece of ground at the south-east end of the proposed buildings, and point out that the present foot and roadway in Park Place will be of no use to the public when the present houses are removed. The question was remitted to the justices who have to be consulted.

DRAINAGE OF CRIEFF.

A SPECIAL meeting of the burgh commissioners at Crieff was held lately, to consider the charges made by the architect, the majority of the commission considering them too high. A partial system of drainage was suggested as involving less outlay; but it was eventually determined to request the engineer to modify his charges, before any further move be made.

DEATH OF DR. TROTTER OF DALRY.

We regret to announce the death, last week, of Dr. Trotter of Dalry, one of the last of a phalanx of authors produced by Galloway in the early part of the present century. After enjoying for many years a large practice, Dr. Trotter retired some years ago, and devoted the remainder of his life to literary and antiquarian pursuits. He published several tales, and was a frequent contributor to general periodicals. His collection of antiquities was one of the most valuable in the south of Scotland, while he possessed a fine library of rare works on his favourite subjects. Dr. Trotter's family was eminently a medical one;

his grandfather, father, brother, and five sons being all members of our profession. He has left behind him an autobiography and a large collection of letters from some of the most eminent men of his time.

THE ANDERSONIAN UNIVERSITY, GLASGOW.

THE annual meeting of the trustees of the Andersonian University, Glasgow, was held on June 23rd. After detailing the changes that had taken place in professorships during the past year, the report announced the receipt of £6,000, under the will of the late Mr. Ewing, for general purposes, with £1,000 to build a suitable fireproof room for his collection of musical instruments, and other smaller sums. The late Sir Malcolm Kerr had bequeathed the University £1,000, to found three bursaries in philosophy, anatomy, and botany. Professor Bischoff had resigned the chair of technical chemistry.

WASTE OF WATER IN GLASGOW.

A SPECIAL meeting of the Water Committee was held on June 23rd, to consider the enormous waste of water going on throughout the city. The mover of the first resolution stated that the waste of water going on in Glasgow for domestic purposes amounted to about fifteen gallons per head daily. Thirty-six million of gallons of water passed through the city daily, and, taking public works into account, it might be fairly estimated that fifteen million gallons were daily wasted. The meeting being too small to dispose of the question as to the best method of remedying this abuse, the matter was adjourned.

DEATH OF PROFESSOR OSWALD BELL OF ST. ANDREW'S.

THE town and University of St. Andrew's have just suffered a severe loss in the premature death of Dr. Oswald Bell, professor of medicine in the University; and the loss will be widely felt among the inhabitants of the district, and the numerous visitors who crowd from all parts of Scotland to the little seaside town during the summer, and who looked upon Dr. Bell as a personal friend as well as a kind and skilful physician. Appointed twelve years ago as successor to Dr. Day in the chair of medicine and physiology, he discharged admirably his duties as a lecturer, and managed, with no less success, the business devolving upon him as head of the medical faculty. The arrangements for the medical graduations were almost entirely in his hands, and the unvarying courtesy and care with which he conducted the arrangements, are familiar to all with whom he came into contact. Dr. Bell was only thirty-eight years of age, but leaves behind him a larger and more sincere band of mourners than many an older man.

IRELAND.

SMALL-POX AT ATHENRY.

As the prevalence of small-pox in Galway has been denied, the following is a correct list of the number of cases at Athenry from March 1st to June 27th. Cases of small-pox, 153; treated in hospital, 53; discharged cured from hospital, 11; died in hospital, 10; died out of hospital, 28. The number of cases is diminishing, and very shortly we may expect to hear that the disease has died out.

THE WHISKEY FIRE IN DUBLIN: ITS MEDICAL AND SANITARY ASPECTS.

THE great whiskey fire which occurred in Dublin on the night of June 18th has many interests from a professional point of view. The district in which the fire took place is one of the oldest and poorest of Dublin. A large number of tenement houses were completely destroyed, and many others injured. The destruction of these wretched houses is, to a great extent, a blessing, as all those destroyed, with one or two exceptions, were the haunts of epidemic disease, and furnished annually large supplies of patients to the Cork Street Fever Hospital, which stands within a few hundred yards of the scene of the disaster. Whatever the remote benefits may be, the present state of the displaced poor people is not only sad, but very alarming. They have been reduced to absolute poverty, and merely saved from starva-

tion by the liberality of their wealthier neighbours. They have obtained house-accommodation for the present in the already overcrowded houses of their neighbours, and it is manifest that a very short duration of the present state of overcrowding and insufficient food and clothing supply will promote an epidemic outbreak. During the progress of the fire, a considerable but not very large number of dissipated wretches drank large quantities of the spirit, which was flowing about the streets in veins of fire. Some thirty of these persons were brought to the hospitals in a state of coma, and several deaths occurred in consequence. The whiskey was of unusual strength, and a good deal of it new. The scene on the morning after the fire, exhibited by the ruins, with their late occupants seeking for some remains of their lost property; the powerful odour of the spirit as it streamed from the ruins and lay in pools the streets; tottering walls, scattered bricks, broken-up sewers, and raving drunkards, mixed up with famine, policemen, hogsheads of whiskey, crying women and frightened children,—baffle all description. Although no loss of life occurred directly from the fire, yet we are afraid that many deaths and much disease will follow from the exposure and privation to which the poor people have been subjected. The mayor immediately summoned a meeting of citizens to take measures for the relief of the sufferers. The meeting was well attended, and a sufficient amount of money subscribed on the spot to meet present needs. A considerable sum, however, will be necessary to compensate the poor for the loss of their "little all". The occurrence of this fire has drawn attention to the very dangerous practice of storing large quantities of whiskey in populous neighbourhoods. We think the storing of spirits should be as carefully guarded as that of gunpowder or petroleum.

UNIVERSITY OF DUBLIN.

ON Saturday last, at a meeting of the Senate, resolutions in Latin were read to the effect that the degree of Master in Surgery *honoris causa* had been conferred on Mr. William Colles, for the pre-eminent diligence with which he had cultivated the art of surgery, by reason of which, as well as for the great advantage to the sick and afflicted, and other deserts, the Senate received him as Regius Professor into the bosom of the University. A resolution was also unanimously adopted, on the recommendation of the Provost and senior Fellows, prolonging to the end of this year the permission given to the senior Proctor in 1872, of using the old formula in conferring the degree of Master in Surgery.

DR. FLEETWOOD CHURCHILL.

We regret to announce the retirement of this distinguished obstetrician from the active practice of his profession. Dr. Churchill, in consequence of failing health, has found it necessary to withdraw from our profession, which he has long adorned, and from which he retires with well-earned laurels to enjoy the *otium cum dignitate* which he richly deserves. Although we must regret that Dr. Churchill will not any longer be able to serve the profession and the public with the energy and zeal which he has hitherto displayed, yet we are glad to know that he is still in full mental vigour, and that from his pleasant country house at Ardrea, near Stewartstown, in the county of Tyrone, we may still hope that he will further enrich medical literature by selections from his vast stores of practical experience. Dr. Churchill has presented his valuable obstetrical library to the King and Queen's College of Physicians, and has thus, by his own liberality and the unselfish kindness of his son Dr. Fleetwood Churchill, jun., established a lasting token of his love for the profession in which he so long laboured. The College of Physicians has presented Dr. Churchill with an address expressive of its thanks not only for his liberality in bestowing his library upon the College, but also for the great and valuable services which he has rendered that body as its President and as Professor of Midwifery in the School of Physic. The College has also directed that a portrait of Dr. Churchill shall be placed in the College hall, in company with the other distinguished ex-Presidents of the College.

CORRESPONDENCE.

SCARLATINA IN SOUTH KENSINGTON.

SIR,—As an erroneous impression is gaining ground with reference to predisposing causes in the house where "the fashionable dinner" and "at home" occurred on June 9th, will you kindly allow me through your columns to state that there was and had been no illness of any kind in the family; that "every guest" was not affected by scarlatina or the characteristic sore-throat; that the sanitary arrangements of the house in question are complete; and that no illness has ever occurred on the premises to raise a doubt concerning the drainage or water-supply? The outbreak, however, is so unparalleled in suddenness, variety of age, numbers, and rapidity, that it is receiving the fullest investigation in the highest quarters, and all concerned are aiding in every possible manner to elucidate the mystery.—I am, sir, your obedient servant,
THE MEDICAL ATTENDANT.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:
NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Queen's Hotel, Birmingham, on Tuesday, the 13th day of July next, at Three o'clock in the afternoon.
FRANCIS FOWKE,
General Secretary.

36, Great Queen Street, London, W.C., June 19th, 1875.

NORTH OF ENGLAND BRANCH.

THE annual meeting of this Branch will be held in the Town Hall, Darlington, on Thursday, July 8th, at 3 P.M. President, 1874-75, ANDREW LEGAT, M.D.; President-elect, 1875-76, S. E. PIPER, Esq., F.R.C.S.

The annual dinner will take place at the King's Head Hotel, Darlington, at 4.45 P.M. precisely.

G. H. PHILIPSON, M.D., *Honorary Secretary.*
Newcastle-upon-Tyne, May 29th, 1875.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE annual meeting of this Branch will be held at Abergavenny, on Friday, July 16th.

Nomination-papers and the titles of communications, etc., must be sent to one of the undersigned by June 26th at the latest, in order that they may appear in the circulars.

Further particulars in the circulars as usual.

ANDREW DAVIES, Swansea. } *Hon. Secs.*
ALFRED SHEEN, M.D., Cardiff. }
Swansea, June 14th, 1875.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

THE annual meeting of the above Branch will be held at Aberdeen, on Saturday, July 17th, at 1.30 o'clock P.M.

Further particulars will be intimated by circular.

ALEXANDER OGSTON, *Honorary Secretary.*
Aberdeen, June 1875.

WEST SOMERSET BRANCH.

THE annual meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, July 22nd, at 2.30 P.M.

The President-elect, Dr. Cordwint, will read a short paper on "Vital Conservancy in Disease".

Members wishing to communicate papers or cases are requested to send notice to the Secretary.

The dinner will take place at 5 o'clock.

W. M. KELLY, M.D., *Honorary Secretary.*
Taunton, June 29th, 1875.

BORDER COUNTIES BRANCH.

THE annual meeting of the Border Counties Branch will be held at Dumfries, on Friday, July 23rd, 1875: President, Dr. GREEN, Kendal; President-elect, Dr. W. A. F. BROWNE, Dumfries.

Gentlemen intending to be present are requested to communicate their intention to the undersigned.

HENRY BARNES, M.D. } *Hon.*
J. SMITH, M.D. } *Secs.*
Carlisle, June 28th, 1875.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, June 24th.

Pollution of Rivers Bill.—Lord SALISBURY, in moving that the House resolve itself into Committee on the Pollution of Rivers Bill, said that having regard to the progress of business in the House of Commons, he feared there would be no chance of passing this measure as it stood during the present Session. He nevertheless hoped that some of the provisions might even yet be placed on the Statute Book. He proposed, therefore, to proceed with those parts of the measure relating to the pollution of rivers by solid matter or by sewage, and he did not intend to press on the attention of Parliament at present that part of the measure which dealt with pollution caused by mining or manufacturing operations.—Lord ABERDARE suggested that Lord Salisbury should, during the recess, re-consider the subject, and bring forward a complete measure next Session.—After a short conversation, the House went into Committee *pro forma*, and immediately resumed, after the adoption of some amendments proposed by Lord Salisbury.

HOUSE OF COMMONS.—Tuesday, June 29th.

Public Health (Scotland) Acts.—In reply to Mr. W. Holms, the LORD ADVOCATE stated that he had the authority of the Chancellor of the Exchequer to say that he would consent to the introduction of a Bill with a single clause, enabling money to be borrowed at as low a rate for sanitary purposes by the local authorities in Scotland as had been conceded in regard to loans to local authorities in England.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS: DENTAL SURGEONS.—The following gentlemen, having undergone the necessary examinations, were admitted Licentiates in Dental Surgery of the Royal College of Surgeons at a meeting of the Board on June 29th.

Messrs. Frederick Canton, M.R.C.S., Marlborough Street; E. J. M. Phillips, M.R.C.S., Liverpool; J. L. Robertson, Cheltenham; J. J. F. Corbett, Cork; J. M. Lipscombe, Alresford; G. H. Harding, Acton, near Stafford; J. H. Whatford, Brighton; W. H. Fox, Gloucester; G. B. Pearman, Chelsea; H. H. Clifford-Eskell, Dublin; Augustus Cook, Upper Norwood; A. A. Hart, Newington Green; Francis Youngman, Thornton Heath; Alfred Foss, Stockton-on-Tees; T. A. Bodecker, Newark-on-Trent; G. A. Williams, Cavendish Place; C. E. White, Belgrave Road; W. G. Morris, Winchester Street; John Carteighe, Stratford Place; Thomas Gaddes, Barkham Terrace; T. E. King, York; James Stocken, Euston Square; R. H. Woodhouse, M.R.C.S., Hanover Square; H. C. S. Bennett, George Street; Alfred Allworth, Lyndhurst Road; James Williams, Walsall, and Thomas Rowney, Hull.

Only three candidates out of the thirty examined were rejected.

APOTHECARIES' HALL.—The following gentleman passed his examination in the science and practice of medicine, and received a certificate to practise, on Thursday, June 24th, 1875.

Martin, John Michael Harding, St. Helen's, Lancashire.

The following gentlemen also on the same day passed their primary professional examination.

Dobbie, Robert John Algernon, London Hospital
Haines, William John, St. Bartholomew's Hospital

UNIVERSITY OF DUBLIN: SCHOOL OF PHYSIC IN IRELAND.—Trinity Term, 1875.—At the examination for the Degree of Bachelor of Medicine, held on Monday, Tuesday, and Wednesday, June 7th, 8th, and 9th, the candidates passed in the following order of merit.

Cochrane, Robert S.	West, John Russell
Franks, Kendal M. St. John (Sch.)	Dane, Arthur H. C.
Fisher, Thomas Carson	Burne, Edward H. } equal
Halpin, Nicholas John	Smith, William B. } equal
Power, John J.	Clibborn, William
Lane, John G.	Montfort, Archibald H.
Hart, William R.	Goodman, Francis G.
Baker, Arthur W. W.	O'Carroll, Martin

At the examination for the Degree of Master of Surgery, held on Monday and Tuesday, June 14th and 15th, the following were the successful candidates.

Fisher, Thomas Carson	Bleakley, Alexander S. } equal
Hunter, William Lovell	Power, John J. } equal
Halpin, Nicholas John } equal	Baker, Arthur W. W. } equal
Hart, William H.	Banks, Alfred
Griffith, De Burgh	Moran, James J.
	Nixon, George M. } equal
	Burne, Edward H. } equal

Medical Travelling Prize.

Cochrane, Robert S.

Surgical Travelling Prize.

Fisher, Thomas Carson

Senior Medical Exhibitions.

Cochrane, Robert S.

Fisher, Thomas Carson

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the monthly examinations of the College, held on Tuesday, Wednesday, and Thursday, June 8th, 9th, and 10th, the following candidates passed.—For the License to Practise Medicine.

Cutler, Peter Aloysius	Lee, William Alexander
Johnston, Arthur Alma	Masters, Sidney Herbert

For the License to Practise Midwifery.

Cutler, Peter Aloysius	Masters, Sidney Herbert
Johnston, Arthur Alma	Ryan, William
Lee, William Alexander	

MEDICAL VACANCIES.

The following vacancies are announced:—

AMERSHAM UNION—Medical Officer and Public Vaccinator for the Workhouse and the Amersham District. Salary, £50 and £63 respectively. Applications on or before 10th instant.

ARMY MEDICAL DEPARTMENT—Surgeons. Examination on August 9th and following days.

BEDWELTY UNION—Medical Officer for the Ebbw Vale District. Salary, £15 per annum.

BOOTH BOROUGH HOSPITAL, Liverpool—House-Surgeon. Salary, £80 per annum, with board, lodging, and washing. Applications on or before July 3rd.

BOSTON UNION—Medical Officer for the Boston District and the Workhouse. **CARNARVONSHIRE AND ANGLESEY INFIRMARY**—House-Surgeon. Salary, £80 per annum, with board and lodging. Applications on or before the 20th instant.

CHORLTON UNION—Assistant Medical Officer at the Workhouse.

DENTAL HOSPITAL OF LONDON, Leicester Square—Assistant Dental Surgeon. Applications on or before the 12th instant.

EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN, Ratcliff Cross—Resident Medical Officer. Salary, £60 per annum, with board, lodging, and washing. Applications on or before the 15th instant.

HAY UNION—Medical Officer for the Workhouse. Salary, £55 per annum.

HULME DISPENSARY—Resident Medical Officer. Salary, £130 per annum, with furnished apartments, coals, gas, and attendance. Applications on or before the 6th instant.

INDIAN MEDICAL SERVICE—Ten Surgeons. Examination on August 9th and following days.

KENSINGTON DISPENSARY—Resident Medical Officer. Salary, £150 per annum, and furnished apartments. Applications on or before July 5th.

KILBURN DISPENSARY—Assistant Resident Medical Officer. Salary, £80 per annum, with apartments, coals, gas, and attendance. Applications on or before the 10th instant.

LEIGHTON BUZZARD UNION—Medical Officer for the Upper District.

LIVERPOOL NORTHERN HOSPITAL—House-Surgeon, House-Physician, and Assistant House-Surgeon. Salaries, £100, £80, and £50 respectively, with board and residence. Applications on or before July 10th.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE—Demonstrator of Anatomy. Salary, £100 per annum, and other emoluments. Applications on or before the 31st instant.

LONDON TEMPERANCE HOSPITAL—Visiting Hospital Surgeon. Applications to the Rev. Dawson Burns, Honorary Secretary, 112, Gower Street.

MARLBOROUGH UNION—Medical Officer for the Second District. Salary, £80 per annum, and fees. Applications on or before July 31st.

METROPOLITAN ASYLUM DISTRICT—Second Assistant Medical Officer at the Asylum for Imbeciles, Caterham, Surrey. Salary to commence at £120 per annum, increasing £10 yearly to £150, with board and furnished apartments. Applications on or before the 8th instant.

METROPOLITAN FREE HOSPITAL, Devonshire Square—Assistant House-Surgeon.

NEWCASTLE EMLYN UNION—Medical Officer for the Penbryn District. Salary, £50 per annum.—Medical Officer for the Llandyssul District. Salary, £50 per annum.

NORWICH DISPENSARY—Resident Medical Officer. Salary, £120 per annum, and residence.

POPULAR UNION—Medical Officer for the Western District.

PORTSEA ISLAND UNION—Medical Officer for the Workhouse. Salary, £250 per annum. Applications on or before July 7th.

RAINHILL (Lancashire) COUNTY ASYLUM—Assistant Medical Officer. Salary, £100 per annum, with apartments and board.

ROYAL SURREY COUNTY HOSPITAL—House-Surgeon. Salary, £75 per annum, with board, residence, and washing. Applications on or before July 31st.

SAFFRON WALDEN UNION—Medical Officer for the Fifth District. Salary, £15 per annum.

ST. BARTHOLOMEW'S HOSPITAL—Assistant Physician-Accoucheur. Applications on or before July 7th.

STOURBRIDGE UNION—Medical Officer for the First Kingswinford District. Salary, £56 per annum.

SWANSEA HOSPITAL—Assistant Resident Medical Officer. Salary, £70 per annum, with board, lodging, and washing. Applications on or before the 6th instant.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTH.

PARSONS.—On June 26th, at Sunnyside, Wimbledon, the wife of T. E. Parsons, Esq., Surgeon, of a daughter.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

TUESDAYGuy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.

FRIDAY.....Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.

SATURDAY....St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Some interesting Specimens will be exhibited at the beginning of the meeting. The Discussion on Puerperal Fever will be resumed.

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

IN consequence of the length of the report of the discussion on the Admission of Women to the Medical Profession, we are obliged to defer to next week our account of the remaining proceedings of the session of the Medical Council.

SALICYLIC ACID LOZENGES.

MESSRS. MOTTERSHEAD and Co. of Manchester have forwarded to us samples of salicylic acid lozenges, which they are about to introduce to the profession. We believe that the lozenge form will be found a good one for the administration of this substance, especially when it is desirable to bring the acid into frequent contact with the mouth and throat.

RUMSEY TESTIMONIAL FUND.

IN addition to the amounts previously acknowledged (£573 6s. 6d.), the following subscriptions have been received.

	£	s.	d.		£	s.	d.
J. Heywood, Esq.	5	5	0	H. Jephson, M.D., J.P., Leamington	20	0	0
W. Rendle, F.R.C.S.	2	2	0	James Wyatt, Esq.	1	1	0
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S. W. Duckworth Williams, M.D.	1	1	0	Walker Fergus, M.D., Marlborough	2	2	0
John Beddoe, M.D., Clifton	1	1	0	Capt. R. P. Beamish	5	0	0
W. Martin, F.R.C.S.	1	1	0	M. W. Taylor, M.D., Penrith	2	0	0
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Leonard Armstrong, Esq., Newton Abbott	3	3	0	R. B. Grantham, Esq., M.I.C.E.	2	2	0
J. B. Sanderson, M.D., F.R.S.	5	5	0	Peter Eade, M.D., Norwich	1	1	0
C. B. Skinner, Esq., Ipswich	10	10	0	West Sussex District, South Eastern Branch of British Medical Association	2	0	0

Subscriptions may be forwarded to Dr. Buchanan, New Government Offices, Whitehall; to the Honorary Secretary; or to Messrs. Roberts, Lubbock, and Co., Bankers, 25, Lombard Street, E.C. Cheques should be made payable to the "Rumsey Testimonial Fund" or bearer, and crossed "Roberts, Lubbock, and Co." Post Office orders should be drawn on the Curzon Street Post Office, and forwarded to the Honorary Secretary, W. H. Corfield, M.A., M.D., 19, Bolton Row, Mayfair, W.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

THE DEGREE OF M.D. AT THE UNIVERSITY OF BRUSSELS. DURING the present discussion concerning medical titles, it will doubtless interest many of your readers to ascertain how the M.D. Brussels may be obtained, and to read an account of an examination I have recently passed at that University. British and other medical practitioners, provided with medical and surgical qualifications, and appearing in person and producing their diplomas, can have their names inscribed in the books of the University, and may then proceed to the examination. The examination is precisely that prescribed by law for the students of the University, and is divided into first, second, and third Doctorate. I passed the examination in French; but, if necessary, the services of an interpreter may be employed. The examination lasts from four to six days, according to circumstances—the practical tests sometimes protruding the period. The examiners are ten in number, and have to be faced separately, two or three of the professors being usually present as auditors.

The first Doctorate consists of materia medica and general therapeutics; special pathology, and therapeutics of internal diseases; general pathology; and pathological anatomy, consisting chiefly of descriptions of morbid microscopical changes.

The second Doctorate includes surgery and surgical pathology; theory of midwifery and diseases of women, public and private hygiene; medical jurisprudence and toxicology.

The third Doctorate includes examination at the bedside of medical and surgical cases, with general clinical examinations; midwifery, with operations on the mannequin; operative surgery on the dead body, and surgical anatomy.

The cases given were pneumonia, second stage; phthisis, lungs in different stages; and rheumatic fever, with endocarditis, haemorrhoids, combined with rectal abscess; and a case of gunshot wound in the head. The operations were—ligature of the brachial artery at the bend of the elbow, excision of the breast, and amputation of the thumb at the carpus.

From what I could learn, the most usual stumbling blocks are the first Doctorate and the operative surgery. The clinical examinations are conducted in a most practical and admirable manner; and in hygiene and jurisprudence the candidate is allowed to explain the state of the law in England.

The secretary of the University will forward particulars on application, or I shall be willing to furnish all the information in my power to any gentleman desirous of proceeding to Brussels, who, by the way, is a most charming town.

44, Weymouth Street, W., June 1875. LEONARD THOMAS.

DR. HUGHLINGS JACKSON'S "Note on Hemikinesis" shall appear next week.

FLATULENT DYSPESIA.

SIR,—Will any of your readers kindly advise me what to do for myself? I have for nearly two years been the unhappy victim of flatulent dyspepsia. Immediately after breakfast, my symptoms begin: I feel a kind of "kick" at my heart; my pulse intermits; a strange sensation, more or less approaching giddiness, in the head; and a burst of tasteless gas from the stomach. All this is repeated many times a minute, and goes on hour after hour throughout the day. Incredible volumes of gas are thrown off the stomach every day. The supply of blood to my brain is so irregular, that I am becoming quite unfit to do my professional work; or, indeed, to make any mental effort whatever. I have taken the advice of several eminent men in town, and have tried every device, dietetic and medicinal, that I or my friends can suggest. In despair, I appeal to any professional friends who will kindly volunteer to assist me through the medium of the JOURNAL.

I am, sir, your obedient servant, A MEMBER.
London, June 23rd, 1875.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Bristol Daily Post; The Daily Bristol Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Glasgow Herald; The Sunderland Daily Echo; The Carnarvon and Denbigh Herald; The Manchester Guardian; The European Review; The Hackney and Kingsland Gazette; The Worcestershire Chronicle; The Birmingham Daily Post; The Brighton Daily News; The Sussex Daily News; The Glasgow Herald; The Cork Examiner; The Scotsman; The Cork Daily Herald; etc.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Mr. Henry Lee, London; Mr. T. Annandale, Edinburgh; Dr. A. P. Stewart, London; Mr. T. H. Bartlett, Birmingham; Mr. W. Fairlie Clarke, London; Dr. R. Farquharson, London; Dr. A. B. Steele, Liverpool; Dr. J. Hughlings Jackson, London; Messrs. Baillière and Co., London; Mr. R. Clement Lucas, London; Mr. W. D. Mann, London; Dr. Sergeant, Camberwell; Mr. H. Carden, Landport; Mr. A. Wanklyn, Leek; Mr. T. J. Dyke, Merthyr Tydfil; Dr. B. E. Cotting, Boston; Dr. Cheadle, London; Mr. Eastes, London; Our Edinburgh Correspondent; Dr. T. J. Denton, Bridlington; Dr. H. G. Knaggs, London; Mr. John W. Teale, Scarborough; Dr. W. Sneddon, Beith; Dr. J. Milner Fothergill, London; The Secretary of the West Bromwich Hospital; An Associate; Mr. F. W. Lowndes, Liverpool; Dr. Balthazar W. Foster, Birmingham; Mr. Joseph Farrar, Bradford; Mr. E. F. Fussell, Brighton; Dr. Pavy, London; Mr. John Salmon, London; Dr. J. J. Merriam, London; Mr. J. Howell Thomas, Shirehampton; Dr. Joseph Coats, Glasgow; Mr. T. Copplestone, Crewe; Mr. Thomas Godfrey, Herne Bay; Dr. David Page, Kendal; A Member; Our Dublin Correspondent; Mr. P. H. Holland, London; Dr. C. W. Philpot, Croydon; Dr. T. O. Dudfield, London; Dr. Henry Barnes, Carlisle; Dr. W. M. Kelly, Taunton; Mr. W. Paget, Liverpool; Dr. W. H. Corfield, London; Dr. Wiltshire, London; Dr. Finlayson, Glasgow; Dr. G. A. Molesworth, London; Mr. W. E. C. Nourse, Brighton; Mr. Humphrey, Romney Marsh; Mr. Wm. H. Rothery, Cheltenham; Mr. S. M. Bradley, Manchester; Mr. Edwin Chartier, Birmingham; Mr. T. M. Stone, London; Dr. M. Charteris, Glasgow; Mr. Roland D. Smith, London; The Secretary of the Charity Voting Reform Association; Dr. Daldy, London; Mr. A. W. Stocks, Salford; The Secretary of St. Thomas's Hospital; Mr. Arthur G. Sandberg, Holt; Dr. Smart, Haslar; Dr. A. Inglis, Worcester; Mr. J. Greasley, Canterbury; Dr. Augustus Brown, London.

AN ADDRESS ON OBSTETRIC MEDICINE AND ITS POSITION IN MEDICAL EDUCATION.

*Delivered at the Annual Meeting of the Metropolitan Counties Branch,
June 28th, 1875.*

By ROBERT BARNES, M.D., F.R.C.P.,
Obstetric Physician to St. George's Hospital; President of the Branch.

THE honourable office to which your kindness has called me involves a duty which, I fear, I shall very inadequately discharge. It is no light task worthily to address so distinguished a body as the Metropolitan Counties Branch of the British Medical Association. It is not, indeed, difficult to find a theme deserving your attention; for that is dictated by the fact of your having chosen me as your President. I understand that your choice has fallen upon me, because you wished to recognise the claim that Obstetric Medicine has to a share in the representation and in the work of our great Association. I am grateful for that recognition. It is an omen, I trust, of fuller and more equal participation in the honours and in the government of our profession.

The actual position of obstetrics in relation to medicine and surgery is a scandal to the profession, and a grievous injury to the public. I offer no apology for asking, In what respect is obstetric medicine intrinsically less worthy than so-called pure medicine and pure surgery? Is not its object at least as important to mankind? Does its exercise demand less scientific knowledge, less trained skill, less devotion to duty? Are those who teach and who practise it inferior in education, in attainments, and in capacity to those who teach and practise medicine and surgery? Flattery was never my forte or weakness; and I should be guilty of flattery most gross, were I to affirm that all the physicians and surgeons of our hospitals were men superior in merit or in usefulness to the teachers and practitioners of obstetrics. Many, I presume, would not themselves lay that flattering unction to their souls. In the name of justice, then, how can they reconcile it to their conscience to usurp almost exclusive possession of the clinical opportunities, honours, and emoluments of the hospitals, and to the government, honours, and other benefices of the colleges? In the name of common sense and in the public interest, why is it that obstetric medicine is all but absolutely unrepresented in the General Medical Council, in the Senate of the University of London, in the College of Surgeons?

Is the answer to be, that medicine and surgery confer upon their votaries the miraculous gift of capacity to legislate for that department of our profession of which they are practically, if not also theoretically, ignorant? It can hardly be contended that medicine and surgery, in the special sense in which they are cultivated by our hospital physicians and surgeons, include a knowledge of obstetrics and gynaecology sufficient for the purposes of government. If there be one department of the healing art which can show a better founded pretension to universality than another, it is surely obstetrics, to understand and to practise which we must combine a liberal knowledge of medicine and surgery.

The best argument in favour of the actual state of things that occurs to me, is the great advance that obstetric medicine has made in spite of every discouragement and the studied indignity to which it has been subjected. But success so achieved is not evidence of the wisdom of those who inflict that discouragement and indignity. It is evidence of the inherent scientific and practical importance of the subject that can enlist able men in its service, and find fitting material for the exercise of their faculties.

It is worth while to take a rapid survey of the actual position occupied by obstetrics and gynaecology in relation to medicine and surgery in our London hospitals, schools, and governing bodies. At this moment the eleven hospitals to which schools are attached have each one obstetric physician, and not all have an assistant obstetric physician. One of the largest has but just been roused to a perception of the fact that a second officer was wanted. Now, in all these hospitals, I need not say, there is a large staff of physicians and surgeons and assistants in training and in full occupation; for not only is there an enormous preponderance of medical and surgical *personnel*, but the distribution of material is so arranged that each physician and each surgeon has a very much larger share than has the solitary obstetric officer. A few beds at most are allotted to him. In all the eleven hospitals there are

4,118 beds. Of these, 141 only are devoted to gynaecology. Does this beggarly proportion fairly represent the relative importance of the three departments? Does it adequately meet the public need? Does it supply sufficient opportunity for clinical instruction? I will not venture to assert that no one will be found bold enough to answer these three questions in the affirmative; but I may confidently assert that no one will be able to make good the affirmative in a single point. Any one who may make the attempt will have to answer a few more questions. Is disease in women a rare thing? Are the sexual organs and functions in women in themselves unimportant? Is their influence upon the economy and upon other organs insignificant? Is it possible to understand aright disease in women, without taking into account its interaction with the physiology and pathology of the generative system?

I will not now attempt to pursue these questions throughout all their bearings. It is enough to point out how painfully inadequate is the provision in our hospitals and schools for the investigation and teaching of subjects so extensive in themselves, and capable of throwing so much light upon many problems regarded as simply medical or surgical. It is inconceivable that the provision for this purpose could be so unworthy, so niggardly, were it not dictated by sheer ignorance; for I will not suppose that it is the result of culpable indifference. This scanty provision, then, must be taken as the measure of the estimation in which the pathology of women is held by those who govern our hospitals, who frame our educational curricula and examinations for diplomas, and who generally legislate for the profession.

The same spirit that is seen in this scanty allotment of beds is manifest in the relative position awarded to the teachers. I believe it is still true that in most of our London hospitals the obstetric physicians hold the position of supernumeraries rather than of recognised members of the staff. They are not in all cases elected in the same manner as the ordinary physicians and surgeons; and these last are especially careful not to admit their obstetric colleagues to share in the fees.

It is not wise for any community to brand a section of its members with the stamp of inferiority, or to inflict upon them the injury of representative and administrative disability. But this we might bear with more or less patient acquiescence, if it could be shown that the actual system worked well for the public interest. *A priori*, it might be safely inferred that injustice cannot work well for the public interest; but it is a matter of easy demonstration that the actual system does not work well. I may appeal to every young man leaving our schools, armed with a diploma, therefore conventionally and legally qualified to practise, for testimony in support of my argument. He must needs admit that he enters upon practice very imperfectly prepared to encounter the difficulties and responsibilities of obstetric work. Those who out of their own mere motion and imperfect knowledge rule these matters, have declared that to have attended twenty cases of labour is clinical experience enough wherewith to enter upon obstetric practice; whilst as for gynaecology, the clinical instruction he has had is not less absurdly insufficient. I know that many of the best and ablest of our young men keenly feel their deficiency in this respect. They find that they must by slow and painful steps, under innumerable difficulties, pick up the knowledge which they ought to have acquired during their career as students. Nor are they to blame for this. Students notoriously concentrate their attention upon that which "pays" at the examination-tables. And there, excepting for the license of the Royal College of Physicians and the degrees of the University, obstetrics and gynaecology are of no use; indeed, even certificates of practical study, that dangerous substitute for the examination-test, are hardly required. If proof of practical study and a sufficient examination-test were instituted, then it would follow as a logical consequence that the opportunities for clinical study would be extended, and that students would "get up" this subject.

It is a painful fact, that the greater number of charges of malaproxia brought against medical men relate to obstetric practice. In many cases it could be shown that the fault imputed was the result of ignorance—that is, of imperfect teaching and experience. Unhappily, the law is too apt to declare that ignorance is criminal; and thus an honest man is sent to gaol as a felon for not possessing that knowledge and skill which our governing bodies have denied him the opportunity of acquiring.

It may be said that the great scheme for a joint examination-board will remedy some of the evils to which I have referred. I hope it may be so; but I have little faith in protracted gestation. There is generally something doubtful in the legitimacy of the conception; and the progeny seldom comes to good. It is true that after many false throes, such as climacteric women big with wind are apt to feel, actual parturition seems near at hand. The University, the Apothecaries' So-

society, and the College of Surgeons, having called in the aid of Parliament, some of the causes obstructing labour have been removed; but still the progress is slow. I am afraid anaesthesia is carried a little too far, and that further operative measures may still be necessary. And when the long-promised birth is accomplished, shall we be happy? Will our expectations be realised? This is a question which, of course, time and experience only can answer. It is at any rate premature, if not fatuous, to dote upon that which at best has only a potential existence.

Amongst the burning questions of the day is the propriety or the right of admitting women into the professions. I say the right or the propriety, because even if the right were made good, the propriety would not follow. Why it is that the women have selected medicine as the especial point of attack, is not quite clear. They are far better fitted by organisation, by natural aptitude, to shine in the pulpit and at the bar. And in the career of arms, if we may trust legendary or mythic history, they have earned no mean distinction. But medicine, whilst demanding physical power not less than the other professions, is essentially founded upon science.

Now, the women who have been distinguished for scientific power might be counted on the fingers of one hand. There seems to be a natural incompatibility between science and the female brain. There is, indeed, no such inherent incompatibility between science and religion or law. Theology and law that are not in harmony with true science must rest upon a very insecure foundation. But the clergy of all denominations, and lawyers as a rule, assume a direct antagonism to science. They set themselves above it; they would trample it down as something in chronic rebellion against their authority. In this antagonism they resemble the women; in these they find their most useful allies. The church and the law, then, are the professions most congenial to the somewhat arbitrary character of the female intellect. Now this question a committee of the Medical Council have handled in its broad aspect in a recent report submitted to the Council, with a view to transmission to the Privy Council, in a masculine and sensible manner.* But there is a subordinate question, which, from an organic defect in their constitution, they are not likely to handle satisfactorily—I mean the education, qualification, and registration of midwives.

It is not for want of information, or advice entitled to respect, that the Medical Council and the governing bodies have so long maintained this deplorable state of things. In July 1868, a Committee of the General Medical Council, of which the late Mr. Syme was chairman, addressed inquiries to the teachers in the various schools, asking for their opinions on the following points: 1. The topics which might most advantageously be included under the subject they taught; 2. The period in a four years' course, when that subject could be most profitably studied, and the length of time which should be devoted to it; and 3. The manner in which it could best be taught—that is, by lectures, practical instruction, or otherwise. Upon this invitation all the obstetric teachers in London met in deliberation, and agreed to the following proposition. "The lecturers, considering the great extension which has been made in recent years in the knowledge of obstetrics and the diseases of women and children, the deep interest of the public in possessing practitioners duly skilled in this department, and that it is of paramount importance to the comfort and success of the young practitioner to possess sound theoretical and clinical training in it, are unanimously of opinion that the actual means of study, and the share devoted to it in the present curriculum, are insufficient." Mr. Syme's Committee frankly acknowledged the necessity of extending the instruction in midwifery. "We are decidedly of opinion," they say, "that the present space allotted to midwifery in the regulations of some of the licensing bodies is too short, and that it should, as was formerly the case, extend over one winter session, and that instruction in practical midwifery should also be extended." But nothing has come of this "decided opinion". A body of men, each of whom is a representative of the governing bodies which have affirmed that attendance on twenty cases of midwifery is basis enough to qualify for obstetric practice, can hardly possess the requisite knowledge to legislate upon this question.

I am sorry to be obliged to qualify this statement. I had not taken into account the probability that the Council would stultify it. Committee. The Committee reported as follows: "After due deliberation, the Medical Council have to express their opinion that the study and practice of medicine and surgery, instead of offering a field of exertion well fitted for women, do, on the contrary, present special difficulties which cannot be safely ignored, and some of which cannot be obviated. Instead of medicine offering more facilities and less difficulties for women than other professions, the Medical Council believe that, as the whole question is looked into, there will be found peculiar hindrances, moral and physical, to the successful pursuit of medicine by women. Moreover, they desire to add, that if it be admitted that women should enter the medical profession, the existence of an equal fitness for other professions must be assumed." This report, after long discussion by the Council, was effectually emasculated.

The practical question, of course, surges up: But how will you find more time for the study of obstetrics? The answer is not difficult. Time may be gained by the simple and common-sense process of striking out of the curriculum teaching that oppresses and bewilders the student, that distracts his attention from the real object of his study, that loads his memory without training his intellect. Without hesitation or misgiving, I would abolish the lectures on Forensic Medicine. This course seems to have been designed chiefly in order to train the lecturer in the great art of teaching what he does not know, without exposing his ignorance. I speak from experience, having gone through the ordeal as a very young man. I am afraid I did not succeed in concealing my ignorance from my class. And just when, by dint of teaching, I had begun to learn a little of the subject, I turned it over to a junior to go through the same experience. I could not help thinking how, when *deirant magistri, plectuntur alumni*. I hope the alumni have forgiven me, reflecting that I, not less themselves, was the victim of an absurd and arbitrary regulation.

The course is usually committed to the youngest lecturer in the school. His "prentice hand" is exercised in teaching the last and most difficult applications of medical knowledge. To do this effectually demands the most matured experience that long practice in medicine, surgery, and obstetrics can supply. No young man can possibly teach efficiently any one of these subjects. It is beyond the power of mortal man efficiently to teach all three. And, practically, this is acted upon by the public. In any case coming before the law-courts, in which a question of medicine, surgery, or obstetrics is involved, do we ever see a simple lecturer on forensic medicine summoned? Is it not the invariable practice to summon those who have had special experience in the subject? So again, where a chemical question is involved, is not the professional chemist appealed to? Society has no longer faith in medical admirable Crichtons: your only admirable Crichton nowadays is the lawyer. He, indeed, is privileged to decide in the last appeal upon every question of medicine, surgery, obstetrics, chemistry, and every other science; and the less he happens to know of the science, the more ready is he to cut the knot with the sword of blind justice. The public naturally invoke the aid of those who have had the largest special experience bearing upon the question in dispute. It seems a logical necessity, then, that the physician, the surgeon, the obstetricist, the chemist proper, should each work out his teaching to its applications to the law—that is, to the limited extent which it is possible to attain in a course of lectures.

I could not cite higher authority in support of this view than that of Sir Thomas Watson. In his reply to the Committee he says: "I doubt whether forensic medicine should find a place in a course prescribed for all medical students in common. Its singular interest and its vast importance are unquestionable. But not one in a hundred of those engaged in the practice of medicine in this country can ever become safe guides, or capable of the more difficult and abstract experimental investigations which from time to time are required in judicial proceedings incidental to our social life. These inquiries should be committed to recognised professional experts, who ought not to be regarded as mere witnesses in any case, but as medical assessors to the appointed authorities."

As to the more strictly legal part of forensic medicine, that which teaches the forms and practice of the law-courts in dealing with ordinary and skilled evidence, the relations between true science and that which lawyers construct out of their inner consciousness, and what constitutes malapraxis and other offences in the eye of the law, all this can be better studied in books, and in the courts themselves. This part of forensic medicine should, in short, be studied as medicine proper is best studied—that is, where it can be seen in practice. It is an essential part of the education of every man to learn how the law is administered. In this country most of us may be called upon to take part in its administration. Observation in the law-courts is the best training for this duty. I have often doubted whether the exemption we enjoy from serving on juries is an unalloyed advantage to ourselves. I am sure it is a disadvantage to the public. The jealousy of the law will hardly bear the presence of scientific men as assessors to the court; but a skilled juryman would virtually exercise a similar function: and thus the public would sometimes enjoy the benefit of law enlightened by science, which is now carefully excluded.

It is impossible to resist the opinion of Mr. Simon, "that a good deal of time is wasted in our medical schools, and also much confusion caused, by lecturers on surgery and lecturers on medicine both considering themselves required to teach such general parts of pathology and practice as are common to both branches". A good deal of needless overlapping also occurs between the courses of anatomy, physiology, and surgery; and almost all the most practised teachers concur in the opinion, that clinical instruction is so incomparably superior to formal

lectures in the class-room, that the systematic courses on medicine and surgery might be usefully curtailed.

Applying these principles to the teaching of obstetrics and gynaecology, I think I may say that we do not indulge in overlapping. Our time and opportunities are so restricted, and our subject so extensive, that we are often compelled to omit altogether special topics of urgent practical importance which rightly belong to us, and which no one else cares to touch. We can barely indicate the special relations of the anatomy and physiology of the female organs to pregnancy and labour. We must needs assume that the lecturers on medicine and surgery have, out of their greater store of time, instructed our class in the general doctrines of pathology. But still, doing the best we can in the three months' summer course of about forty lectures at our disposal, we find it simply impossible to trace satisfactorily the history of pregnancy, parturition, and childbed, including that of the embryo and the newborn child. It must be remembered that the lectures on obstetrics eminently admit of and require illustration by specimens, drawings, practical demonstration, and practice in operations. If the class be ever so small, this practice takes considerable time. And after all, the extensive and growing subject of the diseases of the non-pregnant woman is untouched. This is relegated to the winter, when it is taken up in the clinical lectures, which, again, are too few by far to treat it effectively. This would offer less reason for regret if we had adequate clinical material at our command; if we could supplement at the bedside the defects of our systematic lectures, as the teachers of medicine and surgery can and do. But we find ourselves hampered at every turn; told, like the Israelites of old, to make bricks without straw; the difference being that nobody cares whether the bricks be made or not.

ABSTRACT OF AN ADDRESS

ON

THE BRITISH MEDICAL ASSOCIATION AND ITS AIMS.

Delivered at the Combined Meeting of the Cambridge and Huntingdon, East Anglian, and South Midland Branches, July 2nd, 1875.

By GEORGE M. HUMPHRY, M.D., F.R.S.,

Professor of Anatomy in the University of Cambridge; President of the Branches.

PROFESSOR HUMPHRY, on taking the Chair, observed that it was usual for the person who occupied the honourable position in which he was then placed to say a few words in opening the meeting. The axiom "Let your words be few" could never be more applicable than in a meeting composed, as that was, of men respecting whom it might be said more truly, perhaps, than with regard to any other men, that the work was long and the time was short. The meeting in that ancient seat of learning was a reminder of the close bond which had at all times united medicine with the various branches of literature and science represented by the University. It might, perhaps, be said that the connection between literature and the medical profession was less close now, than it was in those times when the foremost men of letters were to be found in the medical profession, and when the classic languages were the media of communication of medical facts and medical thoughts throughout the various parts of Europe. Still, even at the present time, when it was so hard to excel in more than one subject, there were among them those who were no unworthy successors to Celsus, to Sydenham, and to Sir Thomas Browne. With regard to science, there never was a time when it could be more truly said that every discovery and advance in science had a direct or an indirect bearing upon medicine; and there never was a time when the effort was more determinedly made to lay the foundations of medical study deep in the ground of general science. More especially was this the case with regard to that branch of medicine which had for its object the prevention of disease. He meant sanitary or preventive medicine. Of this, which was daily increasing in importance and public estimation, medical men had always been the most active promoters. It might be urged that, in so doing, they were cutting the very ground from under their feet; for, if disease were prevented, there would be no need of medicine or of medical men. It might be added that there was, perhaps, no other profession or calling the members of which were so actively and disinterestedly engaged in promoting the public welfare in that which would seem to involve the destruction of themselves. They, however, knew well that diseases were for the most part the pro-

duce of civilisation, and that it behoved civilisation to employ the best weapons from its armoury to repress and destroy these its noxious children. It was no small satisfaction to be able to add that the most active promoters of sanitary medicine had been the members of the Association; and that the University of Cambridge had been foremost in England in lending a helping hand to it by instituting an examination, so that the public might be certified respecting those who possessed a competent knowledge of it. There could be no doubt that the importance of this subject increased every year, and that the town or district which neglected it would sooner or later pay the penalty in the shortened lives of its inhabitants.

The British Medical Association was an Association of medical men for the purpose of promoting their mutual welfare; the welfare, that is, of the whole body of the profession, not especially of the magnates whom smiling fortune had enabled to take care of themselves, but rather of the general practitioners, of those who bore the burden and heat of the day, of those who did the hard work, and too commonly received only the hard wages. In some respects, the Association bore resemblance to the guilds of olden times. Those guilds were societies of men belonging to particular trades and avocations, formed for mutual advantage, as is the British Medical Association; but there were certain wide points of difference between them. The guilds for the most part had an eye to the material advantage of their own members, and the furtherance of their own trade, which was often attended with disadvantage to others. Not so the British Medical Association. It had an eye rather to the social and scientific than to the material improvement of each individual member; it had an eye less to the pocket and more to the head and heart. Moreover, those ancient guilds were accompanied with numerous restrictions to prevent persons from entering the trade which they represented, and their laws were enforced sometimes with serious and even savage penalties. He would give an illustration, happily a rare one, and the scene of which was laid in a distant land. There was in China an association of persons engaged in gold-work—a gold-workers' guild—one of the laws of which was, that no member should take more than one apprentice, whereby the number of those entering the trade was limited. One member of the guild, more liberal-minded than the rest, protested loudly against this restriction, and thereby excited the furious animosity of his fellow-craftsmen. Time wore on, and he thought the offence had been forgotten or condoned, when one day a banquet of the members was held. All passed well till, on retiring into an apartment after the banquet, the members suddenly fell upon the unfortunate offender, bound him hand and foot, and then proceeded to bite at him each in turn till they had killed him. The reason of their selecting this mode of inflicting summary punishment is, that the laws there are not against killing, but against particular modes of killing. There is law against shooting a man, or hanging, or drowning, or strangling; but none against biting him to death. He need not say in the British Medical Association there was nothing of this sort. There were no punishments, no limitations, no desire to narrow the area of the profession, or to bar the entrance against those who desire to be enrolled in it. There was, however, one other feature in common with the guilds; viz., that they had a dinner. He hoped all would come to it, and see that there was no biting but of good food, and none of that worst of all biting, viz., back-biting.

The British Medical Association aimed at improving its members scientifically and socially. He well remembered the energy with which the noble founder of the Association, Sir Charles Hastings, used to proclaim that science was graven on the banner of the Association. Well might it be so, for nothing tended more to promote continued happiness than the continued acquisition of well grounded scientific knowledge. Something of this kind was needed to compensate the medical man for his many anxieties and vexations and cares, to beguile and enlighten him in the often weary routine of daily life, and assist him in his many perplexities and difficulties; and certainly no scientific knowledge could do this more effectually than the knowledge connected with his own profession.

Nothing added so much to his happiness as a deeper, more earnest, more continued acquaintance with the science of his profession, which, after all, was a noble science—he said advisedly, the noblest and highest of all sciences. They had to deal with the noblest work of God; to deal with the most complicated machinery in the natural world; and not only had they to deal with it, but they had to deal with it in its aberrations, and to endeavour to prevent and correct those aberrations; and as an incentive to it was added the assurance that it was associated with the prolongation of human life and the diminution of human suffering.

To induce medical men to cull the vast amount of facts which fell under their observation, was one of the objects of the Association. There was one direction especially in which there was a vast, an incalculable

waste of knowledge—namely, in connection with *post mortem* examinations. Medical men followed up a case, sometimes in dim uncertainty, not infrequently in most mistaken certainty, up to the point when death offered an opportunity of unravelling the mystery, and of turning his own weapons against himself. How very large an amount of knowledge was here lost for want of some better means of gathering it in. If the Association could take measures to prevent this waste, it would be doing a vast amount of good. It had occurred to him that the way in which this could be done would be to have in each centre, *e.g.*, in Cambridge, some well qualified person who would be able to go into the surrounding district and assist medical men in conducting *post mortem* examinations. Medical men had not the time, and they would pardon him for saying that many of them had not the skill, to carry out an investigation of this kind in accordance with the modern requirements of science. Two things were needed to give practical effect to this suggestion: first, the men—a difficulty which might probably be met; and, secondly, the money, for certain funds would be required to pay men who should be thus occupied; and this was not easily provided.

The Association also endeavoured to improve its members socially. A great alteration for the better had taken place in this respect within his own observation. Medical men now looked upon one another less as antagonists and more as fellow-labourers in the great cause of humanity. He would venture to throw out the hint, by way of making a practical suggestion, that they should never take offence at that which came through a third person. The most friendly feelings might be misrepresented by a simple gesture; the softest, kindest words might be marred and poisoned by an altered tone, and a meaningless and utterly inoffensive expression might be turned into gall and wormwood by a slight alteration or a trifling exaggeration. This ought not to be so. As members of a professional brotherhood, still more as members of a Christian brotherhood, they ought each to be clothed with such a mantle of good feeling as should ward off many of the arrows which were aimed at them, and certainly should allow none of those which were not intended for them to enter and leave a wound. There should be a confidence in one another's uprightness which hinders the imputation of an ill motive—some of that best feature of charity which thinketh no evil. He had said that there had been a decided improvement in this respect among the medical profession in his time, and that was not a little due to the Association and its meetings. One of the greatest privileges in life was that of coming into contact with men better than themselves. At these meetings they came face to face and hand to hand, and by those unerring pulses tested the qualities of one another's hearts; and there were very few who did not feel that they had met others better than themselves. There was, therefore, a responsibility in attending these meetings, as well as a pleasure—the responsibility of self-improvement, the responsibility of going away better than they came; and if any individual member were raised at the meeting a single step on the ladder of good thought and high motive, their gathering together would not have been in vain.

REMINISCENCES OF A BRANCH SECRETARY.

Being the Address delivered at the Twenty-sixth Annual Meeting of the North Wales Branch.

By D. KENT JONES, M.R.C.S. Eng., President.

I CAN assure you I highly appreciate the honour bestowed upon me by electing me to the position of President of this Branch of the British Medical Association. To me, who have always taken the liveliest interest in everything that concerned the affairs of our Branch, it must, you may well imagine, be a source of the highest gratification to find myself again in close official connection with you. When I resigned the post of honorary secretary, which I had held since the establishment of this Branch, and removed to a distant and new sphere of professional labour, I did not anticipate I should return so soon to the scenes of so many happy and pleasant meetings of this Association. There are many friendly faces and genial voices which I miss—some voices, alas! hushed for ever; there are others, again, who, I am sure, would gladly have been here to-day but for urgent professional engagements. A holiday from our heavy and anxious duties, even for one day, to meet men of whom we have probably heard only by fame, is an enjoyable matter, and cannot be said to have been altogether thrown away.

I intended to say a few words on some subjects of medical practice, making, as it were, a running commentary on some points of therapeutics. It occurred to me, however, that a retrospect, though necessarily a condensed one, of the transactions of this Branch, extending

over a period of twenty-six years, might be acceptable. It was in the spring of 1849, that I took upon myself the initiation of calling a meeting of Poor-law medical officers and others, who I thought might be favourably disposed, at the Liverpool Arms Hotel, Bangor, for the purpose of forming a medical society for North Wales. Of the several gentlemen who attended that little meeting, two or three only are now living, whilst others emigrated to the colonies, and have there ended their career. My old friend, Dr. Lloyd of Llangeferni, who was a member of the Provincial Medical and Surgical Association at the time, recommended that we should try to form a Branch of that Society for North Wales, and wrote to the late Sir Charles Hastings of Worcester for advice. Mr. T. T. Griffith of Wrexham took a lively and important part in the movement; and attended the second meeting, at which it was decided to convene a meeting at Rhyl of all the qualified members of the profession, with the view of inaugurating the North Wales Branch. This was held in May, 1849, and was numerously and influentially attended. And from that meeting the Branch may be said to have fairly started upon its career of usefulness, with Mr. Griffith of Wrexham as its first president, and Dr. Edward Williams of Wrexham and myself as honorary secretaries. To their persevering and valuable exertions, I attribute the successful establishment of this Branch. We were fortunate in having presidents annually who were men of high professional attainments; and, what is also of considerable importance, they were gentlemen whose social position and private worth were recognised by the public, not only of their respective localities, but throughout North Wales. Men of such mark could not fail to attract notice, and they upheld the honour and dignity of the profession. Medical men were gathered together to exchange kindly sentiments; they became better acquainted with each other; and helped to remove those narrow prejudices and jealousies, which so much mar that mutual respect and good feeling which should ever characterise the members of such a profession as ours. The isolated practitioner no longer could complain of the want of a society within easy reach, but for which he might continue to live on unknown to his brethren in more distant parts of the Principality. The benefits of such an institution surely cannot be over-estimated, especially when we are oftentimes beset with difficult cases, and need the advice and assistance of abler and more experienced counsellors.

The locality for holding these meetings should, I think, be always carefully decided upon. We should not forget that much of the success of these gatherings depends upon the place selected for holding the meeting, so that we may attend, and return home on the same day. But it is not always possible to confine ourselves to this scheme. For instance, it is very desirable to break new ground, and go where we have never been before, as was lately done at Bala, where a most successful meeting, largely attended, crowned our efforts. It was here, at Rhyl, that Mr. Theed proposed we should hold what are now familiarly known as intermediate meetings. Although at first these were not so well supported, they have for several years past, I may say upon the whole, been well attended, and have afforded more time for reading papers and discussing cases, leaving to the annual meetings the work of electing officers and auditing treasurer's accounts, and so on. Here, too, from its central position, the majority of our gatherings have been held. I must not forget to record how hospitably we have been entertained by some of our kind fellow-associates to dinners and elegant luncheons, on the occasions of these reunions occurring in towns where they resided.

The British Medical Benevolent Fund was established a few years after the formation of the British Medical Association, with which it has always been in connection. This excellent institution has from time to time afforded a vast amount of good; relieving the poor and distressed medical men, their widows and orphans, in a quiet unostentatious manner. The operations of the Committee are not confined to members only of the British Medical Association; but its benefits are extended to others also. Several members of this Branch are annual subscribers to its funds; and at one of our annual meetings, the sum of £5 was unanimously voted towards the same out of the annual subscriptions. I earnestly commend it to your favourable notice; and would suggest that at every annual meeting some voluntary donation, however small, be made at our festive board to show that, whilst Providence smiles upon us, we do not forget that at that moment there are many unfortunate brethren, and the widows and orphans of deceased brethren, struggling for very existence!

We have as our property that first class weekly paper the BRITISH MEDICAL JOURNAL. It reflects the opinions of the members upon all great professional and social questions. In it we have every subject thoroughly ventilated, and it is conducted with unwearied industry, zeal, and talent.

To the parent Association, and her dutiful children the Branches,

credit must be accorded for the success of the great measures affecting our profession which have passed through Parliament and become law, after being for twenty years or more before the public creating considerable agitation. Substantial as have been some of these, there are many remaining to excite our vigilance and to call for

time, I am confident, must soon arrive when decisive steps must be taken. The Charity Organisation Society of London has done a great deal of good; and were the British Medical and Social Science Associations to co-operate with them, I have no doubt the public would soon be interested in the matter. The Public Health and the Adulteration of Food and Drugs Acts are measures of importance, and have imposed great responsibilities upon the medical men who have been appointed to discharge such heavy and multifarious duties.

Looking back to some of the transactions of this Branch, I am particularly struck with one interesting feature which brings out vividly the character and worth of one of our oldest and most esteemed fellow-associates, viz., Mr. Thomas Taylor Griffith of Wrexham, who has on two different occasions been elected our president. To mark the great regard and friendship entertained towards him, the members, at the annual meeting held here on July 8th, 1873, presented Mrs. Griffiths with his photographic likeness, in a speech full of pathos and kindly sentiments by Dr. Hughes of Colwyn, formerly of Mold, who had also the able assistance of Dr. Llewelyn Williams of Wrexham, as honorary secretary of the presentation committee.

The medical profession ranks deservedly high in the estimation of the public; and its sayings and doings are eagerly scanned. But many members of it, I am sorry to think, have not that proper and exalted idea of the true ethical bearing which characterises not only the doctor, but the gentleman. Too much of the trade and underselling spirit pervades the minds of some, a great deal of charlatanism is practised by others. The really earnest lovers of the art delight only in securing to their patients the fruit of their skill and knowledge without the tares of sophistry and empiricism. These cannot, naturally, connect themselves with irregular practice; and whenever they are confronted with unqualified men, it will behove us all to rally round them, and tender our support and warmest sympathy. Some years ago, I recollect, at one of the annual meetings of this Branch, a strong resolution was unanimously carried against all recognition of quackery, whether in the shape of homœopathy or any other name. I invite notice to be taken of what has recently occurred at Llanberis and Bethesda. I have been acquainted with Mr. Hamilton A. Roberts for upwards of thirty years, and I have known Mr. Hugh Rees also for a considerable period. Both are members of this Branch; the former having filled with distinction the post of President. They have, as you know, voluntarily relinquished lucrative offices, rather than countenance bone-setters. We ought to convey to them our opinion of the unfair and most ungenerous treatment they have received at the hands of men who ought to have required them better. A letter on the subject was placed in my hand, as I came into the room to-day. It is as follows.

“II, Victoria Place, Bethesda, 15th June, 1875.

“Sir,—Most of the members of the medical profession in North Wales are no doubt aware of the appointment of an unqualified bone-setter to act in conjunction with a professional gentleman at the Penrhyn Quarry Hospital. In consequence of this, Dr. H. A. Roberts, who has held the appointment of surgeon to the quarry for a period of about forty-three years, has thought it incumbent upon him to resign that post. I need not inform you that the resignation of Dr. Roberts is a matter of deep regret to all who have had the benefit of his skill and experience in this neighbourhood; and it has been resolved to present him with a testimonial as a slight token of their esteem and respect, and also as a mark of their sympathy, under the circumstances that have compelled him to resign. Subscriptions will be received by the undersigned, or by Mr. R. O. Morris, the Bank, Bethesda. (Signed, etc.) E. PHILIP WILLIAMS, Hon. Sec.”

It is time I should draw this to a close; I am anxious to say a few words more before I do so. In conducting the affairs of this Society, I was for several years ably assisted by our old friend Mr. George

Turner Jones of Denbigh, who was lately obliged to resign the treasurer-ship, owing to bad health. You will join me, I am sure, in expressing our sincere regret at this circumstance, and hope that rest and genial climate may restore him to good health. I bear in grateful remembrance the substantial tokens of your good wishes towards me expressed on two different occasions. I am glad to say that Dr. Eytton Jones of Wrexham has consented to fill the office of honorary secretary of the Branch, and that Dr. Lloyd Roberts of Denbigh holds the treasurer-ship. I am rejoiced to say that nearly all the respectable and talented members of the profession in the United Kingdom and Colonies are now members of the British Medical Association. To those resident in the district of the North Wales Branch who have not yet joined our ranks, I would earnestly appeal, and ask them to become members. The advantages of membership are well defined in the mutual regard and friendship it establishes. I look back to the many years I have been connected with it with singularly felicitous reminiscences. I cannot recall an instance in which I regretted absenting myself for a few hours from the anxious duties of country practice to meet my fellow-associates at meetings like this. The objects of this Society are not those for the gratification of the moment; they point the attention of the profession to the attainment of those medical and scientific purposes for which principally it was established. Bringing so many together naturally conduces to the better cultivation of friendship and knowledge of each other, but for which this happy consummation would never have been attained. I thank you sincerely for listening to a somewhat prolix address, and fear I have occupied too much of your time.

ON THE VALUE OF ASSOCIATED WORK IN INVESTIGATING THE PREVENTABLE CAUSES OF DISEASE.

Abstract of an Address delivered at the Annual Meeting of the Southern Branch, July 1st, 1875.

BY THE PRESIDENT, M.D. VICE-PRESIDENT

of medical science would be willing to admit that it might proudly take its position amongst the most highly cultivated branches of human knowledge; and, recognising the treasures which had been bequeathed to them by their predecessors, it was incumbent upon the members of the Branch to strive to aid in the completion of that edifice whose foundations had been laid by the great, the noble, and the good of their race. It appeared to him, further, that it was the special province of medical societies, more especially an Association so extensive and influential as that of which they constituted a Branch, which numbered not its hundreds only, but its thousands of members, to regard this rich inheritance with peculiar reverence, to foster it with the tenderest care, and to endeavour, by collective and individual efforts, so to use it that it should suffer no deterioration at their hands, and so to guard it that its prestige be preserved, its usefulness extended, and its boundaries enlarged, so that as an inheritance it might pass to their successors richer than it came to them. Although much might and had been done by individual effort, it seemed to him much more might be accomplished if the executive and members of the Association were to undertake the duty of organising some system whereby the smaller rivulets of knowledge that now in a large measure ran to waste could be guided, as it were, into one general current, so that they might become assimilated. This was not the time to consider the details of such a scheme, but he believed its adoption to be both possible and practical. For instance, what a high degree of interest would attach to a carefully arranged geography of diseases, acquired through the combined efforts of the members of the Association, contributing, as it might be made to do, to a medical topography of the several districts of the kingdom. No one could tell how far it might tend towards the elucidation of much that was now mysterious in the genesis of disease, or to the explanation of variations in their character. By its aid, some definite conclusions might be arrived at as to the effects of altitude, geological formation, direction of winds, proximity to the sea, the “lay” of the land, the dryness or humidity of the air, and other influences which in their totality constituted climate, upon diseases generally, and on epidemics specially. There was, without doubt, a certain range of variability

compatible with the preservation of health, but the accommodating powers of the system were limited, and it would be a great gain if by united efforts something like definite knowledge of such limits could be approached, so as to be able to predicate of a given locality that it would be favourable or inimical to health—that it would mitigate or intensify certain forms of disease. Geological formation had also its influence, by no means inconsiderable, on health and disease, not merely in so far as it might facilitate drainage, etc.; its more immediate effects would depend upon the character of the strata of any given locality, and on the water-supply thence derived. The full importance of water as a modifying element of climatic influences, and as a powerful agent ever present and participating in all physiological action and in every pathological change, was not by any means yet appreciated. He was speaking of water in its natural state, and free from those pollutions which were unhappily common. The members were familiar with some of the effects due to water *per se*, such as the prevalence of stone in certain districts and of goitre in others; but there were many other not so strongly pronounced manifestations of which they were entirely ignorant, or possessed but a vague and uncertain knowledge.

He next spoke of another matter requiring investigation, viz., the facility with which certain water not charged with lime-salts acted upon metals, acquiring thereby highly deleterious properties through passing through lead pipes: a danger not yet fully recognised as a source of disease, but which, either slowly and insidiously, or more rapidly, effected its poisonous work. Inquiry in regard to this matter was still more necessary in the present day from the circumstance, that from some cause, probably from a difference in the mode of manufacture, the action of the water on the lead was far more energetic than in former periods. Then, there was the prevalent use of copper vessels for culinary purposes, the baneful effects of which had been witnessed by himself in not a few instances. Other metals had their own peculiar dangers, and a new element in the genesis and modification of disease had been recently introduced with the extensive use of galvanised iron for the conveyance and storage of water in certain districts, a train of evil-marked symptoms ensuing upon the daily use of water thus contaminated.

Having at length dwelt upon the great gain which would come to medical science if minute and remote causes of disease were traced out by the machinery he had indicated, he referred to the action of stimulants as a subject deserving of consideration, with a view to the acquisition of more definite knowledge upon it. The diversity of opinion that obtained in reference to the medicinal and dietetic use of these, and the discrepancy of practice that prevailed, were greatly to be deplored, inasmuch as they imparted to the medical art a gratuitous measure of uncertainty, and detracted from its scientific pretensions. A wide latitude of opinion might be expected to prevail, but it ought not to be so wide as to embrace views so conflicting and irreconcilable that their existence would seem to indicate that a blind empiricism rather than a rational method was the guide of their practice. He referred to the investigations of Professor Parkes and others, as adding much to the elucidation of this subject.

In conclusion, he said if the collective efforts of the Association could be from time to time concentrated on subjects of inquiry similar to those he had mentioned, under some well devised methods of observation, they might well hope for the elucidation of much that was now vague and uncertain. The supplementary reports of the Privy Council and Local Government Board just issued demanded the careful perusal of every member of their profession, as well as of every thoughtful and humane citizen, for they revealed facts at which humanity stood aghast and decency was put to open shame. Their chief burden was the production of diseases by filth, and Mr. Simon said that the deaths in each year registered in this country (now about half a million a year) were fully 125,000 more numerous than they would be if existing knowledge of the chief causes of diseases affecting masses of population were reasonably well applied throughout England, this being the conviction of persons who had studied the subject. And with such terrible power did these preventable causes of disease in certain districts impress their fatal influence on infant life, that Mr. Simon had felt it to be consistent with truth to apply to such districts the epithet "Herodian"—a term expressive of the sacrifice of the weak, the helpless, and the innocent. "Put not your trust in princes", sang David in olden times, and to this

injunction, as regarded sanitary measures, they might now add, and still less in Governments, struck with apathy and palsied with indifference, who stood feebly tottering in the presence of "vested interests", and the "liberty of the subject", piously ejaculating, with averted eyes and uplifted hands, "Sanitas sanitatum, omnia sanitas!"

ON THE PRODUCTION OF GLYCOSURIA BY THE EFFECT OF OXYGENATED BLOOD ON THE LIVER.*

By F. W. PAVY, M.D., F.R.S.,

Physician to and Lecturer on Physiology at Guy's Hospital.

THE author referred to a former communication to the Royal Society on "Lesions of the Nervous System producing Diabetes" (*Proceedings of the Royal Society*, vol. x, 1859-60), in which he made known that division of certain parts of the sympathetic system occasioned the presence of sugar in the urine. The results given in that paper showed that there were other means besides Bernard's celebrated experiment of puncturing the floor of the fourth ventricle, by which artificial diabetes could be induced, but they did not explain the reason of the appearance of the sugar, and the author still sought to discover something upon this point. The inquiry was pushed in various directions, but always with a fruitless issue until the summer of 1874. The author for some time past has been led to look to an altered condition of the blood flowing to the liver as likely to prove the most probable cause of the transformation of amyloid substance into sugar, which evidently constitutes the foundation of the artificial diabetes following operations on the nervous system. Schiff is of this view, and (*Journal de l'Anatomie et de la Physiologie*, Paris, 1866) has referred the escape of sugar from the liver, and thence the production of glycosuria, to the development of a ferment in the blood as a result of the hyperemia (not necessarily of the liver) which follows the operations on the nervous system which occasion artificial diabetes; but, although the author has carefully examined this opinion, he cannot obtain evidence of the development of a ferment in the manner asserted. He has further tried the effect of introducing a secretion, viz., saliva, into the circulatory system, which is known to act as an energetic ferment upon the amyloid substance of the liver, and on one occasion he found, from some cause or other, that the urine became, to a moderate extent, saccharine, but in a large number of other experiments the operation was attended with a negative result.

Having so far proceeded without success, it occurred to the author to try the effect of introducing defibrinated arterial blood into the portal system. He was led to experiment in this way from having some time previously observed that when arterial blood only was allowed to flow through the liver, as, for instance, when the portal vein was tied and the hepatic artery left free, sugar escaped from the organ to such an extent as to render the contents of the circulatory system strongly saccharine. This result he had commented upon as being somewhat surprising, and as furnishing evidence standing in opposition to Bernard's glycolytic theory. He had not succeeded by the operation in producing glycosuria, because, as it appeared to him, no urine was secreted, owing to the ligation of the portal vein leading to such a diversion of blood from the general circulation by the accumulation occurring in the portal system, that the flow through the kidney was too slight to allow of it. He had endeavoured to overcome this obstacle by connecting, through the medium of a cannula, the portal with the right renal vein after ligaturing the corresponding renal artery. If the experiment had succeeded, the liver would have been left with its arterial supply, but the portal stream would have been diverted and made to reach the inferior cava without traversing the hepatic vessels.

As regards the operation, this the author found he could accomplish, but each time he performed the experiment the object he had in view was frustrated by the cannula becoming quickly filled with a plug of

* Abstract of a paper read at the Royal Society, June 17th, 1875.

blood-clot. It was whilst under this difficulty that the thought of collecting blood from an artery, defibrinating it, and then introducing it into the portal system, occurred to him. He had considered it possible that some slight effect might be perceptible, but had not anticipated the strongly marked result which is producible. The amount of blood used has been from ten to eighteen fluid ounces. After the production of anæsthesia by chloroform, the blood was collected from the carotid artery, stirred in order to defibrinate it, strained, and then very slowly injected into a branch of the mesenteric vein. In one experiment, where half an hour had been employed in making the injection, the urine at the completion of the operation contained a notable amount of sugar, and half an hour later showed by analysis the presence of fifteen grains to the fluid ounce. In a second, the urine contained ten, and in a third fourteen grains to the fluid ounce when collected three quarters of an hour after the operation. The experiments were performed upon dogs, and in each case it had been ascertained that the urine was devoid of sugar before the operation.

Having noticed the effect which have been described from the injection of oxygenated blood into the portal system, it became necessary to ascertain positively that it was attributable to the oxygenated condition of the blood, and not to any other cause. To decide this point, an appeal to the counterpart experiment was made. Defibrinated venous instead of arterial blood was injected into a branch of the mesenteric vein, and upon each occasion where such an operation has been performed a negative result has been obtained.

With the evidence thus furnished, the conclusion may be warrantably drawn, that oxygenated blood in some manner influences the liver so as to lead to the production of glycosuria. It may be inferred that, contrary to the effect of venous blood, it promotes the transformation of amyloid substance into sugar. The suggestion naturally occurs, that what has been stated above affords an explanation of the glycosuria occurring after Bernard's puncture of the fourth ventricle and the various lesions of the sympathetic. Without any new agent being called in, sufficient is presented in the state of the blood to account for the production of sugar that occurs. By a vaso-motor paralysis affecting the vessels of the chylipoietic viscera, the blood will reach the portal system without having become dearterialised in its natural way, and in this state it has been shown by the experiments narrated to possess the property of acting within the liver in such a manner as to determine the production of glycosuria.

STATISTICS OF FEVER, ENDING IN RECOVERY AND IN DEATH, OCCURRING IN TWO THOUSAND CONSECUTIVE CASES OF LABOUR.*

By I. HARRINSON, F.R.C.S.,
Fellow of the Obstetrical Society of London.

IN making my contribution to the now all-discussed subject of puerperal fever, I propose to do so from, as far as possible, a practical point of view; to follow the example so admirably set on the introduction of the subject at our last meeting. By practical, I mean as the cases occurred in practice, with all their, it may be, obscurity of origin, irregularity of progress, and, in some cases, unlooked for terminations. I shall not attempt to make things fit where there was no fitness; much less shall I draw a line, hard and fast, in their causes, symptoms, pathology or treatment. I shall give the cases as they were written at the time of their occurrence, with the remarks, if any, appended at the time, and draw inferences from them fairly apparent to you and to me. It cannot be expected that the earlier cases would be examined as closely and with the same light as the latter ones, but, as far as they go, they may be taken as truthful representations.

I need not insist in this place on the normal abnormality of a puerperal woman, specially on her system teeming with the effete products of an involuting uterus and the waste of parturient muscular effort, oppressed with the diverted stream of foetal nutrition, and charged with the detritus of an obsolete circulation, to which kidney implication may be added; nor will I insist on her susceptibilities, increased as they must ever be by the accidents of hæmorrhage, unhealthy surroundings, and mental conditions. It is a state *sui generis*, and only has a parallel, as Dr. Ord remarked to me a few days ago, in a system saturated with the material of gout. It is a state which renders her specially vulnerable to toxæmic impressions.

A good illustration of toxic susceptibility, on a grand scale, is afforded

* Read before the Pathological Society of Reading.

at the present time by our new Pacific acquisition. There, the virgin blood of the Fijians, unacclimatised to zymotic influences, unprotected by previous attacks, and unprepared for any, is at once disordered by the invasion of the weakest of European foes—that of measles—which revels in its freedom from antagonism, and now is numbering its victims by the thousand.

I will take it for granted that puerperal fever is admitted to be a toxæmia, the septinous matter being introduced by contagion (contact) or by infection (any and every other mode of introduction). It is possible that this septinous material may be inoculated before labour; and it is pretty certain that infection, as of scarlatina or erysipelas, may be received at an indefinite time during pregnancy, and only develop itself after delivery.

I will not attempt to draw a line between the access, progress, terminations, lesions, etc., of the specific poisons, as scarlatina, erysipelas, and those induced by animal matter, fresh as after a *post mortem* examination, or more or less putrid, as from a dissecting-room, though I believe it is generally admitted that the fresher the subject greater the danger; or those arising from a bit of retained placenta, or a non-expelled clot; between differences in kind and differences in degree.

Undoubtedly there are differences, and each cause produces a different series of effects, which only require to be carefully classified to establish a differential diagnosis. This is the work yet to be done. It is possible, also, that a practitioner, having met with a number of similar cases dependent on the same cause or causes, as in one hospital or locality, might be led to believe that there was one special puerperal fever.

It is proved by the experiments of Dr. Richardson that septinous poisons may be diluted with water to a given extent, and yet remain active up to an extreme of dilution. This fact warns us how the smallest quantity of morbid matter may inoculate a puerperal woman. He proves, also, that the intensity of the poisonous matter is increased in the most marked degree, and in a manner that seems to defy computation, with the transmission of the poison through fresh series of animals. This fact explains why, when a practitioner has a succession of unfortunate cases, particularly if he redouble his attentions to each, the last cases may be and are the worst.

It is reasonable to suppose that the risk both of contagion and of infection will be greater in some cases than in others, in the specific than in the non-specific; for example, in those arising from the inoculation of erysipelas than in that produced by the mere non-expulsion of a clot.

"It appears to us", says the *Lancet*, "that the history of puerperal fever proves that the disease can be communicated without contact in some cases, and by contact in all. It is not essential that the disease should be taken from one patient to the other; the original contamination of the fingers may give rise to the disease in a series of consecutive cases. I cannot decide how, when a septinous material is inoculated, the effects ensue; whether directly or whether by first inducing inflammation, from the product of which the virus is derived."

I may here state that to the more immediate effects of the introduction of septinous matter, either by contagion or infection, I limit the term septicæmia. Pyæmia is a secondary, or rather a tertiary, state, the product of phlebitis—one of the sequelæ of septicæmia. Blocking of the arteries—pulmonary, cerebral—by clots, local and migratory, must also be included among the dependencies of poisoned blood.

It is not easy to determine whether the dire effects of septinous poisons, seen in some instances, be dependent on the intensity of the poison, on the quantity introduced, or on the susceptibility of the individual to poison or to shock. Mr. Davis related, a few weeks ago, the case of a woman who died in half an hour from the sting of a hornet. It is well known what a very small amount of hæmorrhage from the uterus proves fatal in some cases. The greater protective power of four vaccine vesicles over one, demonstrates that quantity has some influence; some people catch everything; others take nothing. Practically, identity of cause does not produce uniformity of effect. Bear in mind Mr. Jeston's cases. A young woman nursed her father with erysipelas. She was seven months advanced in pregnancy. Two of her children had erysipelas, and, lastly, she was seized. Premature labour came on; puerperal fever supervened, and death occurred in seven days. The nurse who attended this woman was immediately afterwards seized with acute rheumatism and pericarditis, and died in seven days.

Among the things to be remembered in cases of puerperal fever are, that, though the origin may be erysipelas or scarlatina, it does not follow there should be the ordinary expression of either on the patient, nor does it follow that either the practitioner or the nurse introduced it. The patient may have been exposed unconsciously or recklessly to the poison of either, which, during her pregnancy, may have remained in a state of quiescence. A curious question arises, whether a woman in this state may not poison the fingers of the medical attendant at

her confinement, so that he unwittingly may convey the contagion to another woman. I shall have to enumerate cases affording some ground for such a supposition.

It will, I think, be admitted that the nurse must, if frequently unclean, have the opportunity of conveying contagion more frequently than the medical attendant. Let it be remembered that the examinations of the medical man may be few, that his fingers will be smeared with some unctuous sheathing, that the secretions of the woman are copious and protective, and that the process of labour rouses her to a pitch of excitement opposed to the imbibition of septic contamination. After delivery, the state is altered; the frequent ablutions, although with antiseptic fluids, give ample means for its introduction. For the future, the antecedents of the nurse must in every case of fresh engagement in her duties be rigidly supervised. It is evident that lacerations, ulcerations, etc., of the woman's structures may favour the inoculation, and that bruising may even furnish a supply of septic material.

The statistics will include cases of extreme irritation, originating in the undue retention of a small portion of placenta. Clots may produce the same effects. In ordinary cases, such occurrences should rarely happen. I have no instance of septicæmia in cases of abortion, in some of which the expelled ovum smells. I am aware of the lesser development theory, but I have much faith in the ability of Nature to accomplish her own processes without disaster.

What, then, is puerperal fever? I reply, fever occurring in a woman recently confined. I say simply fever; neither a fever, nor the fever. The causes are numerous, the effects various; all are referable, however, to one condition—that of poisoned blood. The first impression, it is true, may be on the nervous system, as from fright, etc.; but the consequences are disturbance of function and vitiation of product. We shall see this more clearly when we come to compare puerperal fever with the effects of cold. In asking what puerperal fever is, I exclude, of course, the state of reaction from the labour, the physiological condition, the tumult of the novel situation, the secretion of milk, and the troubles of lactation.

The fever in mammary abscess sometimes runs high in the earlier periods after labour, being generally, I believe, a local pyæmia, extending from a cracked nipple; in the later, a deposition from a more general affection. The same rule applies to pelvic complications.

It must next be asked, What are the symptoms of puerperal fever? I will answer this practical question in the words of an able article in the *Lancet* of January 30th, 1875.

"We are not going to be drawn into any fine definitions of puerperal fever. The state we have in view is that of a woman recently confined, who, after a shivering, or something that represents a shivering, has a quick pulse. Temperature 101—105 deg.; more or less pain in the uterine region, suppression of milk, distention of abdomen. Lochia deficient or absent; more or less wandering"; and, I would add, an expression of distress.

One state must be here noticed, which has been most unaccountably ignored by—as far as I have seen—all speakers in the recent discussion. I refer to "intestinal irritation", as delineated by Dr. Marshall Hall. In it we get all the symptoms above named, with one important exception: the expression is not altered; it is good.

I cannot now discuss that important point how loaded bowels block the chief avenue of that eliminative process, so imperatively needful in the puerperal woman, and in what a rapid ratio, if neglected, mischief would accumulate. On many grounds, I must here do homage to that traditional dose, on the third day, of castor-oil, or something of the kind. Intestinal irritation is by far the most frequent after-illness of puerperal women.

"The truest and safest view we can take of such symptoms is to regard them as indications of septicæmia, arising from the introduction into the blood of materials more or less putrid, or capable of giving rise to changes in the direction of putrescence and to low forms of inflammation."

Before we say anything about the treatment of these symptoms, I propose to show how frequently they have occurred, their causation (as far as ascertainable), and whether ending in recovery or in death, in two thousand consecutive cases of labour attended by myself.

After-illness, of the poisoned class, in the first 100 cases. Intestinal irritation, 14 cases; uterine phlebitis, 1; phlegmasia dolens, 3; irritation from morbid infection, 1; mania, 1; variola, 1; rheumatic fever, 1. This class includes only the graver manifestations of mischief.

Some of the cases of intestinal irritation were very severe; often, doubtless, confounded with, and not readily distinguished from, cases of puerperal fever. The morbid infection arose in this way. While making a *post mortem* examination, I was called to a labour. Intense irritation followed, and she narrowly escaped with her life. Only one case of uterine cellulitis is reported.

Death occurred in six cases. 1. Abdominal inflammation (epidemic); died in four days. 2. Phlebitis from scarlatina. I was attending several cases of malignant scarlatina, and had opened an abscess in a fatal case immediately before seeing the patient, and she required the catheter till her death. She died in six days. 3. Puerperal inflammation; premature labour; dead child; died in eight days. 4. Erysipelas, by contagion. Before and during the time of my attendance on this case, I was frequently visiting a lady residing close by, who had erysipelas and retention of urine, requiring the frequent use of the catheter. Died in six days. 5. Scarlatina, or the rash of septicæmia. Died in six days. This case will be named again presently. 6. Fright and exposure to cold, followed by fever. The nurse fell down drunk, and was reported dead. Died in eleven days.

These are copied from statistics of 1,000 cases read before this Society sixteen years ago.

After-illness in second 1,000 cases. 1. On the tenth day, the patient had a rigor, followed by fever; and, on the fourteenth day, a bit of placenta came away, with immediate relief. 2. The patient had diarrhoea three weeks before delivery. For three days before labour, the pulse was more than 100. Fever followed. No probable cause. After a few days, the nurse was seized with erysipelas. This was case No. 70 in 1857. 3. No. 75. Slight phlegmasia dolens. 4. No. 76. Pulse above 100, without any discoverable cause. These three cases were the only ones of sequence and seeming consequence, and will be mentioned again. 5. Forceps. At the end of three weeks, had rigors, followed by slight pleurisy and phlegmasia dolens. 6. Severe intestinal irritation. The outcome of *ante partum* neglect. 7. Rigor; fever; herpes oris. In thirty days, a piece of placenta came away. 8. Swelling of calf of left leg during the third week. 9. Pain in calves of both legs during the third week. 10. Craniotomy; rigors; herpes oris; intestinal irritation. 11. Forceps; mental distress; rigors; intense fever for a little while.

I must give a little detail of this last case.

A lady, aged 28; first child; powerless labour. The forceps was used. She was a stranger, and begged I would not ask her name, nor make any inquiries about her. On the evening of the fourth day, she had a rigor, followed by high fever. On the fifth day, every symptom was so intensely aggravated, that the case seemed hopeless. As a last resource, late at night, I placed a box containing iodine under her nose, and requested her to breathe it during the whole night. She followed the direction with desperate obedience; and, next morning, I had the satisfaction to find every symptom marvellously ameliorated. She rapidly recovered. The note appended (1867) is, "to the iodine, I think, is to be given the credit of being the chief means of cure". I think so still. The effects of iodine in these and kindred cases are not yet all told.

Deaths in second 1,000 cases. 1. Mrs. S., aged 29, in labour with her third child, went on well to the end of the third week, when she was exposed to cold, followed by rigor and so-called acute rheumatism. At the end of a fortnight, she was quite free from pain, and up and about; when, one morning, she was found dead in her bed. This case was clearly arterial, from poisoned blood. 2. Mrs. C., aged 35, was confined with her first child. All was well for three weeks. During the fourth week, she had diarrhoea. On the day month from her delivery, after exposure to cold, she had rigors, fever, pleuropneumonia, and died in five days. This case was clearly venous: a pyæmia not to be distinguished from that arising from, e.g., a case of otitis. 3. Mrs. A., aged 30, was confined with her fourth child. She had diarrhoea during her whole pregnancy; slight fever; phlegmasia dolens. She died from diarrhoea—probably through ulceration of the bowels—at the end of two months. 4. Mrs. S., aged 28; first child. Craniotomy; hydrocephalus; rigors; fever. She had pleasant delirium, and died on the tenth day. This case was unfortunate in all its surroundings, nursing, etc. 5. Mrs. T., aged 22; third child; had phlegmasia of one leg, and died in five weeks. In this case, there was no rigor, little fever, some nausea, occasional vomiting, but no prominent symptom, except increasing weakness. The tenderness and swelling of one leg told, however, of phlebitis and pyæmia. Another woman died after confinement, in the same street, the week before.

What do these cases show? A variety of causes and a variety of effects. Where the history is clear, they show that the main means of propagation was by contact, and not by infection. I have no unequivocal case of infection. I have no cases of sequence and consequence, except after-illnesses, marked No. 70, 75, and 76. No. 70 had fever without any ascertainable cause. She had diarrhoea for three weeks, and a pulse above 100 for three days before delivery. Presently the nurse was seized with erysipelas. No. 75 had slight phlegmasia; and No. 76 a pulse above 100, without any discoverable mischief. My suspicion is—it can only be a suspicion—that No. 70 at, and for some

time before, delivery, was charged with the material of erysipelas; that though there was no external expression of the disease, she by contagion, and probably by infection, gave it to the nurse, and that she poisoned my finger at the time of her labour, and that I communicated it—in a slight degree, it is true—to Nos. 75 and 76. The catheter was a ready method of communicating mischief in two cases.

The poisons of scarlatina and erysipelas did not produce those diseases as such, but virulent septicæmia. I have no case of the specific rash of scarlatina, doubtfully excepting one—that of a lady who, during pregnancy, had been visiting cases of scarlatina, and who had a rash like scarlatina on the third day after delivery, and who died on the sixth day. I was not then acquainted with the efflorescence seen in some cases of septicæmia, and I now hesitate to which class to refer it.

The cases show that septicæmia sometimes follows forceps deliveries. This is no more than we might fairly expect on surgical grounds. The contingency applies to all obstetric operations. It is satisfactory, however, to find only one death from fever after instrumental interference: that of craniotomy for hydrocephalus.

It will be observed that there is a marked difference in the duration of the cases fatal by septicæmia and pyæmia. In the former, a few days; in the latter, all died in five weeks from the time of delivery.

After thus briefly telling what the cases show, the next important lesson is, What do they teach? They teach this: that, in some instances, mischief, even unto death, arose from preventable causes, viz., intestinal irritation, in default of previous attention, from the hand tainted with the virus of a *post mortem* examination, from the fingers poisoned with the matter of a scarlatinous abscess, or reeking with the venom of malignant erysipelas. These lethiferous causes, and all such like, may and must be avoided, if we are for the future to practise our profession in peace, quietness, and safety. Endemic influences must be counteracted as well as may be, operative measures avoided when practicable; and the whole physiology of labour and the pathology of its sequences must be carefully observed and ministered to with patience, with a definite aim, and with clean fingers.

I have used all the preventive means I knew—habilitary, detergent, and antiseptic. When scarlatina has broken out in a family where the lady was pregnant, I have recommended her to go away to be confined, as we all know with what pertinacity the poison of scarlatina sticks to a house or to a room. I have avoided, as far as possible, attending cases containing the elements of septinous contamination, and I have never been obliged to cease from practice, even for a limited period.

Before just running over the principles of treatment, it may be useful to compare puerperal fever, the unity of its cause (some septinous material) and the non-uniformity of its results, with some other common agent, and the diversity of its effects. Let us take one with which we are just now familiar: that of the cold of last winter.

We have nothing to do now with the annihilation of function produced by extreme cold, as of a flock of sheep being found dead in the morning after premature shearing, or of a rabbit denuded of its fur. A coat of varnish has nothing to do with the event; they are frozen to death. What I refer to are those lesser perturbations of the system, spoiled functions, with all their noxious entail, not consequent on a cold, but dependent on the cold.

What were they? Affections of every region of the body, from the head to the feet; convulsions, coma, inflammation of tonsils, pharynx, larynx, trachea, bronchi (rarely of smaller tubes), lungs, pleura, stomach, rheumatic fever (so-called), and neuralgias everywhere; as usual, extremes of exposure and extremes of susceptibility must be taken into account.

Observing these every day occurrences, how can the effects of poison introduced into, or generated in, a puerperal woman, be expected to be uniform?

I should like to know how members treated all these various affections during last winter. If a remedy were sought for each organ affected, your therapeutic resources must have been pretty well exercised. For my part, I treated them all alike, on general principles.

So in puerperal fever, turpentine, internally and externally; breathing an iodised atmosphere; opium and quinine, with, of course, proper food, air, and stimulants, etc., do best what can be done, on the same general principles; modified, of course, by the cause.

Quinine, according to Dr. Richardson, counteracts the different poisons in their power of liberating oxygen, his theory of their bane.

Salicine is allied to quinine, and is given as its substitute. Salicine is obtained (analytically) from the willow tribe, the meadow sweet, and winter green.

Salicylic acid is found to be the most effectual disinfectant. It can be made, also, and commercially it is so made—synthetically—by the action of carbonic acid on carbolic acid.

This alliance between quinine, salicine, salicylic acid, and carbolic acid, strikes me as at least curious, and possibly may have a more intimate relation with the success of these substances in the treatment of puerperal fever and such like diseases, than we are at present aware of.

INTRATHORACIC TUMOURS.*

By J. W. F. SMITH-SHAND, M.D.,
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I.—PRIMARY CANCER OF THE LUNGS. (Concluded from page 845 of last volume.)

CASE II.—In the next case I shall bring before you, I have no positive proof to adduce in support of my diagnosis of primary cancer of the lung, although I think I have strong presumptive evidence in its favour. George McKenzie, aged 28, a coachman, was admitted into the Royal Infirmary on July 1st, 1872. The patient stated that he enjoyed good health till last winter, when he was exposed to cold and wet, but he was not confined to the house in consequence. He noticed after this, however, that his breathing was short after any exertion, and that he had a short dry cough. He never had any pain in the chest, and he could lie on either side in bed. About a fortnight ago, his cough became much more troublesome, and he had a white frothy expectoration. There was no hæmoptysis.

Condition on Admission.—The patient had a puffy bloated appearance, with lividity of lips and cheeks, and lay in bed with his head and shoulders raised. There was slight fulness of the jugular veins. There was deficient movement of the left chest, with dullness on percussion in the lower half, and absence of breath-sound and fremitus. A subtympic note was heard in the left infraclavicular region. There was puerile breathing on the right side. The heart-sounds were best heard to the right of the sternum. Pulse irregular, 125 per minute. Bowels costive. The urine was scanty, of specific gravity 1030; contained no albumen. Temperature 103 deg.—July 6th. There was dullness over the whole left chest, with absence of breath-sounds, except on deep inspiration, when distant feeble breathing was heard. The left hand and arm were œdematous.—July 8th. The nurse stated that he had been confused and delirious the previous night. The œdema of the arm had increased, and there was marked swelling of the left side of the face and neck. On inspection, the left side of the chest was smaller than the right, and the infraclavicular region was flattened. The heart-sounds were heard more to the right of the sternum. There was no change in the other physical signs. He expressed himself as feeling easier. The left pupil was slightly more dilated than the right. His voice was rather husky. He said that of late his voice had altered in character, and had not been so clear as formerly. About 3 P.M., he fell into a heavy sleep, from which he could with difficulty be roused. The stupor gradually became more profound, and he died at 6 P.M. The last two days, his urine was copious, as he passed three pints in twenty-four hours.

Strong efforts were made to obtain a *post mortem* examination, but they failed. All that I could venture to do was to insert a trocar into the chest in the axilla. Considerable resistance was offered to the passage of the trocar, as if it were passing through some dense firm substance, and when the trocar was withdrawn, nothing followed, except two or three drops of bloody serum.

REMARKS.—The existence during life of well marked inward pressure signs on the left innominate vein in this case, and the result of the exploratory examination after death, conclusively prove that the dullness on percussion was due to a solid tumour, and not to fluid. It is a clinical law laid down by Walshe, that evidences of pressure on internal parts, as the aorta, arteries, veins, nerves, trachea, bronchi, œsophagus, or thoracic duct, are solely due to tumour, whatever its nature may be, and that neither hydrothorax, pneumothorax, or empyema can produce them. There can be little doubt also that the obstruction to the venous circulation was the cause of death, by inducing stupor and cerebral congestion. The only point to decide is, whether the tumour was aneurismal or cancerous. My reasons for fixing on the latter were the absence of pain and impulse, and the evidence of slight displacement of the heart to the right side.

In this case, the left chest was flattened and smaller than the right, while in Mackie it was enlarged, as judged by the eye. Dr. Walshe, in his last (fourth) edition of *Diseases of the Lungs*, states that, when there is simple cancerous infiltration associated with limited tuberos formation, the affected side is either retracted or depressed, but that, when the cancer of the lung is mainly tuberos, the diseased side is generally

* Read before the Aberdeen, Banff, and Kincardine Branch.

but not uniformly enlarged. In Mackie's case, I unfortunately did not measure the two sides of the chest; but my decided impression was, that the left was considerably larger than the right. I, therefore, wrote to Dr. Walshe, asking him whether he did not think it likely that an infiltrated pulmonar cancer weighing close upon five pounds would produce enlargement of the affected side. In the reply with which he kindly favoured me, Dr. Walshe said that he had never seen a case of primary infiltrated cancer where the pleura was demonstrably free from the disease, in which the effect was not a contracting one, if the dimensions of the side were affected at all. But he said he could *a priori* conceive that, in a case of rapid quasi-general infiltration with encephaloid disease, enlargement of the lung and slight expansion or bulging of the side might take place. He shows, in his work, that, in acute pneumonia during the stage of red hepatisation, enlargement of the side may occur; and I have little doubt that, in rapid cancerous infiltration going on to any extent, the same result would ensue. From Dr. Walshe's extensive experience and opportunities of observation, great weight must be attached to any statement of his on the subject, and it may doubtless be the case, as he says, that, in simple cancerous infiltration, the general effect is a contracting one; still it will be well to bear in mind that it is quite possible that, in certain stages of the disease, or in cases of rapid growth, an enlargement of the side may be produced. And Aviator, as quoted by Cockle, is of opinion that, in the early stage of cancer, there is a slight though decided augmentation in size of one side of the chest.

Cancer of the lungs is a disease of adult life, and is said to occur much more frequently in the right than in the left lung, and amongst males than females. Out of 39 cases collected by Dr. Risdon Bennett, however, 19 were females and 20 males; the left lung was involved in 14, and the right in 9, both lungs being affected in the remainder, or the disease was confined chiefly to the mediastinum.

Of the two forms, the medullary and scirrhous, the first is by far the most common. It may be met with in the form of small granular masses, like miliary tubercles, or, which is more common, in larger masses isolated from each other, with healthy lung-tissue intervening. It was formerly supposed that cancer may be infiltrated into the air-cells, the lung-tissue being entirely converted into cancerous matter. This form, Rokitansky says, is rare, and when it occurs, it is the result of a pneumonic process. This view, however, of the conversion of an infiltration into cancer, says Niemeyer, has been abandoned; and it is now believed that, in the origin of infiltrated cancer, after the transformation into cancer-cells of a few of the connective tissue-cells of the matrix of the lung, this conversion is propagated into the neighbouring connective tissue and into the connective tissue-cells of the adjacent alveoli. The air-cells may be filled, but this is not as the result of a true exudation.

No more need be said at the present time on the histology of cancer while the controversy rages between Virchow, Forster, and others, who believe that the connective-tissue corpuscles form the matrix from which cancer springs; and Thiersch and his supporters, who hold that cancer can only originate from epithelial structures. And, as Rindfleisch remarks, the histology of cancer of the lung, more especially from the great rarity of the disease, is still in its infancy.

II.—ANEURISM.

The second portion of my paper will be mainly devoted to the consideration of some of the physical signs and symptoms produced by this aneurism, which I now show you. The notes of the case are as follows. John Jaffray, aged 43, seaman, and a native of Aberdeen, was admitted into the Royal Infirmary on July 22nd, 1871.

Previous History.—The patient had been in the way of coming to hospital for the last four years to be treated for secondary syphilis (chiefly periostitis), which was always speedily cured by five-grain doses of iodide of potassium, and he had been able to follow his employment till March of the present year. He stated that he had been subject to a cough for a good many years; that for nearly a year he had had difficulty in swallowing, especially liquids; and that, in January 1871, his cough being then bad, he became affected with hoarseness and loss of voice. In March of the same year, he was a month in hospital with periostitis of the right tibia, which was cured by treatment; but, after this, he was not able to work, owing to shortness of breathing and pain in the breast. The pain in the breast becoming worse was the cause of his again entering the hospital at the present time.

Present Condition.—July 23rd. The patient, who was a dark-haired, brown complexioned man, had lost flesh considerably since he was in hospital in spring. He complained severely of a dragging pain in the left hypochondriac region, and of shortness of breathing, and he lay habitually on his right side. On inspection, the chest was well formed, and

nothing abnormal could be detected in the heart or lungs by auscultation and percussion. The sputum was frothy, slightly mucopurulent. The right pulse was weaker than the left. The urine was natural. His digestion was bad; the bowels costive. There were no inequalities of the pupils. The sight was dim, except for distant objects. He was ordered iodide of potassium, steak diet, and stimulants.—August 25th. The patient had not been examined particularly for some time till today, when the following points were ascertained. On inspection, there were flattening and diminished chest-movement in the left infraclavicular region, and slight bulging in the left hypochondriac region. The heart's apex beat in the fourth intercostal space, immediately below and to the inner side of the left nipple. The impulse was visible in the left mammary and infraclavicular regions, and there was slight pulsation at the sternal notch. On percussion, there was dullness over the left clavicle and infraclavicular region anteriorly. The percussion-note was clear, almost tympanic, in the left hypochondriac region. There was dullness over the left back. The area of hepatic dullness was diminished. On auscultation, the breathing on the right side was harsh generally; on the left side anteriorly, it was faint, with slight blowing expiration in the left infraclavicular, mammary, and axillary regions. There was absence of breath-sounds in the hypochondriac region. Posteriorly, the breathing was faint on the left side with blowing expiration in the supraspinous region. The heart-sounds were weak but normal.—August 31st. The patient coughed up two or three mouthful of dark blood. The pain in the chest and the dysphagia had gradually gone. Slight hæmoptysis occurred now and again, and the sputum was on one occasion examined microscopically, but no other cells were seen than the normal blood-corpuscles.—After September 1st, no notes of the case were kept, as I was absent from home for a few weeks; but there was little change in the patient, except that he became gradually weaker, and that the flattening of the left side of the chest became more marked.—On October 4th, profuse hæmoptysis occurred, and he died suddenly that day.

Post Mortem Examination.—October 5th. (Reported by Dr. Rodger, pathologist.) The heart was adherent to the pericardium. Its valves and cavities were healthy. It was much congested on the right side, as were also the veins leading to it. The right lung was congested and œdematous; the left lung was closely adherent to the chest-wall, and compressed. At the root of the neck, the whole of the arch of the aorta was aneurismal from in front of the innominate artery to its posterior termination—the left bronchus and the left recurrent laryngeal nerve being considerably compressed by the enlargement. The thoracic aorta was more or less dilated throughout its whole extent; and, immediately above the diaphragm, there was another smaller aneurism projecting to the left side, but there was no excavation of the bodies of the vertebrae from the aneurism, and neither of them had ruptured—the immediate cause of death being hæmoptysis from congestion of the lung, and suffocation. The liver externally was covered with patches and bands of tough lymph from previous perihepatitis, and the liver itself was very much distorted and deformed in its lobulation; the gall-bladder being placed at the extreme right margin of the organ, the right lobe being almost wanting, and the quadrate, Spiegelian, and left lobes very irregularly and enormously enlarged. The spleen was normal. The kidneys had the tubules of the cortical substance much loaded with inflammatory desquamative deposit, but not much degenerated.

REMARKS.—I must admit that this case puzzled me a good deal, and that, although I was divided in opinion as to its being a case of aneurism or of phthisis, my impression latterly was strongly in favour of its being cirrhosis or syphiloma of the lung, with a syphilitic affection of the larynx. Doubtless the severe pain and dyspnoea, the loss of voice and dysphagia, together with the impulse and pulsation in the left mammary and infraclavicular regions and at the sternal notch—slight though they were—the hæmoptysis and the inequality of the two radial pulses, seemed to point very clearly to aneurism. At the same time, it has to be remembered, that there was a history of syphilis and of long-standing cough; that the patient soon afterwards, being unable to work, began to lose flesh; and that shortly after this there was evidence of flattening and diminished chest-movement on the left side, with dullness on percussion.

It has also to be noted, that the apex-beat was higher than normal, and that this fact, as also the impulse in the upper portion of the left chest, and the tympanic note in the left hypochondrium, was explained by the contraction of the lung, and displacement of the heart and stomach, which are seen in cases of phthisis, and notably in cirrhosis. There was no heaving character about the impulse, and the seat of the pain referred to the left hypochondrium was unusual for aneurism, and may have been produced by peristalsis, or by the second aneurism above the diaphragm. It was most probably produced by

the latter cause, and the disappearance of the pain and dysphagia may have depended upon a change in the direction of the protruding forces. As there is said to be a connection both between syphilis and aneurism, and syphilis and cirrhosis, the previous history in this case could be of no decided value in the diagnosis. Hemoptysis as a symptom is common to phthisis, cancer, aneurism, and cirrhosis; but, in the latter disease, it appears to be more rare than in the other examples.

It may be briefly stated in conclusion, that, in the differential diagnosis of intrathoracic tumours, the most valuable of all the symptoms seems to me to be *pain*, and that, in doubtful cases, when severe pain is complained of, it is much more likely to be dependent on aneurism than on cancer.

DENTIGEROUS CYST IN THE UPPER JAW.

By A. W. STOCKS, M.R.C.S.,
Surgeon to the Salford Royal Hospital.

R. D., AGED 18, a healthy-looking girl, residing at Morecambe, came under my care for the treatment of a tumour occupying the right cheek, forming a projection into the nose, filling up the canine fossa, projecting outwards under the malar eminence, and encroaching on the mouth. In the latter position, it was found to occupy the space of the right lateral incisor, canine, and first bicuspid teeth, which were wanting. The alveoli corresponding to the former two were found to be dilated (for, although three teeth were absent, yet there were to be found only two alveoli), and the edges of the alveolar plates could be distinctly traced, having projecting through them a soft semifluctuating tumour, on the surface of which ramified numerous large veins. The movement of the upper lip was considerably interfered with. The tumour had existed for about three years. The appearance of the girl's face was peculiarly that produced by a dilatation of the antrum of Highmore. There was not much pain, and the voice was rather nasal. An exploratory puncture through the dilated alveolus by means of a cannula and trocar let out a small quantity of bloody serum. No distinct fluctuation could be made out between the most prominent parts of the swelling and the projection into the mouth.

On November 12th, 1874, the cheek having been raised from the front of the upper maxilla (under chloroform) without any wound of the external skin, the tumour was easily perforated by a gouge, and the opening enlarged by a pair of nibbling forceps sufficiently to admit the finger into the antrum, which was found to contain a clot of blood and some serum, the former being the result, no doubt, of the late exploratory puncture. On passing the finger into the cavity, a hard pointed substance was found projecting from the roof of the antrum, about a quarter of an inch from its posterior wall, and, after a few forcible but vain attempts, a fully developed canine tooth was removed by the forceps. The cavity was filled with lint and the patient sent to bed. Her progress towards recovery was uninterrupted, and, on January 16th, there was only a slightly fistulous orifice at the junction of the lip with the upper jaw. The distortion, which continued as great as before the operation, has been much reduced by pressure obtained by wearing a small India-rubber ball firmly bandaged on the cheek during the night; and the projection into the mouth has shrunk very much; indeed, now there is scarcely any distortion left.

The tooth which was removed from its abnormal position is in all respects a well developed canine (permanent) tooth measuring barely four-fifths of an inch, the crown being exactly three-tenths of an inch long. The fang, however, instead of having a smooth surface similar to that found in most teeth, is surrounded by a firm deposit of bone, giving one the idea that it was not implanted in an ordinary alveolus or socket, but rather ankylous to the bone in which it was found. It appears that, some time ago (how long she could not say), according to the girl's statement, she had her "eye-tooth" on that side removed; that it was a "sucking tooth"; and that the corresponding tooth in her permanent set never appeared. The lateral incisor and first bicuspid teeth were extracted at a much later period, with a view to the cure of the tumour. How the tooth got into the position in which it was found, is very difficult satisfactorily to explain; but it would appear not improbable that, in the extraction of the primary tooth, some damage had been done to the pulp of the secondary tooth, and that the germ had been lifted out of its normal position and carried, so to speak, on the top of a cyst formed by a morbid secretion in the dental sac, through the antrum, and so taken root in the orbital plate of the superior maxilla, where it was found.

The case mentioned in Bryant's *Surgery*, page 279, is somewhat similar to the above, save that in it the tumour was formed by a solid instead of a fluid growth. The engraving on the same page gives very fairly the peculiar external appearances of the above case.

CLINICAL MEMORANDA.

HEMIKINESSES.

IN reply to Dr. Claye Shaw's remarks, I would say that I have not introduced the term hemikinesis for any *one* mobile disorder. In the report from my hospital practice to which Dr. Shaw refers, it is stated that the term is applied to "over-movements of one side of the body, as, for example, hemichorea, hemispasm, etc." I coin this word to facilitate the comparative study of one-sided mobile disorders, and their study in relation to hemiplegia. There are several mobile disorders which are alike, in so far that each of them affects first and most the same muscular region as is paralysed in hemiplegia; they are unlike, in that in each case the muscles suffer differently. There are many varieties of one-sided movements; athetosis is one variety. I did not think the case of my patient was one of athetosis. It is a variety of over-movement which I have been in the habit of calling hemicontracture. Before I publish the case, however, I shall re-read Hammond's description of athetosis, as well as study the papers of Gairdner and Claye Shaw.

I have many times written on the comparative study of one-sided mobile affections in relation to hemiplegia. That this method of investigation is useful, I will adduce Dr. Radcliffe's testimony. In his article on Chorea in the second (not in the first) edition of the second volume of Reynolds's *System of Medicine*, after stating the reasons I have advanced for the localisation of the changes producing chorea in convulsions near to the corpus striatum, he writes: "For most assuredly the difficulties which beset any attempt to localise the choreic lesion in the nerve-centres are not a little simplified by thus insisting upon the clinical relations between hemichorea and hemiplegia as a ground for believing that the region of the corpus striatum is the part affected in both disorders." J. HUGHLINGS JACKSON, M.D.

THE CAUSE OF DEATH AFTER THE INJECTION OF A NÆVUS.

IN Dr. Buchanan's interesting lecture, published in the *BRITISH MEDICAL JOURNAL* of June 26th, mention is made of a case of nœvus of the eyelid treated by the injection of perchloride of iron, and ending fatally.

"A drop of perchloride of iron was introduced, and in two minutes it was dead, just as if shot through the head with a pistol. A particle or portion of the coagulated blood had entered into the ophthalmic vein, and had gone back and got plugged in some part of the venous circulation at the base of the brain or orbit. Congestion or stagnation of the blood had taken place, and the result was fatal."

It would be interesting to know whether the cause of death in this case was determined by *post mortem* examination, as the explanation offered by Dr. Buchanan would otherwise appear somewhat improbable; for, as the calibre of a vein increases with the distance from the capillaries, it is difficult to understand how the plug would become obstructed in its course towards the heart. Supposing, however, that the plugging took place in the orbit, I am still at a loss to conceive how an obstruction of the ophthalmic vein would occasion sudden death. If, on the other hand, the clot became lodged in the cavernous sinus of one side, owing to the free communications existing between the sinuses of the two sides, and the special provisions present in children for the escape of blood from the cranium, it may be doubted whether a fatal result would immediately follow. I have seen cases in which the lateral sinus and internal jugular vein of one side were plugged from extension of inflammation from the ear without causing any brain-symptoms.

It once happened that I was present when a child died suddenly after the injection of a nœvus of its scalp, and the explanation then offered was, that the plug had passed through the right side of the heart and become impacted in some large branch of the pulmonary artery. I should be inclined to think that a similar accident had occurred in the case related by Dr. Buchanan, unless some other cause of death were discovered by *post mortem* examination.

R. CLEMENT LUCAS, B.S., St. Thomas's Street.

TESTIMONIAL.—A complimentary dinner and testimonial were on Friday, June 18th, given by the members of the Bradford Medical Aid Association to Joseph Farrar, Esq., L.R.C.P.Ed., in token of the highly satisfactory manner in which he has for the past two years discharged his duties as medical officer to the Association. Great regret was expressed by several of the speakers at Mr. Farrar's resignation.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION.
SESSION, 1875.

Wednesday, June 23rd.

DR. ACLAND, President, took the Chair at 2 P.M.

Visitation of Examinations.—The Council resolved itself into Committee for the consideration of the reports of the visitors of examinations.

University of Dublin.—The medical examinations of this body were visited and reported on by Dr. Haldane and Mr. Busk.

Dr. PYLE moved, and Dr. ANDREW WOOD seconded:

“That a copy of the report of the visitors of the examinations of the University of Dublin be forwarded to that University, for their consideration and remarks.”

Dr. APJOHN, while expressing his general satisfaction with the report, commented on some portions of the report. The visitors had stated that, by a resolution of the Council of the College founded on the recommendation of the professors, the written answers could not be removed from the custody of the Medical Registrar, nor could extracts be taken from them for publication. It was a mistake to state that this was in consequence of a recommendation of the professors.

Dr. STOKES said that he shared with Dr. Apjohn his pleasure at reading the reports of the visitors. The care, patience, and skill which the visitors showed in the performance of their duty were beyond all praise. There were, however, one or two points in the reports which were not quite accurate. It was stated that the second examination for M.B. might be “regarded as the final one for the highest medical degree granted by the University”. Candidates for the degree of M.D., which was not allowed to be taken till three years after that of M.B., were required to present a thesis or theses, which they were always encouraged to base on original observations; and were liable to be examined on the subjects of the theses. The visitors suggested that the same plan should be followed as in the previous examination, of having as coadjutors examiners who were not teachers in the school. The Regius Professor of Physic, who was associated with the King’s Professor of Medicine in the examinations, was not a teacher. It had been suggested that the time occupied in the *vivâ voce* clinical examinations was too short. His opinion, and he believed that of his colleagues, was that the judgment as to the *mens medica* of the candidates was arrived at by the study of the clearness of the written descriptions of the cases put before the candidates, more than by any number of questions. With regard to the question whether the professorial element should be represented in the examinations, he did not think that the Council would advise that the professors should be confined to teaching alone. Several of the professors in the Examining Board at Trinity College were not teachers of Medicine, or only teachers of collateral sciences; *e. g.*, Dr. Galbraith and Mr. Leslie in Physics, and Dr. David Moore and Mr. Wright in Botany. Mr. Macnamara, who was an examiner in *Materia Medica*, was not a teacher in the school. The total exclusion of the teaching element had been recommended; but this proposal implied want of confidence in the impartiality of the examiners. Great advantage both to medical science, to students and to the teaching bodies, arose from teachers in other schools being called on to assist in the examinations. He was ignorant of any recommendation of the professors regarding the written answers. Permission to inspect these was always liberally granted. At the same time, it was right to exercise restriction as to their publication, which might be injurious to the interests of candidates.

Dr. STORRAR, referring to the statement in the report that, at the previous examination, a candidate might come up in all the five subjects, Physics, Botany, *Materia Medica*, Chemistry, and Descriptive Anatomy, but that few did so, asked if candidates were allowed to present themselves for examination in one subject at each of five separate examinations.

Dr. APJOHN replied that this was the case.

Dr. STORRAR thought the practice very much in favour of superficial knowledge. The advantage of grouping several subjects in one examination was that a more thorough knowledge of them was secured.

Dr. HALDANE said he had sent a telegram to Dr. Haughton, the Medical Registrar, asking whether the professors had made the recommendation referred to respecting the written papers; and that Dr. Haughton had replied that they had done so. There was probably a misconception, but no inaccuracy, as to the fact. He could speak in

the highest terms of the manner in which the clinical examination was conducted; but he thought the time rather too short. No doubt a good idea of the comparative merits of candidates could be formed from an examination of the written papers; but the case was quite different when the object was to determine whether the candidate was qualified to practise.

Dr. APJOHN was glad to hear that there was authority for the statement as to the recommendation by the professors; but he was quite ignorant of it.

Dr. AQUILLA SMITH had no recollection of it. With regard to the alleged shortness of the time allowed, a competent candidate ought to be able to answer the questions within the time. In one case, a candidate, instead of occupying the whole hour, sent in his answers—which were the best of the series—in thirty-five minutes.

Sir DOMINIC CORRIGAN said that there was no similarity in the plan of the reports; and that, if the visitations were continued, it would be necessary to give instructions to the visitors as to the method to be followed.

After some further discussion, in which Sir D. Corrigan, Mr. Macnamara, Mr. Quain, Dr. Storrar, Dr. Humphry, Dr. Apjohn, Dr. Rolleston, Mr. Turner, Sir William Gull, and Dr. Bennett took part, the motion was carried.

University of Durham.—The examinations at this University were reported on by Dr. Storrar and Dr. John Struthers. It was moved by Dr. BENNETT, and seconded by Mr. QUAIN:

“That a copy of the report of the visitors of the examinations of the University of Durham be forwarded to that University, for their consideration and remarks.”

Dr. PYLE said that the University of Durham was one of the first bodies to recognise the importance of examining candidates in practical anatomy, and it had carried out this system for fifteen years. Referring to a case mentioned in the report, in which a candidate deficient in practical chemistry had been allowed to again present himself within a short time for examination in this subject, he said that his answers in anatomy and physiology were good, and those in chemistry fair, and that it would have been a hardship to put him off for a year, as he would have been prevented from offering himself for examination at other boards. The visitors had referred to the conduct of the examinations by the teachers in the school alone. This was quite an exception. This year, Dr. King Chambers was appointed an examiner; and the President of the Council, among others, had in past years performed the duty. The report would receive attention from the authorities of the University.

Dr. ANDREW WOOD referred to remarks made by Dr. Struthers on the deficiency in English education shown by one of the candidates. It was not creditable that there should be deficiency in spelling. Dr. Parkes had last year drawn attention to imperfect spelling on the part of candidates for the diploma of the Royal College of Surgeons of Edinburgh; but it had been found that they had passed their preliminary examinations elsewhere. He thought that the examiners for a medical diploma or degree ought to have the power of rejecting a man who showed himself to be illiterate; and that they should report on the matter to the Council.

Mr. TURNER thought that the candidate referred to as having been allowed to present himself in practical chemistry ought not to have had another chance. From the report, it appeared that he bungled frightfully in his dissection.

Dr. HUMPHRY said that the report showed the necessity of dissection. The candidate was reported to have answered the questions in anatomy readily and correctly, and yet to have made a most extraordinary hash of his dissection.

The PRESIDENT, before putting the motion to the vote, said that the subject of preliminary examination had come under his notice when he was an examiner at Durham nine years ago. He was sure that sooner or later the Council would have to consider whether the examinations in the subjects of general education were what should be required.

The motion was then carried; and the Council adjourned for an hour to allow several Committees to complete their business.

Adoption of the Proceedings of the Council in Committee.—The Council having resumed, Dr. ANDREW WOOD moved, and Sir WILLIAM GULL seconded:

“That the resolutions of the Council in Committee be adopted by the Council.”

Dr. ALLEN THOMSON moved as an amendment:

“That the resolutions of the Council in Committee be adopted, with the exception of the words in resolution 5 of the 19th June, *viz.*, ‘and that special consideration be requested to be given to such part as refers to the clinical examination for the licentiates, and to the deficiencies in the department of medical jurisprudence.’”

The College of Physicians was the only body regarding which a resolution of the kind had been adopted. He thought that the reports on other bodies contained remarks which called for quite as strong expressions of opinion. The reports should be simply sent to the several bodies, so that all the points in them might be considered.

Mr. QUAIN seconded the amendment, which was opposed by Sir WILLIAM GULL; and, on being put to the vote, was lost, 8 voting for, and 10 against it.

The motion for the adoption of the proceedings of the Committee was then carried.

Thursday, June 24th.

The Council were occupied during the whole of this day in discussing the report of the Committee on Mr. Simon's letter. An account of the debate was given at pp. 9-25 of last week's JOURNAL.

Friday, June 25th.

Dr. ACLAND, President, took the chair at 2 P.M.

Medical Education of Women.—Letters on this subject from Miss Jex Blake and Mr. A. T. Norton were read; and on the motion of Dr. ANDREW WOOD, seconded by Dr. RISDON BENNETT, it was resolved:

"That the letters from Miss Jex Blake and Mr. Arthur Norton on the Medical Education of Women be acknowledged, with a statement that they have been considered by the Council."

Registration of Foreign Degrees.—The following letter was read.

"Royal Albert Asylum for Idiots and Imbeciles
of the Northern Counties.

"Lancaster, June 21st, 1875.

"SIR,—Having, on behalf of myself and several other registered practitioners, who are graduates in medicine of foreign Universities, been in communication with Mr. Cowper-Temple on the subject of the Bill which I find is now referred to the consideration of the Medical Council, I beg leave to bring to your notice, as President of the Council, the following facts and suggestions:

"1. That there is a considerable number of registered British practitioners, some occupying important public positions, who, for various reasons, have, since 1853, obtained degrees in medicine at foreign Universities of repute.

"2. That such degrees, though possessing no legal value, have been generally recognised, not only by the courtesy of the profession, but by many of the examining boards in this country as possessing *examinational* value.

"3. That were it lawful for the Council to register, as *additional qualification*, well-attested foreign degrees in the case of persons previously admitted to registration as qualified by British diplomas to practise medicine, no objection could be urged on the ground of public policy. The registration, under such conditions, of *bonâ fide* foreign degrees, would moreover clear the way for the stringent suppression by law of the use by unqualified persons of medical titles based upon worthless (so-called) degrees.

"The concession suggested in the last paragraph, though not reaching the extent contemplated in Mr. Cowper-Temple's Bill, would probably be received with satisfaction by the promoters of that Bill, as recognising the medical qualifications already held by women, contingently upon their being hereafter admitted to examinations under the control of the Council. At the same time it would satisfy the just aspirations of those who, like myself, possess a foreign degree, the examinational value of which is confessedly superior to that of the 'minimum' British qualifying diplomas, but who, in the present state of the law, can require only the lower and not the higher class of qualification.—

"I have the honour to be, Sir, your obedient servant,

(Signed) "G. E. SHUTTLEWORTH, *B.A. Lond.; M.D., Heidelberg; M.R.C.S. Eng.; L.S.A. (Regd.); Medl. Supt. Royal Albert Asylum.*

"H. W. ACLAND, Esq., M.D., F.R.S., *Pres. Med. Council.*"

A postscript to the letter stated that the writer believed his views to be shared in by Dr. Balthazar Foster, Dr. G. F. Bodington, Dr. Grange, Dr. W. Hoffmeister, and other gentlemen holding foreign degrees with whom he had been in communication.

Dr. SHARPEY moved, Dr. ROLLESTON seconded, and after a brief discussion it was resolved:

"That it is desirable that the Council should take into consideration, at a future meeting, whether, with a view of furthering the desire of extended accomplishment in medicine and science among the members of the medical profession, it may be advantageous to make it lawful for the Council to insert in the *Medical Register*, after the name of a person registered on qualifications in medicine and surgery obtained in

the United Kingdom, the appropriate title indicative of a medical degree obtained, after study and examination, in a foreign or colonial University approved for this purpose by Her Majesty's Privy Council on the recommendation of the Medical Council."

Dr. SHARPEY moved, Dr. ANDREW WOOD seconded, and it was resolved:

"That the receipt of Mr. Shuttleworth's letter be acknowledged, and that he be informed that the Council have reserved the consideration of the subject of his letter."

Proposed Repeal of Portions of the Medical Acts.—The following report from the committee on this subject was presented.

"The committee appointed to consider the proposed repeals of parts of the Medical Acts, submitted for the consideration of the Medical Council by E. K. Rickards, Esq., the Speaker's counsel (as contained in the appended schedule), after consulting the solicitor to the Council, is of opinion that the repeals proposed are merely formal, and do not alter the principle or effect of the several Acts.

"The only doubt the committee has had is whether the whole of Section 46 of the Medical Act, 1858, should be repealed, or only that portion of it which relates to students who had commenced their studies before the passing of the Act. On the whole, however, the committee is of opinion that no part of the section is now required, and that the whole may be repealed. "JOHN STORRAR, *Chairman.*"

To the report was appended a schedule of the alterations proposed.

Dr. STORRAR moved, and Dr. HALDANE seconded:

"That the report of the Committee on Mr. Rickards's letter be adopted."

The adoption of the second paragraph of the report was opposed by Mr. TURNER, Dr. ALLEN THOMSON, Dr. ROLLESTON, and other members of Council, on the ground that there might still be students and practitioners who might come under the operation of that section, which enables the Council to dispense with the provisions of the Act in certain cases.

Mr. TURNER moved as an amendment, Mr. MACNAMARA seconded, and it was resolved:

"That the report of the Committee on Mr. Rickards' letter be adopted, with the exception of the proposed repeal of Section 46."

Executive Committee.—The Council having balloted for the Executive Committee, the following members were found to be elected: Dr. Bennett; Dr. Humphry; Dr. Andrew Wood; Dr. A. Smith; Dr. Sharpey; Dr. Quain.

Qualifications in State Medicine.—Dr. PARKES moved:

"That in reference to the communication from the University of Oxford, relative to 'qualifications in State Medicine, the Council considers that, in the interests both of the public and of the advancement of medical science, the principle embodied in the conjoint examination scheme for licenses to practise medicine and surgery, should be extended to any licenses or certificates in State Medicine or public health."

Mr. QUAIN seconded the motion; which, after a discussion in which Mr. TURNER, Dr. STORRAR, Dr. ROLLESTON, Dr. HUMPHRY, Dr. A. SMITH, Dr. A. WOOD, Sir WILLIAM GULL, Sir DOMINIC CORRIGAN, and Dr. PARKES took part, was carried.

Admission of Women to the Medical Profession.—The debate on this subject was resumed. [See page 17 of last week's JOURNAL.]

Report of the Pharmacopœia Committee.—Dr. QUAIN moved, Mr. BRADFORD seconded, and it was resolved:

"That the report of the Pharmacopœia Committee be received and entered on the minutes."

The report was as follows.

The Pharmacopœia Committee have to report that 2,097 copies of the reprint of the *Pharmacopœia* have been disposed of since its publication; that 10,000 copies of the *Additions*, which was the entire number of the original issue, have been sold; and that it has been found necessary to reprint 5,000 copies. The whole outlay and return are exhibited in the annexed table of expenditure and receipts, together with a statement of the stock in hand.

The Committee have had under consideration the important question of issuing a new edition of the *Pharmacopœia*, inasmuch as it would be necessary, if this step were decided on, to take immediate steps for the preparation of the work. The Committee, however, after much consideration, and after conference with the editor of the existing edition of the *Pharmacopœia*, have come to the conclusion that there is no necessity, and that it would not be desirable, to issue a new edition for some time to come. In this conclusion the Committee are strengthened by the consideration that the publication of the *Additions* last year has been sufficient to meet the requirements of the profession, by the introduction of all the more important new remedies and preparations.

The Committee further report that there are no outstanding liabilities

on account of the *Pharmacopœia*, and that there is at present no outlay required.

The Committee recommend that a *Pharmacopœia* Committee be reappointed.

June 23rd, 1875.

RICHARD QUAIN, M.D.

Statement of "*Pharmacopœia Account*" (1867) with Additions (1874).

EXPENDITURE.		£	s.	d.
Reprinting 5,000 copies of the <i>Pharmacopœia</i> , 1867...	488	5	0	
Printing 15,000 copies of additions, and binding in cloth, lettered, etc. ...	300	13	6	
Paid Editor ...	50	0	0	
	838	18	6	
Balance in favour of Council ...	558	3	6	
	£1,397	2	0	
RECEIPTS.		£	s.	d.
By sale of 2,097 copies of reprinted <i>British Pharmacopœia</i> ...	435	12	0	
„ sale of 10,000 copies of additions to <i>Pharmacopœia</i> (1867) ...	256	10	0	
	692	2	0	
„ estimated value of 2,850 copies of reprint ...	580	0	0	
„ estimated value of 5,000 copies of additions ...	125	0	0	
	£1,397	2	0	

It was moved by Dr. A. SMITH, seconded by Mr. BRADFORD, and agreed to :

“That the report of the *Pharmacopœia* Committee be adopted.”

Dr. ROLLESTON moved, Sir WILLIAM GULL seconded, and it was resolved :

“That the *Pharmacopœia* Committee be reappointed.” The Committee to consist of—Dr. Quain, Chairman; Dr. Bennett; Dr. Begbie; Dr. Aquilla Smith; Dr. Sharpey.

Report of Committee on Visitations.—Dr. PARKES moved, Dr. HUMPHRY seconded; and it was resolved :

“That the Report of the Committee on the visitations of examinations in 1873-74, and on the remarks of the licensing bodies on the reports of the visitors, be received, and entered on the minutes.”

The Committee commented in detail on the remarks offered by the several licensing bodies on the reports of the visitors, and concluded with the following summary.

The Committee have now brought before the Council the chief points in the reports of the visitations, and in the remarks of the licensing bodies, which appear to call for comment. But there are certain general points adverted to in several of the reports which can be best considered in this place.

The Committee must, however, first remark that it has been a source of gratification to them to observe in how good a spirit the licensing bodies have received the suggestions of the visitors, how almost uniformly they have given their suggestions full attention, and in how many cases they have adopted them. The Committee have also observed with pleasure not only the thoroughness with which the visitors have inspected the examinations, but the freedom of their reports from anything like captiousness or unnecessary criticisms.

The Committee beg to recommend that in future visitations the visitors should be instructed to make themselves acquainted both with the reports previously made of the examinations they are about to inspect, and also of the remarks of the licensing bodies on these reports.

The Committee will now proceed to the general questions raised in the reports.

1. It appears that there are still examinations conferring licenses to practise which are only partial, *i.e.*, which do not include all the ten subjects* which the Medical Council has recommended shall be tested before a qualification is granted. The Committee think that, when all the visitations are completed, it may be desirable to consider how to deal with such cases, if they then exist.

2. The old question of teachers examining their own pupils has been raised in some of the reports. But, as the custom of appointing non-professional examiners, and of giving them a large share in the ex-

amination, is now generally adopted in all the cases where professors are also examiners of their students, the point seems to the Committee of less importance than formerly. An entirely different practice is followed by one licensing body, the Royal College of Surgeons of Ireland; in which, either by charter or by-law, it has been arranged that no teacher can be an examiner; and thus the Dublin College, by going to the other extreme, deprives itself of the very best examining power. Teachers, and especially those who use examination in the instruction of their classes, must be the best examiners; but, when teachers have to examine their own pupils, non-professional aid must be introduced. But surely it is a great mistake to convert this necessary adaptation into a principle, and to refuse to make the best examining talent available, as is done in this instance. The Committee think it would be well if independent corporations, in arrangements for the composition of their respective examining boards, had regard to some plan for securing an interchange of *personnel*. By such a course, the advantages undoubtedly secured by having practised teachers to act as examiners would be obtained without the drawbacks sometimes found to attach to the working of boards in which teachers examine their own pupils.

3. The question whether actual dissection should always be required in the anatomical examination is raised in some of the reports; but this point is now settled by a late resolution of the Council, which has decided that candidates may be called on to dissect, and, therefore, they will necessarily always prepare for the contingency.

4. Several of the visitors have objected to so many subjects being taken too closely together; in one case six, and in another five great subjects are examined upon in writing in one day. The Committee agree with the visitors that this is putting too much pressure on the candidates, and that better answers would be obtained if these examinations were extended over two days. The point will probably recur next year, and can be then dealt with.

5. The method of conducting the clinical medical examinations is extremely diverse. In some instances, the candidate is taken to the bedside; is left there for a definite time, and then writes out the case, on which he is then questioned. In another instance, the candidate examines the case for himself, but does not write it; the examiner then goes to the bedside, and hears his diagnosis and the reasons. In another examination, the examiner and candidate go together to the bedside, and the latter then examines the case under the eye of the former for any time deemed necessary by the examiner. Some licensing bodies do not take the candidates to the bedside at all, but bring the patients to the room where the candidates are. In some cases, the visitors have made remarks and recommendations to which the licensing bodies do not give their assent, and the Committee believe that, in the present state of things, it will be well for the Council to make no suggestion on this point; but it would be desirable that the Council should request the licensing bodies to direct their attention to these diversities of practice, in order that each body may review its own practice, and improve it if it see cause. The Committee, however, entertain no doubt on one point; *viz.*, that the candidates should be taken to a hospital to be examined, and that the medical patients should not simply be brought to the Examining Hall.

6. The methods of conducting the Surgical Clinical Examination are also different, but the Committee recommend that this matter should be discussed at the next Council session, when the reports of all the bodies will have been made and commented on.

7. The Committee has had under consideration the custom of allowing a candidate to pass only one portion of an examination, and of permitting him to be examined on a future occasion, only in a subject he has failed in before. This custom takes several forms; in one case, a candidate who passes in surgery but fails in medicine, is allowed to present himself in medicine only at a future occasion; or a candidate who passes in *materia medica* but fails in chemistry, is subsequently only examined in chemistry; but, in some cases, this plan is carried farther, and a candidate who fails in the written and oral parts of the examination in medicine, but passes in the clinical examination, is not required to undergo the clinical examination a second time. These several plans of residues or remanets appear to the Committee to require some consideration from the Council; but probably, as in two or three other cases, this matter had better be discussed next year, when all the reports of visitations are before the Council.

8. A question has been raised in the Committee with regard to candidates who have been rejected by one licensing body, presenting themselves (without additional study) before another examining board. This question has often been before the Council, but without any satisfactory plan being suggested by which a licensing body could know that they had a candidate before them who had shortly before been rejected by another board. A member of the Committee has proposed that, in all cases, every candidate's schedules should be stamped by the licensing

* The ten subjects are—Anatomy, General Anatomy, Physiology, Chemistry, *Materia Medica*, Practical Pharmacy, Medicine, Surgery, Midwifery, and Forensic Medicine.

body admitting him to examination, and that the date should be inserted. A rejected candidate would receive back his papers, but these would inform any other examining board that he had been rejected at a certain date. In this way, without any record of rejection, and without any invidious distinction between candidates, the fact of previous rejection would be known.

9. Another question has been raised in Committee which does not fall within its power to consider, but which it thinks of importance enough to be reported to the Council. It has been asked whether the Council should not directly, or by means of the licensing bodies, inspect the schools of medicine, and see whether the appliances for teaching are sufficient? The Committee conceive they have discharged their duty in passing over this question to the Council for consideration, if it deem fit.

E. A. PARKES, *Chairman*.

Saturday, June 26th.

Dr. ACLAND, President, took the Chair at 12 noon.

Admission of Women to the Medical Profession.—The debate on this subject was resumed. (See page 22 of last week's JOURNAL.)

Visitation of Examinations.—On the motion of Dr. PARKES, seconded by Dr. BEGBIE, it was resolved:

"That the report of the Committee on the Visitations of Examinations, and on the remarks on such visitations, be considered next session, in connection with the reports which have now been sent down for the consideration of the licensing bodies."

The Conjoint Scheme for England.—Dr. BENNETT moved:

"That the President be asked to inform the Council whether he is able to state in what position the joint scheme for England now is, and whether there is reason to believe that there is any foundation for the report that the Royal College of Surgeons of England have virtually seceded from the conjoint scheme agreed on by the English licensing bodies, as reported to this Council, inasmuch as it is currently reported that certain resolutions have been come to by the Council of that College respecting the appointment of examiners under the conjoint scheme in question, which resolutions are in direct contravention of certain principles of the scheme as approved by this Council."

The motion having been passed, the PRESIDENT made the following reply.

"In answer to Dr. Bennett's question, I must observe that no full information can be officially given without communication with the Committee of Reference of which Sir James Paget is chairman, and with the bodies who have sent representatives to that committee. The scheme cannot be completed till Sir John Lubbock's Bill is law. As to the College of Surgeons having withdrawn from the scheme, that is a report as to the truth of which I have no evidence, nor have I any reason for believing it. There seems to be no ground for supposing that the College of Surgeons, which has taken much pains with a Bill that has already passed the third reading in the House of Commons, will do other than act in the same spirit as that which induced them to obtain the Bill. The College of Surgeons had, I believe, always maintained or implied their right to secure the nomination of a certain proportion of the examiners in surgery and in anatomy. If this right be now insisted on, the consent of the co-operating bodies and of the Medical Council to the arrangements proposed by the College of Surgeons is obviously necessary. These circumstances show that the negotiation is one which, in its very nature, requires time, but they do not indicate that the scheme will come to an end."

The Conjoint Scheme for Ireland.—Dr. APJOHN moved, and Dr. STOKES seconded:

"That the President be requested to ask the representative of the Royal College of Surgeons in Ireland whether the Council of the Royal College still adheres to the scheme of conjoint examinations as adopted by the King and Queen's College of Physicians, and agreed to by the other licensing bodies in Ireland, with the exception of the Queen's University, and sanctioned by the Medical Council (March 31st, 1873)."

The resolution having been adopted, Mr. MACNAMARA gave the following answer.

"The Council of the Royal College of Surgeons of Ireland have not withdrawn from the conjoint scheme of examination for Ireland. The Fellows, the year before last, by a large majority, decided that they could not approve of the scheme then submitted for their consideration, but did not express themselves as being hostile to the principle of a conjoint examination. The Council, nevertheless, remained pledged to the scheme approved of by this Council; but, during the past year, the question has fallen into abeyance. The present feeling in Ireland would seem to be, that we should be very much influenced

by the steps which may be taken in England and Scotland in this direction."

Instruction in Materia Medica and Therapeutics.—The following letter, addressed to the President of the General Medical Council, was read.

"Sir,—We, the undersigned lecturers on materia medica and therapeutics in the medical schools of London, desire to call the attention of the Medical Council to the unsatisfactory conditions under which, owing to certain existing regulations, we are compelled to teach the above-named subjects. We are of opinion that the two branches of pharmacy and therapeutics should be taught at different periods of the medical curriculum, the former being naturally connected with the courses of chemistry and botany, which the student attends during his first year, whilst the latter absolutely requires some more advanced acquaintance with pathology and medicine. We find that this question has already occupied the attention of the Council, inasmuch as, in 1871, the following resolution was proposed by Professor PARKES, seconded by Sir R. CHRISTISON, and carried by a majority of 15:

"That it is desirable that the instruction in pharmacy should be separated from that in therapeutics, and that the former should be obtained at an early, and the latter at a later, period of the course."

"This encourages us to hope that the Council may see fit again to consider this matter, with a view to deciding in how far, or in what way, these suggestions may be carried into effect.—(Signed) Frederick J. Farre, Lecturer on Materia Medica, St. Bartholomew's Hospital; W. Moxon, Lecturer on Materia Medica, etc., at Guy's Hospital; T. Lauder Brunton, Lecturer on Materia Medica, St. Bartholomew's Hospital; John C. Thorowgood, Lecturer on Materia Medica at Middlesex Hospital; Octavius Sturges, Lecturer on Materia Medica, Westminster Hospital; E. Buchanan Baxter, Professor of Materia Medica in King's College; R. Douglas Powell, Lecturer on Materia Medica, Charing Cross Hospital; Robert Farquharson, Lecturer on Materia Medica, St. Mary's Hospital; Sydney Ringer, Professor of Materia Medica in University College."

It was moved by Dr. PARKES, seconded by Dr. A. SMITH, and resolved:

"That the foregoing letter be received and entered on the minutes."

Dr. PARKES moved, Dr. A. SMITH seconded, and it was resolved:

"That the recommendation of the Committee on Professional Education, that the teaching of pharmacy should be an early, and the teaching of therapeutics a late course in the curriculum, which recommendation was adopted by the Council, be included in the 'recommendations and opinions of the General Medical Council which are sent to the licensing bodies, and that a copy of the above letter be forwarded to each of the bodies enumerated in Schedule (A) of the Medical Act."

Memorial from Practitioners in Durham.—A memorial was then read by Dr. PYLE from certain practitioners in Durham, calling attention to a charge made against an unqualified practitioner under the Medical Act, in which the magistrates refused to convict, and also declined to grant a case.

It was moved by Dr. STORRAR, seconded by Sir DOMINIC CORRIGAN, and agreed:

"That the memorial of certain medical practitioners in the county of Durham be read, acknowledged, and entered on the minutes."

Recommendations of the Council.—It was moved by Dr. ANDREW WOOD, seconded by Dr. STORRAR, and resolved:

"That the Committee on the Recommendations of the Council be continued, and that they be directed to bring up their report to the next session of the Council."

Executive Committee.—Dr. A. SMITH moved, Dr. BEGBIE seconded, and it was resolved:

"That the powers and duties heretofore delegated to the Executive Committee shall be vested in the said Committee until the next meeting of the General Medical Council."

Votes of Thanks.—It was moved by Dr. A. SMITH, seconded by Dr. BEGBIE, and agreed:

"That the cordial thanks of this Council are due, and are hereby tendered to Dr. Andrew Wood for his services as chairman of the Business Committee, during the present session of the Council."

"That the thanks of the Council are due, and are hereby tendered to the treasurers, Dr. Quain and Dr. Bennett, for their important services."

It was then moved and carried by acclamation:

"That the thanks of the Council are hereby cordially tendered to Dr. Acland, the President, for his efficient services during the present session of the Medical Council."

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st, Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 10TH, 1875.

PROVIDENT INSTITUTIONS AND OUT-PATIENT
DEPARTMENTS.

V.—PATIENTS' PAYMENTS.

WE now come to a branch of the subject which has never before occupied the share of public attention which it deserves. We allude to the system adopted at several provincial and some London medical institutions, of obtaining payment from each case applying for relief as an out-patient, and in some cases from in-patients also. This system is at present confined exclusively, we believe, to hospitals for women and children in the provinces, and to some of the special hospitals in London. The difference in the mode of treating the patients who apply for relief at these institutions is, that in London they admit free cases in addition to those out-patients who make some payment, but in the provinces no persons are allowed to receive the benefits of the institution without the payment of at least an entrance-fee of sixpence on their first visit. It appears that this particular system was originated by a surgeon of Bristol, who opened a dispensary for women and children in February 1857, and fixed the following scale of fees: For women, 1s. 6d. the first visit, 2d. each subsequent visit; for children, 6d. the first visit, 1d. per visit afterwards. His work proved so successful that, six months afterwards, a committee of gentlemen interested in the experiment was formed, and the institution was thus firmly established as one of the charities of Bristol. This dispensary grew in public favour; and in the year 1866, owing to the exertions of Mr. Mark Whitwell, the Treasurer, an in-patient department was added for children, with forty beds, admission to which has been on the free principle from the first. The institution was at the same time called the Bristol Hospital for Sick Children and for the Out-door Treatment of Women. Although the in-patient department is quite free, great care is taken to exclude all improper cases, and the chief responsibility for all admissions rests with the medical officer himself. At the end of 1872, the Committee raised the original fees for all visits after the first from 2d. to 3d. for women, and from 1d. to 1½d. for children, with the object of making the out-patient department self-supporting. This they will, we believe, succeed in doing; for we find from the last published report that 963 women who paid 9,523 visits, and 2,449 children who made 14,418 visits, to the out-patient department in 1873, contributed by their payments £315:19:2 towards the cost of their treatment, which actually amounted to £487:9:4. The system pursued at Bristol commended itself to the managers of the Children's Hospital, Birmingham, as a remedy for an abuse which caused them much anxiety a few years ago; viz., the large number of trivial cases who applied for treatment at the out-patient department, to the exclusion or detriment of more severe and deserving cases. It was accordingly adopted by them in principle—a payment of 6d. for each child on the first visit; and has been quite a success, financially at any rate, as the sum received from these payments in 1874 was £310:14. We say *financially*, because it appears to have had but a temporary influence on the number of out-patients, who were 1,345 fewer in the six months after its adoption, as compared with the numbers for the corresponding period of the previous year (1871).* In the next twelve months, the number of out-

patients was increased by 1,389, as compared with that of the preceding year (1872). Nevertheless, the Committee, in their last published statement, speaking of this system, say: "Your Committee continue to think this regulation an excellent one. The fee is always paid cheerfully, and the sum raised enables the charity to carry out its good work more thoroughly"; although the number of out-patients had again increased by 1,178.

Another Birmingham Hospital—the Hospital for Women—the patients at which amounted to 1,750 (in, 71; out, 1,679, in 1873), has also adopted the system of small payments. Here the rule is: "Out-patients are required to pay one shilling as a registration-fee on entering, and a further fee of one shilling at the expiration of each two months during which they may remain under treatment." The amount received from patients in this way in 1873 was £95:9:8, and the total expenditure was £1,059:16. At this hospital, out of seventy-nine in-patients, thirty paid £79:14 for their treatment, making the total receipts of £175:3:8 for the year from this source. The Women and Children's Hospital at Sheffield has also adopted the registration-fee; and we are informed, on reliable authority, that this system "is commending itself more and more to the managers of provincial hospitals, and is likely to be very generally adopted". Whatever objections may be raised against this system—and they are summed up briefly in the statement that under it "cases may be, and sometimes are, admitted which are not proper subjects for charitable relief, and which could, in all probability, afford to pay for the necessary treatment in their own homes"—it cannot be denied that it has many advantages over the old ticket system, and on this ground alone it should, in our opinion, commend itself to the thoughtful consideration of all hospital managers. Every hospital that we have mentioned reports favourably on its working, and we quote the following brief extracts from the last published Reports of the Committees for the year 1873.

Children's Hospital, Birmingham.—The Committee wish to record their conviction that the system works most satisfactorily. It has had the good effect of weeding out many unsuitable cases, such as those belonging to the pauper classes, and other cases too trivial to need hospital treatment. A portion of the sum raised by these fees also gives the Committee the means of increasing the medical staff by the appointment of two *paid* extra acting physicians. Thus, the patients receive even more attention than they did formerly; the income of the charity is considerably increased; and the Committee have never heard of any objection being raised to the payment of the small fee required.

The Women's Hospital, Birmingham.—The Committee report that the shilling fee has fully answered the expectations they formed of it. It keeps from the already overcrowded waiting-rooms trivial and pauper cases, and affords a very appreciable addition to the hospital funds. The fee is so small, that there are very few women above the pauper class who are unable to pay it, and yet it is sufficient to keep away those who would otherwise come from mere curiosity. Whenever, from long illness or shortness of work, patients of the working class are unable to pay, then the fee is remitted. Thus, your Committee consider that they have avoided the evils attendant upon the ticket system and the absolutely free or unchecked system.

At the Bristol Children's Hospital, as already stated, it makes the out-patient department nearly self-supporting.

Surely, the abuse to which we have alluded may be almost left to cure itself, especially when it is borne in mind that the vigilance of the committees of management at the above institutions and their anxiety to guard against abuse of all kinds has led them to adopt this system, which, to say the least, is a step in the right direction, and may be regarded as one more nail in the coffin of hospital abuse.

We now come to the special hospitals, which are increasing in number, if not in influence, every year. The mania for these institutions has produced a sort of graduated scale of ingenuity of invention in the fertile brain of the originators, which may be briefly summarised thus: Positive, "Throat Hospital"; comparative, "Heart Hospital"; superlative (wonderful invention this), "Infirmary for Diseases of the Legs". Whether the mania may still increase, and result eventually in a Hos-

* Medical Report for the year 1872 of the Children's Hospital, Birmingham.

pital for "Corns, Bunions, and Diseases of the Nails", with an in-patient department, time alone will show.

At the Hospital for Diseases of the Throat, Golden Square, the annual report of which, by-the-bye, is one of the cleverest pieces of "appeal literature" we have ever seen, most of the patients pay something. These payments are weekly, fortnightly, or monthly; they vary from 1s. to 5s. per month, and are written at the head of the prescription-papers for the guidance of the medical officer, but not in plain figures. The sum received from patients during the year 1873 at this hospital was £733:1:6, being rather less than a third of the expenditure. It may be well, bearing in mind the scenes enacted at the meeting of the Metropolitan Hospital Sunday Fund in January and March last, and the statements then made by the representatives of special hospitals, to examine closely the accounts of the Hospital for Diseases of the Throat. The statement of receipts and expenditure for the year ending December 31st, 1873, shows that the ordinary income derived from subscriptions and donations (£2,632:8:4), contributions from patients (£733:1:6), dividend (£91:18:10), and donation boxes (£44:10:3), amounted to £3,501:18:11; and the ordinary expenditure (if such items as telegraph to medical superintendent's house, and printing and binding second edition of the *Hospital Pharmacopœia*, may be included under ordinary expenditure) amounted to £2,625:11:2, leaving a balance of ordinary income over expenditure of £876:7:9 for the year. In addition to this balance in hand of £876, this hospital received from the Hospital Sunday Fund £191:13:4, and yet its supporters say that the award of the Hospital Sunday Committee "has not been fair or impartial" so far as the special hospitals are concerned. We quite agree with these grumblers, though we arrive at our own conclusions from a different point of view. In what have the Hospital Sunday Committee "not been fair and impartial" in their dealings with these special hospitals? We answer; in having, even on one occasion, granted £191 to the Hospital for Diseases of the Throat when it had a balance of £876 in hand from other ordinary sources. Nor is this all; for, in the same year, 1873, this very special hospital received £1,000 from the proceeds of a bazaar; £1,000 from an anonymous donor, "H. D. T"; £19:19 from legacies; having besides a balance in hand from the previous year of £253:4:3. To summarise:

The actual income for the year 1873, was ...	£ 5,966:15:6
The actual expenditure of the year 1873, was	2,625:11:2

Balance of income over expenditure ...	£3,341:4:4
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Yet the supporters of this hospital appeal to the general public for additional funds on the ground that "subscriptions and donations are much needed to meet the heavy expenses".

There is another special hospital, the Central Throat and Ear Hospital, which may be fairly regarded as in opposition to the one we have just been describing. It has only been in existence since March 1874, and, up to January 19th, 1875, 2,329 patients had been treated, and £137 13s. had been received from patients' payments. It is expected that these payments will pay the salaries of dispenser, matron and servants, and perhaps the current expenses of dispensary and house-keeping. Patients are seen at this hospital, in addition to the usual days and hours, on Tuesday and Friday evenings at 7.30, and the clergy are allowed to send cases gratuitously. The following is reported to us as the result of a visit to this hospital one Tuesday evening.

There were about sixty people waiting to be seen when we arrived at 7.30. The cases were:

1. Workwoman, shopwoman, milliner, earning from seven shillings to thirteen shillings per week each, and living at home, agreed to pay, in each case, one shilling per week for attendance at hospital.
2. Wife of a carpenter, not in regular work, agreed to pay two shillings and sixpence every fourteen days.
3. Labourer's wife, pays nothing. Husband ill, and receiving twelve shillings per week from club.
4. Carpenter's child, one of twelve children, ten living at home. Weekly earnings of family fifty-two shillings, pays one shilling a fortnight.
5. A carpenter not always in full work, earns thirty-eight shillings

per week. Wife and daughter have been to hospital before. Pays two shillings and sixpence every fourteen days.

6. Law-writer, living at home with parents, earns fourteen shillings per week, pays one shilling per week to hospital for attendance.

These are the cases just as they presented themselves, and we are bound in fairness to say that, if special hospitals be needed by the poor, this hospital is certainly doing good amongst that class of patients who ought alone to receive medical advice for a nominal sum. Seeing, however, that most of our great hospitals have now well administered special departments, we incline to the opinion that special hospitals are not needed at all, and are open to many objections.

We must not conclude this paper without commending the work done by that useful and unobtrusive institution, the Establishment for Gentlewomen during temporary illness, in Harley Street. No hospital in London does probably greater good with the funds entrusted to its managers than this excellent Hospital. Its object is declared to be "to afford a home in illness, with medical and surgical treatment, to gentlewomen of moderate means, the wives, daughters, and relatives of clergymen, naval, military, and professional men, and to governesses and artists". Patients are placed under the charge of one of the medical staff of the institution, and any other medical attendance is prohibited, except at their discretion and when they think it desirable. Neither infectious cases nor cases of insanity are received. Applicants must produce: 1. A certificate from medical attendant as to fitness for admission; 2. Two letters of introduction, with particulars of social position and income; 3. A guarantee as to weekly charges and expenses.

The weekly charge is (including board, lodging, medical attendance, and medicine), for single women, twenty-three shillings; for a room occupied by two ladies, nineteen shillings; for accommodation in the divided room, fifteen shillings. Children are admitted in special cases on the same terms. The income from all sources in the year 1873 was £4,510:0:6, and the patients' payments amounted to £839:16:0. The expenditure was £3,110:13:3. If we exclude legacies, which amounted to £2,061:19:0, it will be seen that the ordinary expenditure exceeded the ordinary income by £904:6:9. This valuable institution only received £38:6:8 from the Hospital Sunday fund.

HOSPITAL REFORM.

THE Westminster Hospital deserves credit for the painstaking manner in which, during the last two years, it has been investigating the whole question of out-patient administration. No less than four committees have been appointed during that period. To the reports of the earlier committees, we have from time to time alluded. That of the fourth is now before us. In it the whole subject is reconsidered, and, in conclusion, the Committee make the following recommendations, which are well worthy the attention of all hospital managers.

1. That the entrance for out-patients be at the side gate, instead of at the front door of the hospital; that the registration of the patients take place within that entrance, instead of in the front hall; that a competent porter be placed in charge of the out-patients; and that the hours of admission, 12.30 to 1.30, be strictly enforced, the gate being closed punctually at the latter hour.

2. That the present limitation and selection of the patients by the assistant house-surgeon be discontinued. He might, if found necessary, still distribute the patients to the different physicians and surgeons.

3. That the medical officers be instructed that they have full power to dismiss any applicants, with or without governors' letters, whom they consider not proper objects of charity, or not likely to benefit by treatment as out-patients; but, in case of a patient bringing a governor's letter, they shall endorse their reason upon the letter, which shall be filed and laid upon the Board-room table on the following Board day, in order that the same may be communicated to the governor, if the House-Committee shall so order.

4. That each medical officer shall exercise this power at his own discretion, either by attending half an hour earlier and selecting the proper cases for further investigation and sending the rest away, or by seeing all the cases in the ordinary course, and, after investigation, referring

such as shall not be retained to the Poor-law, the General, or the Provident Dispensary, or sending them into the wards, or elsewhere, as the case may be, writing such reference across the patient's paper. There is nothing to prevent the medical officer from prescribing once for such patients, if he think it desirable.

5. That any case of evident and gross abuse should be immediately reported to the House Committee, in order that full investigation may be made.

6. That friendly relations should be entered into between the out-patients' department of the hospital and the dispensaries; that notices of the latter be put up in the out-patients' rooms of the hospital, and papers distributed to such patients as would be more properly treated at such institutions; and that, on the other hand, the medical officers of the dispensaries should be invited to bring their unusual and interesting cases to the hospital out-patients' rooms, not necessarily for treatment at the hospital, but for consultation.

7. That the present limitation of the out-patients' prescription papers to two months be abolished. It is useless as a check, the majority of the patients ceasing to attend before the expiration of that time, and the rest receiving a fresh paper as soon as it is required. It also entails additional and avoidable labour on the medical officers, as, by the confiscation of the expired letter by the dispenser, they are deprived of the assistance of previous notes and prescriptions. It occasionally happens that a patient has to attend once or twice a month for a long period, and great confusion is produced by the constant renewal of the prescription paper, a periodical re-registration being all that is required.

8. A further recommendation of the Committee would be the offer of assistance to the assistant-physicians, whose patients unavoidably continue in excess, either by the election of one or more additional assistant-physicians, or by the appointment of one or more casualty physicians, as has been adopted at St. Bartholomew's Hospital.

With some of these recommendations we heartily concur; others appear to us wanting in decision; but they only serve to show the difficulties which surround an individual institution when it attempts to move in this matter, and how much it is to be desired that some general plan could be agreed upon, and form the rule for all hospitals and dispensaries. The weakest point in this scheme is, that it throws the task of discrimination upon the medical staff. We have always maintained that this duty forms no proper part of their work, and that the additional burden ought not to be put upon them. It places them in an invidious position with regard to their patients, and it is an unwarrantable demand upon time and energies which are already taxed to their full extent. There is something like satire in the suggestion, contained in another part of the report, that the out-patient officers might attend half an hour earlier, in order to sift their cases, while it is recommended to appoint additional assistant-physicians, in consequence of the present excess of work.

The question of out-patient relief has also been under consideration lately at the Children's Hospital, Great Ormond Street; and it appears to us that the managers of that institution have adopted a plan which is at once simpler and more satisfactory. It has been determined that no patient can be prescribed for a second time, unless his hospital letter has been stamped by the Committee of the Charity Organisation Society for the district in which he lives.

Letters have been issued which bear on their face, in addition to this new rule, a list of the local offices of the Charity Organisation Society, and the hours at which application may be made to them, in order to furnish the necessary particulars and obtain the requisite stamp. This plan appears to us very promising, and we shall watch with interest to see how it succeeds.

SALARIES OF MEDICAL OFFICERS OF HEALTH.

AMONG the many anomalies that exist in our present disjointed system of sanitary organisation, not the least striking is the absence of proportional uniformity which marks the salaries that have been allotted by the various authorities of combined urban and rural sanitary districts to their medical officers of health. The most cursory glance down any list of medical officers of health which shows the amount of their salaries, is sufficient to prove that neither the population, nor the area of the district, nor the probable amount of work to be performed, has

had much weight in fixing the amounts of these salaries. The inspection of such a list, moreover, leads to the inevitable conclusion that many of the appointments have been made only in deference to the pressure of public opinion, or of the Local Government Board, and that the real intention, in fixing upon nominal salaries, was to secure the amount of sanitary work done being also nominal. In order to check, as far as possible, this pretence at sanitation, we are naturally, as in all other branches of sanitary organisation, brought face to face with the necessity for a Central Health Authority, with power to act as a control department in health matters. It is important to our sanitary progress not only that medical officers of health should be adequately remunerated for sanitary duties efficiently performed, but that, in the matter of salary, they should not be without appeal entirely at the mercy of their sanitary authorities, who, in many cases, would be best pleased by inaction.

As an example of the necessity for the Central Health Authority to have some power of control in the matter of salaries of health officers, the case of Keighley may be cited. The Local Board District of Keighley has a population exceeding 20,000 persons, and has recently become notorious for its antivaccination board of guardians, and the inaction of its sanitary authority, although for months the town has suffered from epidemics of small-pox, scarlatina, typhoid fever, and other forms of zymotic disease. A medical officer of health was appointed by this local board at £50 a year, but, during the past six months, the duties have necessarily been of such an arduous character as to engross the whole time of the medical officer, and recently an application was made to the local board for an increase of salary, or at any rate for some remuneration for the extra duties which have been entailed by the prevalence of small-pox. This application was referred to the sanitary committee, who recommended that the "application for extra remuneration be considered when the present epidemic is stamped out". At the last monthly meeting of the local board this recommendation was adopted, and it was voted that the committee had exercised a wise discretion in the matter. A member of the board was of opinion that, if the medical officer knew that an increased remuneration would be given to him when the town was clear of the epidemic, it would stimulate him to greater exertion. Only those who have read the history of the small-pox epidemic in Keighley, and of the present sanitary condition of the town, and who know how the zeal and energy of the medical officer have been thwarted and neutralised by the neglect of their sanitary duties by the board of guardians and the local board, can thoroughly appreciate the full import of this treatment of the medical officer's application for an increase of salary. In such cases as Keighley, the medical officer of health should have an appeal to the Central Health Authority to fix his salary at such a sum as would afford reasonable remuneration for his duties.

At a meeting of the General Committee of Management of the Royal Free Hospital on the 8th instant, Mr. William Rose, of Old Cavendish Street, was elected Surgeon of the hospital in the vacancy occasioned by the decease of Mr. J. D. Hill.

We publish in another column a letter from Mr. Smee advocating strongly the formation of a special committee to take proceedings which shall lead to the establishment of voting by proxy in the College of Surgeons on the occasion of the election of Fellows. We have before now set forth in full the arguments in favour of that reform. But more than argument is necessary; action is required, and the action must come from those who are really interested. The country Fellows are virtually largely disfranchised by the present arrangements, and the power of election is vested in the hands of small cliques. When now and then some vigorous action has been taken by extra-metropolitan Fellows to make their voice and their choice respected, it has struck the wire-pullers with dismay, and terrible notes of warning have been sounded. As a matter of fact, what is desirable in the interests of the College is, that the whole body of the Fellows should be equally repre-

sented. We are very far from thinking, however, that this will be effected without vigorous resistance and prolonged effort. Mr. Smee must prepare for a vigorous campaign, if he wish his manifesto to be more than *brutum fulmen*; and then the doubt will remain, whether the result is worth the trouble. It is curious how greatly the importance of a rather limited body and a very insignificant election has been magnified by newspaper-writing and paper-wars. It might be supposed that the Council of the College of Surgeons was the parliament of the profession, and its members the conscript fathers who decide the fate of medicine. The Council is a venerable and respectable teacup, in which so many storms have raged, that it is apt to be looked upon by a few enthusiasts as quite the biggest bowl in the universe.

At the election of Fellows into the Council of the College which took place last week, and which resulted, as already stated, in the re-election of Mr. Prescott Hewett and Mr. John Birkett, and the replacement of Mr. Spencer Smith by Mr. J. Cooper Foster, 222 Fellows attended to record their votes. Of this number, 55 were from provincial towns, some at a great distance from London. Of the 59 plumpers given at this election, 32 fell to the lot of Mr. Smith; Mr. Smee received 13, Messrs. Hewett and Forster 5 each, and Mr. Hussey 3. The following analysis of the voting on this occasion may perhaps be interesting. The combinations were: Hewett, Smith, and Birkett, 20; Hewett and Smith, 9; Hewett, Smith, and Forster, 10; Hewett, Smith, and Hussey, 2; Hewett, Smith, and Smee, 2; Hewett and Birkett, 1; Hewett, Birkett, and Forster, 58; Hewett, Birkett, and Hussey, 2; Hewett, Birkett, and Smee, 3; Hewett and Forster, 3; Hewett, Forster, and Hussey, 7; Hewett, Forster, and Smee, 1; Hewett and Hussey, 2; Hewett and Smee, 2; Smith and Birkett, 1; Smith, Birkett, and Forster, 9; Smith, Birkett, and Hussey, 2; Smith, Forster, and Hussey, 1; Smith, Forster, and Smee, 1; Smith and Hussey, 4; Birkett, Forster, and Hussey 1; Birkett, Forster, and Smee, 2; Forster and Hussey, 2; Forster, Hussey, and Smee, 1.

THE festival of the Fellows of the Royal College of Surgeons of England took place after the election, when a much larger number than usual attended, owing, no doubt, to the well deserved popularity of the excellent chairman, Surgeon-General T. Longmore, C.B. Many gentlemen attended from long distances. Among the country Fellows were Mr. Ambler, Hemel Hempstead; Mr. J. Archer, Birmingham; Mr. W. Barker, Wantage; Mr. Barrow, Ryde; Mr. Benfield, Leicester; Mr. Boxall, Horsham; Mr. W. A. N. Cattlin, Brighton; Mr. T. W. Crosse, Norwich; Dr. Green, Bristol; Mr. C. J. Hawkins, Cheltenham; Mr. Hodson, Bishop's Stortford; Dr. Humphry, Cambridge; Mr. Horsfall, Leeds; Mr. Hussey, Oxford; Mr. F. F. Lee, Salisbury; Mr. E. Lund, Manchester; Dr. W. J. V. Lush, Weymouth; Mr. Manby, Wolverhampton; Mr. D. P. Maurice, Marlborough; Dr. J. B. Maurice, Marlborough; Mr. G. May, Reading; Mr. A. W. Nankivell, Chatham; Dr. Orsborn, Bitterne; Mr. E. K. Owen, Oxford; Mr. Penhall, St. Leonards; Mr. Symonds, Oxford; Mr. C. E. Thomson, Ross; Mr. Treves, Margate; Mr. J. Webb, Cobham; Mr. White, Oxford; Mr. Wilbin, Southampton; Mr. S. Wood, Shrewsbury; Mr. S. Woodman, Ramsgate; etc. Mr. T. B. Curling, F.R.S., late President of the College, has consented to take the chair next year.

At a quarterly meeting of the Council of the Royal College of Surgeons on Thursday, July 8th, Sir James Paget, Bart., F.R.S., was elected President, and Messrs. Prescott Hewett, F.R.S., and John Birkett, Vice-Presidents, of the College. At the same meeting of the Council, Mr. R. Brudenell Carter was elected Professor of Surgery and Pathology; Mr. W. H. Flower, F.R.S., and Mr. W. K. Parker, F.R.S., Joint Professors of Comparative Anatomy and Physiology; Mr. Erasmus Wilson, F.R.S., Professor of Dermatology; and Mr. William Turner, F.R.S.E., Lecturer on Anatomy and Physiology. Dr. T. B. Peacock and Dr. Wilks, F.R.S., were appointed Examiners in Medicine; and Dr. Arthur Farre, F.R.S., Dr. Barnes, and Dr. Priestley Examiners in Midwifery.

THE President of the College, in resigning office, delivered (for the first time) an address, relating the progress of events during the year. We shall refer to it again next week. Pressure of matter prevents us from referring to other matters interesting to the members and fellows.

At the dinner, Sir William Muir was understood to confirm in a positive manner the promise held out by Mr. Hardy lately, when he stated that ever since receiving the statements of the deputation from the Parliamentary Bills Committee of our Association last year, he had been more or less engaged in endeavouring to settle the grievances of the Army Medical Department on an equitable footing, and that an improved warrant might shortly be expected.

THE correspondence which has taken place between the Lord Chancellor and Dr. Hardwicke, in reference to the inquest held on the body of the late Sir Charles Lyell, has been published. The correspondence opens with a communication from the Lord Chancellor recapitulating the facts of the case, which our readers are acquainted with, and calling for an explanation. To this Dr. Hardwicke replied that, having received information that Sir Charles Lyell's death had been hastened or caused by a fall, he deemed it his duty to investigate the circumstances, as the relatives declined to furnish him with particulars, but referred him to Dr. Andrew Clark, whose certificate was, "Meningitis, ten weeks; effusion, six days". In reply to this, the Lord Chancellor says that he cannot but think that, if an official application had been made to Dr. Clark, he would have given such explanation as would have rendered a coroner's inquiry unnecessary. The very brief memorandum of Dr. Clark appear to have been taken without any explanation having been asked for, and the inquiry has caused much pain and uneasy feeling in the public mind. The letter winds up by observing that "the Lord Chancellor is ready to believe that Dr. Hardwicke acted in this matter under a scrupulous sense of what he considered to be his duty; but he feels obliged to point out the considerations which lead him to the conclusion that a more sound and careful exercise of discretion would have led to a different course, and expresses a hope that in future more accurate and reliable information will be obtained, before proceeding to public investigations of death, which must be so harrowing to the feelings of relatives and households".

THE coroner has a short way of his own for dealing with difficulties. Addressing a Marylebone jury this week on the subject of the confinement of dipsomaniacs, he observed: "If people liked to go on paying taxes for the support of thirty or forty thousand lunatics, it could not be helped; but, if he had his own way, he would soon make short work of it, although the Home Secretary, Mr. Cross, had told a deputation the other day the subject was one of great difficulty." Now, we confess to sharing the difficulties of the inferior person who is for the moment Home Secretary; and, if the great mind of the present coroner for Central Middlesex could really give us "a short way" to the settlement of the matter, it would greatly abridge some very intricate discussions which are likely to be carried on at the Edinburgh meeting of the Association, much facilitate the work of legislation, and lay the whole nation under the same debt of gratitude as the acquiescent jury. Is it not "atrocious" that Dr. Hardwicke should see so much labour and anxiety wasted over a difficult problem, when he has in hand a solution not only satisfactory, but short, which, however, he omits to state?

DEAN STANLEY ON THE PROFESSION OF MEDICINE.

DEAN STANLEY, in the course of an admirable address to the students at St. Thomas's Hospital, described the hospital as the "palace of the poor and suffering; founded by one of our kings, whose name was among the best beloved of the long series of English sovereigns, and who was himself an eager student cut off before he passed the age of studentship. It was, he thought, exceedingly interesting in finding oneself in a great hospital to remember how it served, more perhaps than any other institution, to check the revolutions of time. This institution, with the exception of its change of locality, had pre-

served its objects and its purpose absolutely unchanged. He remembered seeing in the town of Angers a hospital, still continued, which was founded by Henry the Second, and which alone of all the institutions in Angers, had remained unchanged in that most changeable of all countries. And this brought him to the profession to which they were called. Nothing could be more delightful to contemplate than a number of young men who were growing up to devote themselves to a career which had for its object nothing less than to do good to the human race. All the great professions, no doubt, had this for their object indirectly, but their profession and his own profession were the only two which had this direct beneficence for their object. The clergyman and physician must be inseparable allies. Looking over all the professions, if they took the best of all the various classes of students, the best specimen of all was the best kind of medical student. There were three reasons why a good medical student ought to be better than the student of any other profession. First of all, he had to deal with human suffering—the alleviation of human suffering, and doing good to mankind in the most direct form. There was a very striking passage in *Scenes in Clerical Life*, by George Eliot, in which was described how all the various doubts and difficulties, speculations and despair of a man shrunk away to nothing when he entered an hospital. In an hospital there was no intervening obstacle between themselves and doing good. There they met with every sort of creed and opinion that could be presented to them, and yet always in a form that demanded nothing but their sympathy, nothing but their endeavour to perform their duty towards the suffering, nothing to rouse theological or scientific or any other sort of odium—only the one single purpose of enabling their patients to recover their health, or be what they were intended by their Creator to be in their passage through life. There was another reason. Some might think that familiarity with the sight of human suffering might cause them to lose sympathy with it, but, judging from what he had seen of medical men outside hospitals, he had invariably found that their interest in and sympathy for their poor suffering patients was as great as if they never met with any other cases of sickness and suffering in the world, so that it would seem that, instead of having their minds deadened by witnessing suffering, they were quickened. That he trusted would be the case with all medical students who had anything whatever in them that was worth living and worth dying for. Then, again, some people thought that having their attention so much fixed on the external frame, it might lead them to disparage and to put on one side the spiritual and the moral part of human nature, but, in point of fact, and again judging from the most distinguished surgeons and physicians he had known—he thought he might say they all had known—this was not the case; but it was the case that physicians and surgeons of any eminence at all, so far from having their minds fixed or their hearts corrupted by having their attention fixed on the outward physical frame, were perhaps even more than other persons led to feel the difference, the everlasting difference, between what was merely external and what was inward and spiritual.”

THE WORCESTER INFIRMARY.

THE public are apt to be very unreasonable in the demands which they make upon the gratuitous services of those who hold honorary appointments at hospitals. The governors seem to forget that, if they do much for a young man by placing him upon the staff of such an institution, he does far more for them by the valuable services which he is constantly rendering, it may be throughout a long term of years; and it should be remembered that, whereas the value to him of his connection with the hospital is considerably lessened after a few years, the value of his services to the institution is, on the contrary, yearly augmenting with his increased skill and experience. In order to take a right view of this matter, and to secure just treatment for our profession in those questions which will from time to time arise, it is very desirable that the medical staff should have a larger share in the management of hospitals than they now possess. This subject has been brought prominently before us by an incident which has recently

occurred at the Worcester Infirmary. In February last, Dr. Inglis received on one of his out-patient days a sudden and urgent call to attend a private patient in the country. The 59th rule of the institution requires that when a medical officer is prevented from attending in person, he shall obtain a substitute from among his honorary colleagues; but, on the occasion in question, Dr. Inglis had not time to do this. He, therefore, wrote to the house-surgeon, a fully qualified man, asking him to see his out-patients; which was accordingly done. On this particular morning, two labourers, who had previously been attended by a local practitioner, had walked eight miles to the hospital in order to obtain farther advice, and were disappointed at only seeing the house-surgeon. This apparent hardship was reported to the committee; and, after various deliberations and much discussion, a vote of censure was passed upon Dr. Inglis “for neglect of duty by absenting himself from the out-patients of the infirmary on February 13th without providing a substitute according to the rules, to the disappointment of two patients in a humble class of life”. As Dr. Inglis has been for fourteen years on the honorary medical staff of the institution, we cannot wonder that such a vote as this should have led him to tender his resignation at the next monthly committee, which was held on the 19th ult. It is hardly possible that this matter should be passed over in silence at the annual general meeting of the governors, and it remains to be seen whether the vote of censure will be sustained. There can be no doubt that the letter of the law is against Dr. Inglis, but the manner in which it has been pressed appears to us both harsh and unjustifiable. It was said that a similar incident had occurred four years ago, and that, therefore, the present case could not be passed over. We can only say that if, during fourteen years’ service, there has been no greater cause of complaint against Dr. Inglis than that which is afforded by two such cases, he deserves praise rather than blame. It appears to us that the rule under which he has been censured was drawn up without a due consideration of the exigencies of the medical profession. Cases must frequently arise in which medical men in active practice can neither see their hospital patients themselves, nor be able in the emergency to communicate with their colleagues. The house-surgeon, on the contrary, is always on the spot; he is a duly qualified medical man, and he is acquainted with the previous treatment of those who are attending the hospital regularly. As Mr. Budd well pointed out, the medical staff of the Worcester Infirmary would most effectually carry out the spirit of the rule by referring to him in any such sudden and unavoidable absence. We trust the general body of governors will see the injustice that has been done to Dr. Inglis, and that the vote of censure will not only be rescinded, but that the wording of rule 59 will be so altered as to leave greater latitude to the medical officers in providing a substitute. As we pointed out before in alluding to this matter, those who find the money and those who find the skill are alike necessary to the well-being of a hospital; and the former, who are often men of leisure and free from all pecuniary anxieties, should treat with consideration those who, while perfectly willing to give a large portion of their time to the gratuitous service of the poor, must not be expected to neglect the private practice upon which they are dependent for their livelihood.

THE STUDY OF INSANITY.

THE following petition, signed by the Lecturers on Insanity at the Medical Schools of the United Kingdom, has been presented to the medical examining boards, praying that students of medicine may, if they so desire, substitute a three months’ course of clinical instruction in the wards of a lunatic asylum for the same period of attendance in the medical wards of a general hospital. The petitioners state that not fewer than four hundred gentlemen are engaged in the treatment of the insane; and, when we reflect that at present the assistant medical officers of asylums have to learn their duties after they are appointed, and that students of medicine in general enter upon the practice of their profession without having seen a single case of insanity, we think the permission asked for a reasonable one. There are large asylums

near all the schools of medicine. There are several in and near London, besides St. Luke's and Bethlem Hospitals. Asylums might be qualified, like provincial hospitals, according to the number of beds; and in no way could a greater impetus be given to the scientific study and treatment of insanity than by the presence of a clinical class within the wards of an asylum.

1. That your petitioners are lecturers on insanity or psychological medicine in the schools of medicine to which their names are attached, as below.

2. That their courses of lectures are not (by the regulations of any qualifying board) imperative on students of medicine as a part of their curriculum of professional study.

3. That your petitioners are aware of the grave objections to adding to the already large number of subjects which students of medicine have to master during their period of study, but they venture respectfully to suggest that the entire absence of any provision for the clinical study of so important a branch of medicine as insanity and its kindred diseases cannot but be prejudicial to the interests of a large majority of students in their future careers.

4. That insanity is not (like diseases of the eye, teeth, etc.) to be met with in the wards of a general hospital, and that consequently students have no opportunity for observing it without attending at a lunatic asylum.

5. That, of the great number of asylums and hospitals for the insane which there are in the country, there is at least one contiguous to every medical school in the kingdom.

6. That your petitioners not only lecture on insanity, but also have the means of affording clinical instruction in asylums for the insane of easy access to the students, and that their lectures and *cliniques* include both insanity and many other important nervous diseases of a class which are not usually seen in general hospitals, such as epilepsy, paralysis, softening and tumours of the brain, chorea, hysteria, hypochondriasis, and others.

7. That there are, on the narrowest computation, four hundred medical men now engaged in the speciality of mental disease, either as officers or as medical attendants at the asylums and other receptacles for the insane in the United Kingdom of Great Britain and Ireland, this number having greatly increased of late years, and there being an increasing difficulty in procuring qualified assistants for asylums; and that it is of the highest importance that those entering this department in future should have some practical and scientific knowledge of this most difficult branch of medicine, not only for their own comfort and satisfaction, but also in order to the proper treatment of the insane and the advancement of science.

8. That the University of London has the following regulation and note thereon: "Attendance during three months in the wards of a lunatic asylum recognised by the University, with clinical instruction, may be substituted for a like period of attendance on medical hospital practice." "The senate regard it as highly desirable that candidates for the degree of M.B. should practically acquaint themselves with the different forms of insanity by attendance in a lunatic asylum."

9. That your petitioners are of opinion that, if the regulations laid down by the University of London were adopted by all examining boards, a great boon would be conferred on many students who might then, without sacrifice of time, which they can hardly afford, avail themselves of the opportunities for studying a class of diseases with which at present they have little or no practical acquaintance, but which are of all others liable to entail on medical practitioners heavy losses both of prestige and of fortune. Indeed, so undoubtedly is this the case, that it is within the knowledge of your petitioners that many medical men of skill and repute have declined to give an opinion and certify in cases of insanity, in consequence of the disastrous results into which a faulty certificate may lead them; thereby, in the opinion of your petitioners, shirking responsibilities, which, as fully trained medical men, they are bound to accept.

Wherefore, your petitioners humbly pray that you will be pleased to take into favourable consideration their petition, that it shall be permitted to students of medicine who wish to qualify to appear before you for examination, to substitute, if they so desire, a three months' course of clinical instruction in the wards of a lunatic asylum for the same period of attendance in the medical wards of a general hospital.

It is signed by G. Fielding Blandford, M.D., F.R.C.P.L., St. George's Hospital, London; J. Crichton Browne, M.D., F.R.S.E., Leeds Medical School; T. S. Clouston, M.D., F.R.C.P.E., Royal Edinburgh Asylum; W. J. Hunt, M.D., F.R.C.P.E., Charing Cross Hospital, London; Robert Jamieson, M.D., University of Aberdeen; T. Laycock, M.D., F.R.C.P.E., University of Edinburgh; Henry Rayner, M.D., Middlesex Hospital, London; Alexander Robertson,

M.D., F.F.P.S.G., Town's Hospital and Asylum, Glasgow; W. H. O. Sankey, M.D., F.R.C.P.L., University College, London; George H. Savage, M.D. Lond., Guy's Hospital, London; T. Clave Shaw, M.D., M.R.C.P.L., St. Bartholomew's Hospital, London; Edgar Sheppard, M.D., D.C.L., King's College, London; H. Sutherland, M.D., M.R.C.P.L., Westminster Hospital, London; John Batty Tuke, M.D., F.R.C.P.E., F.R.S.E., Extra Academical School, Edinburgh; R. H. B. Wickham, F.R.C.S.E., University of Durham; W. Rhys Williams, M.D., St. Thomas's Hospital, London; and D. Yellowlees, M.D., F.F.P.S.G., Royal Glasgow Asylum.

THE LATE OUTBREAK OF TYPHOID IN SHEFFIELD.

AT a recent meeting of the Sheffield Board Guardians, it was stated that the workhouse contained thirty cases of fever, of which five had been admitted from one house. Although the general zymotic death-rate in Sheffield has recently been satisfactorily low, the fatal cases of fever have shown an excess for some weeks. Sheffield appears to be suffering from its neglect to provide suitable hospital accommodation for the isolation and treatment of infectious diseases. It is one of the few large towns without a fever-hospital. The admission of fever-cases into a workhouse, or even a workhouse infirmary, is a necessity which should now never arise in large towns.

SANITARY AND EDUCATIONAL EXHIBITION.

AN exhibition of sanitary, educational, and domestic appliances will be held from October 6th to the 16th, in the Corn Exchange, adjoining the Pavilion, Brighton, in connection with the Social Science Congress to be held contemporaneously in that town. The object of the exhibition is to bring under the notice of the public generally, and particularly those who are interested in social, sanitary, educational, and economical questions, the latest scientific appliances for improving the public health, promoting education, and advancing social economy. These will be classified under the following heads: 1. Warming, ventilation, and lighting; 2. Domestic appliances and apparatus; 3. Sanitary architecture and appliances; 4. Sanitary engineering and methods for disinfecting; 5. Food and clothing; 6. School furniture and school apparatus. The exhibition will be opened with an address to be delivered in the Dome. Lectures on the various classes of exhibits will be given during the period of exhibition.

THE ROYAL MEDICAL BENEVOLENT COLLEGE.

WE have just received the annual report of the Epsom Medical College, and are pleased to learn that the school is full, and that its finances are prosperous. We are not, however, equally satisfied with the manner in which the Council refers to the petition lately presented by a deputation of subscribers who are in favour of a reform in the present mode of electing scholars and pensioners. The report says that "the Council have received a memorial *purporting to have been signed by 1,342 subscribers*"—an expression which would certainly convey to most readers an idea that some of the signatures were not obtained in the usual straightforward manner. The report itself contains the strongest evidence of the necessity for the changes petitioned for. At the last election, there were forty-one candidates for four scholarships, and nine candidates for two pensions. Every one of these fifty candidates had been declared by the Council to be a deserving case, yet not one of them could possibly be successful without the expenditure of a considerable sum of money in canvassing, etc., whilst a large proportion, and these not necessarily the least deserving, must, in spite of this expenditure, inevitably be unsuccessful. The Council still hold to their idea of placing the names of those subscribers who object to being canvassed in a separate list; but this, as we have before explained, does not go to the root of the evil. The object of the petitioners is not to save themselves a little annoyance—it is but little trouble to drop the canvassing letters and cards into the waste-paper basket; they wish that the needy applicants may be spared all this unnecessary trouble and expense. At present, the members of the Council, with the help of their immediate friends and adherents, have practically the control of the elections; they thus enjoy a large amount of patronage without the

smallest responsibility as to the way in which it is exercised; those who signed the memorial desire that the Council shall still enjoy their patronage, but that they shall be openly responsible to the general body of governors for the way in which it is used. At present, fifty candidates and an army of friends fight and struggle for months in order that six of them may obtain the advantages of a *charity*. The petitioners think that these claims would be far more satisfactorily settled by a Committee of the Council, and they trust that the day is not far off when a charity election will no longer be an expensive scramble. The Council may be right in calling this a "sweeping" change; but, if so, the change is only the more necessary.

APOTHECARIES' HALL: PRIZES IN BOTANY.

AT the recent competitive examination for the Prizes in Botany, given annually by the Society of Apothecaries to medical students, the successful candidates were:—1. Neville Scott Whiting, of University College, a Gold Medal; 2. William Rushton Parker, of University College, a Silver Medal and a Book.

THE NECK OF THE FEMUR.

IN the current number of the *Art Journal* is a paper by Mr. Edward Owen, Demonstrator of Anatomy at St. Mary's Hospital, describing the arrangement of the cancellated tissue in the upper end of the femur. Mr. Owen's explanation differs very considerably from that which is to be found in Mr. Ward's work on *Osteology*. He argues that the weight received upon the head of the bone is transmitted to the shaft in two distinct courses. The first is by means of rays of bones which pass almost vertically from the interior of the head, to be lost in the inner wall of compact tissue in the shaft of the bone. These rays lie to the inner side of a plumb-line let fall from the upper and outer margin of the head to the compact tissue on the inner side of the shaft. The compact tissue on the outer side, as it approaches the base of the great trochanter, dissolves itself into arched spicules of cancellated tissue, which pass into the interior of the head of the bone, where they interlace with the vertical rays. These arched spicules afford the second course for the transmission of weight and shock, and are materially strengthened by fine arches which, springing from the inner compact pier, intersect them at regular intervals. Mr. Owen has shown the plan of this arrangement in vertical section, and has instituted a close comparison between it and the first iron bridge, of which he also gives an illustration. In that part of the neck where neither vertical nor arched rays are to be made out, the cancellated tissue takes no definite arrangement. This part is compared with the "spandrel" in the bridge.

SCOTLAND.

A MEETING of managers of the Royal Infirmary and Asylum, Aberdeen, was held a few days ago to consider the contracts for building a new west wing to the asylum, at an estimate of £5,000. It was resolved to delay proceedings for the present, in consequence of the unexpectedly large amount of the tenders.

THE funeral of the late Professor Oswald Bell of St. Andrew's took place on June 30th, and was attended by the Senatus Academicus, the Town Council, and a large number of private friends. Business was suspended in the town for some hours while the mournful ceremony was taking place.

THE inhabitants of the mining village of Moringside, near Wishaw, are at present suffering severely from the great scarcity of water. Hitherto the village has been supplied with water from an adjoining coal-pit belonging to the Shotts Iron Company, but this source having failed, the only supply that can now be obtained is from the Stone Craig's pit, a distance of fully a mile from the village.

GLASGOW ROYAL INFIRMARY: PROJECTED SCHOOL OF MEDICINE.

THIS matter seems about to be taken up in earnest by the directors of the Royal Infirmary. They are about to apply to the Crown for a new charter or a modification of their original one, to enable them to hold heritable property to the amount of £5,000, and some other powers. They also seek in the new charter to obtain power to establish a school of medicine at the infirmary. This seems to us the most important of the matters sought for. In the course of the meeting in which the matter was brought before the subscribers, Dr. Gairdner impressed on the managers the desirableness of not appointing individual lecturers to teach the several subjects, but making it open to any one who thought he could attract students to give courses of lectures on the various departments. The advantages of such an arrangement are obvious, as it offers facilities to any energetic young man to work his way up as a teacher. In whatever form it is finally established, the Royal Infirmary ought to form a very attractive extramural school.

HEALTH OF CUPAR ANGUS.

THIS town has been of late remarkably free from any epidemic disease, and it is believed that the plentiful supply of pure spring water, which was introduced into the town about a year ago, has had much to do with the preservation of the health of the inhabitants. The quality of the water cannot be surpassed. It may be mentioned, as illustrating the health which the community has enjoyed for the last six months, that during that period only twenty deaths have occurred in the parish. The population is 3,055, and thus the death-rate has been a little over thirteen per thousand *per annum*.

ABERDEEN UNIVERSITY COURT.

AT a meeting of the University Court, Aberdeen, held on July 2nd, a letter was read from Dr. Macrobin, professor of medicine in the University, petitioning to be allowed to retire from his professorship, the duties of which he has discharged with great ability and success for the past forty-three years. Advancing age and a failing voice made this step necessary. The court unanimously resolved to report to the Queen in Council their opinion that he ought to be allowed to retire under the provisions of ordinance 9. The court also altered ordinance No. 16, to the effect that in future there will be six non-professional examiners in medicine, each receiving £30 *per annum*, in place of three, each receiving £60. This alteration, however, will not come into force until it has received the approval of the Queen in Council. An order was read signifying the approval of the Council of alterations made at the last meeting in the ordinance regulation of the Fullerton, Moir, and Gray scholarships.

CLOSING OF AN ENDOWED HOSPITAL.

LAST week, workmen were engaged in barricading the windows of the Asylum for Incurables, Leith. This institution was built and endowed in 1840, by John Gladstone of Fasque, a native of Leith, and was intended to provide a refuge for incurables. For the past few years, the inmates have been few in number, and have received no accessions, and those who still remain have been boarded out. The building was offered by Sir T. Gladstone, the acting trustee, to the School Board, but not accepted, and will now, it is said, be disposed of privately.

THE SEASON STATUE.

THE case containing the statue was removed after the accident to the studio of Mr. Brodie, and, on examination, it was found that the damage occasioned by the fall was very considerable. But the artist expects that a fortnight's hard work will restore the model to a perfectly satisfactory condition.

SMALL-POX IN ABERDEENSHIRE.

WE are glad to be able to state that the last patient suffering from this disease has been discharged from the Small-pox Hospital in the town of Aberdeen, and it has now been closed. Since January 7th, 1875, seventy-six patients have been admitted, of whom sixty-four recovered.

and twelve died. In Woodside, a village in the neighbourhood of Aberdeen, however, the disease has again showed itself in the persons of three girls employed in a large factory there.

NORTH OF SCOTLAND MEDICAL ASSOCIATION.

THE annual meeting of this Association was held on Saturday, June 26th, in the Medico-Chirurgical Hall, Aberdeen. Dr. Jamieson, Aberdeen, the retiring president, delivered an admirable address on Insanity considered from the historical and physical point of view. Dr. Mackie of Inch was elected president for next year, and after further business was concluded, there was a long private discussion on medical ethics. The members dined together in the evening.

THE WHITADDER POLLUTION CASE.

WE learn that the defenders in the action brought by the riparian proprietors of the river Whitadder have caused intimation to be made to the proprietors' law agents that it will be unnecessary to go on with the trial, which was to have taken place this month in Edinburgh, as the pollution of the river to the extent of creating a nuisance will now be admitted by them, and that the court will be asked to give the defenders time to execute remedial measures for preventing any noxious matters flowing from these works into the river for the future.

PROSECUTION UNDER THE VACCINATION ACT.

AT the Sheriff Summary Court, last week, a druggist in Edinburgh was charged, at the instance of the inspector of the poor of St. Culbert's parish, with contravening the eighteenth section of the Vaccination (Scotland) Act, in failing to have his child vaccinated. The accused pleaded guilty, stating that he abstained from having the operation performed on principle. The sheriff imposed a fine of five shillings, with two guineas of expenses, with the alternative of ten days' imprisonment.

IRELAND.

SIR WILLIAM WILDE, M.D., has been elected an honorary member of the Royal Academy of Science at Upsala, and a corresponding member of the Geographical Society of Berlin.

THE DUBLIN MAYORALTY FOR 1876.

AT a meeting of the Municipal Council, held on last Monday, it was proposed by the Hon. J. P. Vereker, seconded by Sir J. W. Mackey, and carried unanimously, that Dr. Owens, J.P., should be Lord Mayor of Dublin for 1876. Dr. Owens has had considerable experience in sanitary matters.

DUBLIN MAIN DRAINAGE.

HER Majesty's Treasury have objected to increase the loan of £350,000 to £500,000 for main drainage purposes, without further security than the corporation has already offered. Their lordships also recommend that should any money be lent, that the Government should be represented on any committee appointed to superintend the execution of the scheme. This latter suggestion is a most reasonable one, and is the only way to give confidence to the citizens, should the intercepting sewerage system be ultimately adopted.

THE LATE FIRE IN DUBLIN.

THE recent fire has not proved so disastrous as some statements published would lead one to believe, and it is now thought that the fire will have done considerable service in a sanitary point of view, by removing a large number of houses let in tenements, in a bad state of repair, overcrowded with families of the poorest class, and hot-beds of epidemic disease. The total number of houses destroyed has been seventeen, and two have since been taken down, making a total of nineteen, which contained about fifty-six families, the average value of

whose effects may be placed at £10, though this may be considered rather a high estimate, which would make a total of £560 amount of damage to those inhabiting the tenements; but, as about £2,000 has been collected, several of these poor families so suddenly removed from their homes will soon be in a more prosperous condition than before the calamity.

HEALTH OF IRELAND: QUARTERLY REPORT.

DURING the first quarter of the year, the births registered amounted to 36,444, being equal to an annual birth-rate of 27.5 per 1,000; and the deaths to 30,589, or an annual mortality of 23.1 in every 1,000; the birth-rate being under, and the death-rate beyond, the average. Small-pox caused a good many deaths; and, in reference to this subject, a registrar of the Ballinrobe Union states that a few cases of small-pox of a most virulent form occurred, and in several instances it attacked persons who previously had the disease from inoculation, though, curiously enough, it spared parties who had been vaccinated. Abuse of all sanitary arrangements is spoken of very strongly by various registrars, and a considerable number of the deaths clearly traceable to the unwholesome conditions under which so many of the poorer classes in Ireland exist. Among the deaths registered was one at Mallow of a man stated to be 107 years of age. Small-pox caused 239 deaths; measles produced 195; to scarlet fever, 1,107 were ascribed; diphtheria, 128; diarrhoea, 450; and to fever and whooping-cough, 769 and 322 respectively were referred.

SANITARY INQUIRY IN A DUBLIN SUBURB.

A SANITARY inquiry was held on June 25th at the Town Commissions Hall, Pembroke Township, Dublin, into a complaint made by the inhabitants that a portion of the district had not been provided with a "sufficient sewer", and that a nuisance existed arising from an open ditch which received the sewage of a populous and fashionable neighbourhood. The petitioners allege that "the nuisance is dangerous to human life". It is not long since the unsanitary condition of Beggar's Bush Barracks, situated not very far from the site of the present inquiry, attracted attention to many unhealthy points about this district. The inquiry was held by Captain Robinson, the Local Government Board Inspector for the Dublin District. The inquiry presented some curious features as to the manner in which it was conducted. The person presiding was an ex-cavalry officer; the case for the petitioners was conducted by a clergyman (the Rev. E. W. Maunsel); and the case for the local authority by their Chairman (Mr. Vinnon, the agent to the Earl of Pembroke, an eminent Dublin business man). It will be observed, that not one of those concerned knew anything of either law, medicine, or engineering, and therefore had to trust altogether to the statements of the witnesses. Several witnesses deposed to illness in the neighbourhood, and to the great prevalence of zymotic diseases in the vicinity of the nuisance. Dr. Murdock, the medical sanitary officer of the district, considered the nuisance to be dangerous to health. Dr. Grimshaw was specially employed by the petitioners, and described a state of things well calculated to produce all kinds of zymotic disease. We cannot enter upon details here; but suffice it to say that a wide ditch about a mile long runs through one of the most fashionable portions of the most fashionable suburb of Dublin, and receives the sewage from hundreds of houses. The ditch has only about a fall of a foot and a half through its whole length. This mile of cesspool contains about eighteen inches of foetid mud. This horrible nuisance has been repeatedly complained of, and nothing has been done towards remedying it; hence the inquiry. The only defence put up by the Town Commissioners amounted to this: that it was a difficult thing to drain a place without a natural fall; that it would cost a good deal to make an artificial fall; and, lastly, the usual and good defence that the ditch belonged to the railway company, and that a neighbouring sanitary authority meant sometime to construct a system of main sewers which ought to take in the Pembroke district.

THE EDINBURGH MEETING.

ON the page facing Dr. Barnes's address, will be found a blank form intended to be filled up by those members proposing to attend the next annual meeting of the Association in Edinburgh. For the convenience of all concerned, it is desirable that every one who expects to attend this meeting should fill up the form and post it prepaid.

NEW MEMBERS.

DURING the last fortnight, nearly two hundred members of the profession have intimated at this office their desire to become members of the British Medical Association, and have received the required forms of nomination for signature. Our associates can be furnished with forms for proposing new members on application to the Honorary Local Secretaries of Branches, or the General Secretary, Mr. Francis Fowke, 36, Great Queen Street, London, W.C. Nomination papers intended to qualify new members for election in time to attend the next annual meeting in Edinburgh, should be duly signed and forwarded to the General Secretary without any delay.

MEDICAL ADVERTISING.

AT the recent annual meeting of the Lancashire and Cheshire Branch of the British Medical Association, the following preamble and resolution were adopted, endorsing the views expressed recently by the BRITISH MEDICAL JOURNAL on a subject interesting alike to the profession and to the public.

That this Branch, having considered the prevalence of the existing practice of advertising in the daily and other newspapers, medical works avowedly addressed only to medical readers, and not calculated to enlighten (or intended for the perusal of) the public generally, is of opinion that, in the majority of instances, this practice can in no way tend to public edification; that it is largely used as a means of indirectly advertising the names and departments of practice of the authors of such books; that it tends to confuse and mislead the public by confounding the distinction between medical men of real eminence and laborious work with others who find in such advertisement means of notoriety, and a costly but still lucrative mode of commercially pushing their professional fortunes.

Resolved, therefore, That this Committee is of opinion that medical works intended for medical readers should not be advertised in any other than medical journals.

Resolutions to the same effect were also passed at the recent combined annual meeting of the Cambridge and Huntingdon, East Anglian, and South Midland Branches, and at the annual meeting of the Midland Branch, of the British Medical Association.

TREATMENT OF HABITUAL DRUNKARDS: DEPUTATION TO THE HOME SECRETARY.

A DEPUTATION, principally representative of the medical profession, waited on July 1st upon Mr. Cross, the Secretary of State for the Home Department, to urge upon the Government the desirability of introducing in the next session of Parliament a measure, founded on the recommendation of the Select Committee of the House of Commons, for the control and management of the class of persons known as habitual drunkards, or dipsomaniacs. There were upon the deputation: the Earl of Shaftesbury; Lord Houghton; Lord Henry Scott, M.P.; Sir H. Fergusson-Davie, M.P.; Dr. Lush, M.P.; Mr. M'Carthy Downing, M.P.; Sir Wm. Fergusson, Bart.; Sir Thomas Watson, M.D., Bart.; Canon Conway; Dr. C. J. B. Williams, F.R.S., Physician Extraordinary to the Queen; Mr. W. C. Garman, ex-President, and Dr. Bodington, President-Elect, of the Birmingham and Midland Counties Branch of the British Medical Association; Dr. Pigott, D.C.L.; the Rev. Dr. Cox, Vicar of St. Helen's; Dr. H. Monro; Dr. Farquharson; Mr. Holthouse; Mr. Curling, F.R.S.; Dr. Murchison, F.R.S.; Mr. J. Wood; Dr. Sibson, F.R.S., and others.

The Earl of SHAFTESBURY, in introducing the deputation, said he could not do better than read the memorial of members of the medical profession and others, which he begged to hand to the right honourable gentleman. The noble lord then handed to the Home Secretary the document, which was signed by, amongst others, the Dean of West-

minster; Sir George Burrows, M.D., Bart.; Sir Thomas Watson, M.D., Bart.; Sir William Fergusson, Bart.; Sir James Paget, Bart.; Sir William Gull, M.D., Bart.; Sir Henry Thompson; C. J. B. Williams, M.D., F.R.S.; Edward H. Sieveking, M.D.; and Cæsar Hawkins, F.R.S.

Sir THOMAS WATSON observed that, during his very long professional life, he had been incredulous respecting the reclamation of habitual drunkards, but his late experience had made him sanguine as to their cure, with a very considerable number of whom excessive drinking, indulged in as a vice, developed itself into a most formidable bodily and mental disease, resulting from alcoholic poisoning of the system. The introduction in excess continually, from time to time, of intoxicating drinks—particularly of alcoholic drinks—led to an accumulation in the system of their specific poisons. The tissues of the body and the nervous system—which included the brain—became at length so impregnated, so charged with the poison, as to produce in the unhappy victim of this condition a craving for the accustomed stimulant which became absolutely irresistible. Such people as those were "dipsomaniacs"; and for those victims there could be no doubt there was but one remedy: absolute restraint from all access to spirituous or alcoholic drink for a sufficient length of time, so that they should gradually recover from the mania. When men were inclined to renew the vice, there should be "institutions" or "retreats" for their reception, where they might be placed by their friends or well-wishers, by their own personal desire, or by the authority of the magistrates, for periods of three to twelve months.

Dr. MONRO remarked he would rather treat fifty lunatics than one "dipsomaniac".

Mr. CROSS replied to the deputation in the following terms. Lord Shaftesbury and Gentlemen,—I am very glad I have seen you here to-day. This matter was brought before the attention of Parliament by the late Mr. Dalrymple, who certainly was most energetic in advocating repressive measures. I am not now going to give you—nor do you ask me to give you—any expression of opinion on the matter. You must all know that there are great practical difficulties in the way. We are enabled to treat criminals and lunatics, but in this matter we should have to deal with a class which are not quite criminals nor quite lunatics, although they nearly approach both classes in many cases. As an old visitor of asylums, I have seen many of these cases treated as cases of lunacy with very beneficial effects. I remember a case in which one poor man stayed in an asylum for years by the advice of his friends, because he felt that if he were freed from restraint he would lapse into his former habits. But you have not to-day gone into the question of numbers or expense. I take it that you might find a great many dipsomaniacs in London.

Mr. GARMAN: I believe so; but we think that the class of cases would be so readily distinguished that the number, where forced seclusion would be necessary, would not be so numerous as might be supposed.

Mr. CROSS: However, there are great practical difficulties in the way. There are numbers of a class of cases where the dipsomaniacs would have to be given into custody, and there would be great difficulty in getting persons of that kind into safe keeping. All I can say on the present occasion is, that your memorial shall receive that consideration which its importance deserves.

The deputation then withdrew.

CORRESPONDENCE.

VOTING BY PROXY AT THE ROYAL COLLEGE OF SURGEONS.

SIR,—The last election at the Royal College of Surgeons has revealed a wide-spread discontent amongst the Fellows. It is assumed that the members of Council are elected by the Fellows at large; but the election takes place at the College in London, whilst the majority of the electors reside in the country, hundreds of miles distant, so that it is not possible that any election can represent the opinions of the general body.

It is a mere mockery of justice to bestow a franchise on Fellows which in many cases they cannot possibly use, because they are unable to leave their duties, and incur the cost, the loss of time, and fatigue of the journey, simply to enable them to drop a voting paper into a ballot-box. Every man entrusted with a vote is bound to have a *bona fide* opportunity of recording it; for if he have not, he is virtually disenfranchised. For this reason, Parliament has wisely decreed that the members of universities, who are in a similar position with respect to

residence to the Fellows of the Royal College of Surgeons, can vote by papers without the necessity of a journey.

By the Act 24 and 25 Vic., cap. 53, the members of the Universities of Oxford, Cambridge, and Dublin, are empowered to employ voting papers. This privilege was extended to members of the London University by 30 and 31 Vic., cap. 102; and the details of election were further simplified by 31 and 32 Vic., cap. 65. The College of Surgeons having been shown the way, has only to take advantage of the precedent by procuring an Act, of a few lines in length, rehearsing the University Election Acts, and applying their provisions to the particular case of the College of Surgeons before the next election takes place. The question has only to be raised for its propriety to be admitted; for where is the surgeon who would not rather watch a serious case when life or death may depend, than neglect his patient, that he may formally hand over a printed paper to the recognised official of the College of Surgeons? To obtain the desired end, proper means must be taken. The body of country Fellows must ask before their request can be granted; and I shall be glad to receive the names of every Fellow desirous of voting by papers, that we may at once take steps to obtain the Act of Parliament necessary to obtain our just due.

I remain, sir, your obedient servant, ALFRED SMEE.
7, Finsbury Circus, July 6th, 1875.

P.S.—Only fifty-seven country Fellows voted at the last election.

MR. TEALE'S CASE OF EXCESSIVELY HIGH TEMPERATURE.

SIR,—On February 28th, I brought before the members of the Clinical Society, and through them of the profession in general, some notes of a case of excessive and long maintained high temperature after special injuries, with recovery, in which a temperature ranging from 108 to 122 deg. and upwards, had been maintained for a period of nearly nine weeks.

It is not, I think, surprising that the relation of such a case, which, if it be faithfully recorded, tends to upset all the ideas previously entertained as to vital resistance to heat, should have provoked some criticism, and even, in the minds of some, a certain amount of scepticism. From various quarters, I have received suggestions and questions on points of difficulty in the case; and to these I propose, with your permission, to reply *seriatim* in the JOURNAL.

I have been asked, "Was the temperature ever taken in the mouth?" I was more than once desirous to do so, whilst my patient was very ill. The attempt, however, always caused retching, and was not persevered in. After the paper was read, as Miss G. was then suffering from the relapse brought on by her journey home, I wrote and asked her brother to call in her medical attendant, to ascertain the temperature in her mouth. The brother, in reply, says: "On Sunday, March 7th, my sister's temperature was taken under the tongue, between the thighs, and under the arm (simultaneously), and was from 108 to 108½ deg."

Mr. Henry Hind, partner of the Messrs. Trotter of Stockton, writes on the same date:

"I was asked to see your patient, Miss G., on Sunday, March 7th, and I then found her with a quiet pulse, and apparently in a good state of health, but in bed; and upon taking her temperature, I found the thermometer in use by her to register 108 deg. This I verified by using my own, which registered the same within one-eighth part of a degree. I have now in my possession a thermometer lent by me to Mr. G., which is indexed to mark 110 deg.; and after use, the register was driven into the little bulb at the end."

"Was the temperature ever taken in the rectum, groin, and axilla simultaneously?"

On December 10th, 1874, it was so taken (as was stated in my paper, an abstract of which only appeared in the JOURNAL). The result was: temperature in both axillæ, 110.4 deg.; in rectum, 111 deg. It was repeatedly taken in both axillæ, and between the thighs simultaneously, when, as a rule, the three thermometers were within half a degree of one another."

"Have you ever kept your hand and eye on the instrument whilst any of the high temperatures were recorded?"

I have repeatedly steadied the thermometer in the axillæ myself, and have watched them rise simultaneously to heights ranging from 112 to 118 deg. and upwards. The thermometers have then been carefully removed by me into the adjoining room, to avoid drawing our patient's attention unduly to our observations; and I have then frequently given them to the nurses and friends to grasp. The sensation to the hand of

a glass tube heated to 118 deg. is one that, when once it has been felt, is not easily forgotten.

"Had you a trained nurse during the period of the high temperature?"

For most of the time; at first, one from the York Institution, and afterwards one from Lincoln. They were both somewhat sceptical about the high temperature at first, having been accustomed to take readings in hospitals; and I put them on their guard against mistakes. They were repeatedly present when observations were taken.

"Had the patient frequently hot bottles in bed with her, or hot flannels?"

To her feet, an India-rubber hot-water bottle was occasionally applied, but nowhere else. To her head and spine, she had very frequently ice-bags, which were grateful to her. I was early made acquainted with the "hot-water-bottle theory", and mentioned it to her nurses and attendants. On this point, I would ask, if a patient could endure in contact with her skin *one* bottle so hot that it would raise a thermometer to 118 or 120 deg., still less two or three in various parts of the body. On removing the instrument, I have repeatedly placed my hand in the axilla, and have found the impression of heat given there as great as that given by the thermometer, the patient's hands being at the same time icy cold.

Observations were taken at all sorts of times, sometimes in the night when the patient was dozing.

During the nine weeks of my patient's severe illness, a variety of instruments (most of which have since received the Kew certificate) registered temperatures which never once fell below 108 deg., and which sometimes reached 122 deg. and upwards. For five weeks afterwards, the patient being convalescent, the same instruments never once registered a temperature above 100 deg. After the patient's return home, when she was suffering from a partial relapse of her old symptoms, another set of instruments, in the hands of another medical man, again registered as high as 110 deg. and upwards (the temperature in the mouth tallying with that in the axilla). Since that time, convalescence having again been gradually approached, frequent observations have never on any occasion given a high rate of temperature.

I have now laid before the profession every point that occurs to me as likely to be of interest in this case. I have carefully looked round to see if there can have been any possibility of error, and have failed to find any. I now leave it, with the conviction that, if it has been accurately observed and faithfully recorded, as I believe it has been, other facts must sooner or later crop up, which will tend to throw light on that which is at present obscure.

In the discussion which followed the reading of the paper at the Clinical Society, Mr. Jonathan Hutchinson pointed out that there was an essential difference between the cases of abnormal temperature following lesion of nerve-centres, and those which formed part of the course of a specific fever; and Dr. Farquharson drew attention to a case of excessive lowering of temperature after spinal injury to 81 deg. Again, in the BRITISH MEDICAL JOURNAL of April 3rd, 1875, under the heading "Drunkenness in Germany", an account is given of thermometric observations carefully taken both in rectum and axilla, in two cases of alcohol poisoning, in one of which a temperature of 76 deg. was recorded, and in the other of 75.5 deg., with recovery in both cases. That is to say, a depression of 23 deg.; whilst in my case it was raised to about the same amount.

In pursuance of the same idea, that the greatest variations of temperature may be looked for in injuries to the nervous centres, Mr. Pridgin Teale, on the same occasion, related a case he had recently seen of fracture of the skull, where, in a few hours after the injury, the temperature had risen to 109 deg., when death ensued. Can any one say how high it might not have risen, had not the injuries caused death? For I contend that there is no proof in such cases that the temperature, *per se*, is the cause of death.

Dr. Lionel Beale, in the Lumleian Lectures on Life and on Vital Action in Health and Disease (see BRITISH MEDICAL JOURNAL, May 8th, 1875), in further illustration of the same idea, speaking of bioplasm-particles, says:

"Another important change to which these bioplasm-particles, in connection with the peripheral expansion of nerves, probably takes part, is the development of heat. Is it not possible that, under certain circumstances, the mode of force developed in the matter of the nerve-bioplasm may be changed, heat being rapidly produced instead of nerve-force? The suggestion at once occurs, whether the explanation of such exceptional cases of high temperature as that brought by Mr. John Teale before the Clinical Society a short time since, will not probably be found to have something to do with the phenomena of nerve-bioplasm." I am, sir, faithfully yours,

JOHN W. TEALE.

Scarborough, June 20th, 1875.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Queen's Hotel, Birmingham, on Tuesday, the 13th day of July next, at Three o'clock in the afternoon.

FRANCIS FOWKE,
General Secretary.

36, Great Queen Street, London, W.C., June 19th, 1875.

BRITISH MEDICAL ASSOCIATION: FORTY-THIRD ANNUAL MEETING.

THE Forty-third Annual Meeting of the British Medical Association will be held at Edinburgh, on Tuesday, Wednesday, Thursday, and Friday, August 3rd, 4th, 5th, and 6th, 1875.

President.—E. COPEMAN, M.D., Senior Physician to the Norfolk and Norwich Hospital.

President-elect.—Sir ROBERT CHRISTISON, Bart., M.D., D.C.L., LL.D., F.R.S.Ed.

An Address in Medicine will be given by JAMES WARBURTON BEEBIE, M.D., F.R.C.P.Ed.

An Address in Surgery will be given by JAMES SPENCE, F.R.C.S.Ed., F.R.S.E., Professor of Surgery in the University of Edinburgh.

An Address in Physiology will be given by WILLIAM RUTHERFORD, M.D., F.R.S.E., Professor of the Institutes of Medicine in the University of Edinburgh.

The business of the Association will be transacted in Six Sections, viz.:

SECTION D. PUBLIC MEDICINE.—*President:* Right Hon. Lyon Playfair, M.P., C.B., F.R.S. *Vice-Presidents:* Inspector-General Smart, M.D., C.B.; Dr. Arthur Mitchell. *Secretaries:* Dr. Andrew Smart, 24, Melville Street, Edinburgh; Dr. Fraser, Knutsford.

SECTION A. MEDICINE.—*President:* Dr. Quain, F.R.S., London. *Vice-Presidents:* Professor W. T. Gairdner, Glasgow; Dr. Grainger Stewart, Edinburgh. *Secretaries:* Dr. Claud Muirhead, 7, Heriot Row, Edinburgh; Dr. Stephenson, 33, Buccleuch Street, Edinburgh.

SECTION B. SURGERY.—*President:* Professor Lister, F.R.S. Edinburgh. *Vice-Presidents:* Professor Pirrie, Aberdeen; Professor Macleod, Glasgow. *Secretaries:* Thomas Annandale, Esq., Charlotte Square, Edinburgh; Dr. John Duncan, 8, Ainslie Place, Edinburgh.

SECTION C. OBSTETRIC MEDICINE.—*President:* Dr. Matthews Duncan. *Vice-Presidents:* Dr. Keiller; Professor Simpson. *Secretaries:* Dr. Peel Ritchie, 16, Hill Street, Edinburgh; C. J. Cullingworth, Esq., 260, Oxford Street, Manchester.

SECTION E. PSYCHOLOGY.—*President:* Dr. Lowe, F.R.S., Edinburgh; *Vice-Presidents:* Dr. Sibbald; Dr. Clouston. *Secretaries:* Dr. Brown, Royal Asylum, Edinburgh; Dr. Saundby, Saughton Hall, Edinburgh.

SECTION F. PHYSIOLOGY.—*President:* Professor Burdon Sanderson, F.R.S., London. *Vice-Presidents:* Dr. McKendrick; Professor J. Dewar. *Secretaries:* Dr. Lauder Brunton, F.R.S., 23, Somerset Street, Portman Square, London. Dr. Caton, 18, Abercrombie Square, Liverpool.

Honorary Local Secretaries.

Dr. John Batty Tuke, Edinburgh.

John Chiene, Esq., Edinburgh.

Dr. J. G. McKendrick, Edinburgh.

Dr. J. Bishop, Edinburgh.

Tuesday, August 3rd.

11 A.M.—SERVICE IN ST. GILES'S CHURCH. Sermon by Rev. Dr. Alexander.

1 P.M.—MEETING OF COMMITTEE OF COUNCIL.

3 P.M.—MEETING OF THE COUNCIL, 1874-75.

3.30 P.M.—GENERAL MEETING.—*President's* Address; Annual Report of Council; and other business.

9 P.M.—*PRESIDENT'S* RECEPTION IN ASSEMBLY ROOMS, MUSIC HALL.

Wednesday, August 4th.

9.30 A.M.—MEETING OF COUNCIL, 1875-76.

11.30 A.M.—SECOND GENERAL MEETING.

11.30 A.M.—ADDRESS IN MEDICINE.

2 P.M.—SECTIONAL MEETINGS.

9 P.M.—CONVERSAZIONE GIVEN BY THE ROYAL COLLEGE OF PHYSICIANS IN THE INDUSTRIAL MUSEUM.

Thursday, August 5th.

9 A.M.—MEETING OF THE COMMITTEE OF COUNCIL.

10 A.M.—THIRD GENERAL MEETING.—Reports of Committees.

11 A.M.—ADDRESS IN SURGERY.

2 P.M.—SECTIONAL MEETINGS.

6.30 P.M.—PUBLIC DINNER IN MUSIC HALL.

Friday, August 6th.

10 A.M.—ADDRESS IN PHYSIOLOGY.

11 A.M.—SECTIONAL MEETINGS.

1.30 P.M.—CONCLUDING GENERAL MEETING.

4 P.M.—PARTY IN THE ROYAL BOTANIC GARDENS, GIVEN BY THE UNIVERSITY OF EDINBURGH.

Saturday, August 7th.

EXCURSIONS.—Bass Rock, Melrose, Trossachs, Roslin.

Gentlemen desirous of reading papers, cases, or other communications, are requested to forward the titles to the General Secretary, or to one of the Secretaries of the Section in which the paper is to be read. All papers should be forwarded to one of the above named officers at as early a date as possible.

No paper must exceed twenty minutes in reading, and no subsequent speech must exceed ten minutes; all speeches at the General Meeting must not exceed ten minutes each.

ANNUAL MUSEUM.

The Eighth Annual Museum of the British Medical Association will be held in the Practical Chemistry Class-room in the University on the 3rd, 4th, 5th, and 6th of August, 1875, and will be open from 10 A.M. to 6 P.M. The Committee appointed to take charge of the arrangements for this museum will be glad to receive for exhibition:

1. Latest Inventions in Medical, Surgical, and Obstetrical Instruments and appliances of all kinds.

2. New Drugs and their Preparations, and New Articles of Diet for Invalids.

3. General Pathological Specimens, with photographs, models, casts, drawings, etc., illustrating Disease.

4. Specimens and Preparations in connection with Injuries and Diseases of Bones and Joints. [It is desired to make this a special feature in the Exhibition.]

5. New Physiological Apparatus.

6. Microscopes and Microscopic Specimens, Pathological and General; New Chemicals and other Appliances used in Histological Research.

The following is a list of the Museum Committee. All communications to be addressed to the Hon. Secretaries:—Professor Turner, Dr. Angus Macdonald, Dr. Argyll Robertson, Dr. John Wyllie, Dr. W. Gordon, Mr. Thomas Annandale, and Mr. A. B. Stirling. Dr. Charles E. Underhill, 8, Coates Crescent, and Dr. John Playfair, 25, Rutland Street, *Hon. Secretaries.*

NOTICE TO EXHIBITORS.—Application for space should be made as soon as possible, and the amount required mentioned. A written or printed description of all objects intended for exhibition must be forwarded for insertion in the Catalogue; and the Committee earnestly request all intending Exhibitors to bear in mind that it is impossible for their descriptions to be inserted unless sent in early—viz., not later than July 17th. All objects intended for exhibition must be delivered on or before July 27th. They must be addressed "Curator of Museum of British Medical Association, the University, Edinburgh."

N.B.—The Name of the Exhibitor should be written on the outside of each parcel, and a card bearing his name and address should be enclosed, to facilitate the return of the articles.

FRANCIS FOWKE, *General Secretary.*

36, Great Queen Street, June 26th, 1875.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

THE annual meeting of the above Branch will be held at Aberdeen, on Saturday, July 17th, at 1.30 o'clock P.M.

Further particulars will be intimated by circular.

ALEXANDER OGSTON, *Honorary Secretary.*

Aberdeen, June 1875.

WEST SOMERSET BRANCH.

THE annual meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, July 22nd, at 2.30 P.M.

The President-elect, Dr. Cordwent, will read a short paper on "Vital Conservancy in Disease".

Members wishing to communicate papers or cases are requested to send notice to the Secretary.

The dinner will take place at 5 o'clock.

W. M. KELLY, M.D., *Honorary Secretary.*

Taunton, June 29th, 1875.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE annual meeting of this Branch will be held at Abergavenny, on Friday, July 16th.

Nomination-papers and the titles of communications, etc., must be sent to one of the undersigned by June 26th at the latest, in order that they may appear in the circulars.

Further particulars in the circulars as usual.

ANDREW DAVIES, Swansea. } *Hon. Secs.*
ALFRED SHEEN, M.D., Cardiff. }

Swansea, June 14th, 1875.

BORDER COUNTIES BRANCH.

THE annual meeting of the Border Counties Branch will be held at Dumfries, on Friday, July 23rd, 1875: *President*, Dr. GREEN, Kendal; *President-elect*, Dr. W. A. F. BROWNE, Dumfries.

Gentlemen intending to be present are requested to communicate their intention to the undersigned.

HENRY BARNES, M.D. } *Hon.*
J. SMITH, M.D. } *Secs.*

Carlisle, June 28th, 1875.

YORKSHIRE BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at the Medical School, Leeds, on Wednesday, June 9th. Dr. MARTIN DE BARTOLOMÉ having resigned the chair to the new president, Mr. TEALE, he, after a few remarks, called upon the secretary to read the report of the Council.

Report of Council.—The report stated that there had been a steady increase in the prosperity of the Branch. Twenty-five new members had been admitted during the year; eight had been lost by deaths and resignations, making the present number 230, and showing an absolute increase of seventeen members. Reference was then made to the business done at the two ordinary meetings held at Scarborough and Huddersfield, and to the value and number of the communications which had been brought forward. The report then went on to speak of the progress of the Parent Association, and the valuable work which it had effected since the foundation in 1832. With this growth had improved the financial position of the Association, by which it was enabled to afford considerable assistance to the advancement of medicine and allied sciences, by devoting grants of money for the promotion of original research. Regret was expressed at the death of their venerable associate Mr. W. Hey; and the report concluded, after thanking the President and Council for their services, by calling upon each member to use his endeavours for the furtherance of the objects of the Association and the Branch, and for the increasing their numbers, and showing that each individual might, if he chose, become an important unit in this extensive and powerful professional brotherhood.

Election of Officers and Council for 1875-6.—The following were elected—*President*: T. P. Teale, Esq. *President-Elect*: Wm. Burnie, M.D., Bradford. *Honorary Secretary and Treasurer*: William Procter, M.D., York. *Branch Council*: B. Dodsworth, Esq.; W. D. Husband, Esq.; W. Matterson, M.D.; S. W. North, Esq.; G. Shann, M.D.; I. M. Williams, Esq.; York: T. C. Allbutt, M.D.; C. Chadwick, M.D.; J. D. Heaton, M.D.; S. Hey, Esq.; T. R. Jessop, Esq.; T. P. Teale, Esq.; T. Scatteringood, Esq.; C. G. Wheelhouse, Esq.; Leeds: M. Martin de Bartolomé, M.D.; J. Benson, Esq.; W. F. Favell, Esq.; J. C. Hall, M.D.; A. Jackson, Esq.; J. H. Keeling, M.D.; Sheffield: R. H. Meade, Esq., Bradford: R. T. E. B. Cooke, Esq., Scarborough: S. Holdsworth, M.D., Wakefield: S. Knaggs, Esq., Huddersfield. *Representatives in the General Council*: T. C. Allbutt, M.D.; W. F. Favell, Esq.; J. C. Hall, M.D.; J. D. Heaton, M.D.; S. Holdsworth, M.D.; A. Jackson, Esq.; W. Matterson, M.D.; R. H. Meade, Esq.; G. Shann, M.D.; T. P. Teale, Esq.; C. G. Wheelhouse, Esq.

Clinical Cases.—The PRESIDENT then said that, rather than deliver a formal address, he had chosen to exhibit and make remarks on a number of interesting clinical cases. The first were a series of cases of disease of the trochanteric bursa, simulating hip-joint disease. The disease, he said, consisted in suppuration of the bursa which intervenes between the trochanter major and the flat tendon of the glutæus maximus which is inserted into the fascia lata. In all there was absence of hip-joint disease, although the simulation had been such

that the point could not be decided until the muscles became relaxed under chloroform. The treatment consisted in the free opening of the diseased cavity, and relieving the bursa from pressure by division of the glutæal tendon. Mr. Teale also exhibited a series of successful rhinoplastic cases.

Simulated Hip-Disease.—Mr. MCGILL read a paper on two cases simulating hip-joint disease, cured by division of the fascial attachment of the glutæus maximus. In one case the disease had existed for two years; for eighteen months of this time, the patient, a boy aged 8, had been kept in bed. The disease, which was external to the joint, was cured by division of the glutæal tendon. The other patient was a girl, aged 9; her symptoms were neither so severe nor of such long standing. She was cured by the same treatment. Mr. Mc Gill thought it was doubtful in these cases of inflammation external to the hip-joint, whether the lesion commenced in the bursa over the great trochanter or in the cellular tissue round the joint; in either case division of the tendon of the glutæus maximus, either directly or subcutaneously, was indicated.

Necrosis of Cranial Bones.—Mr. IKIN exhibited a case of extensive necrosis of the temporal and parietal bones in a staff-sergeant, aged 46. About two years ago, a small tumour appeared on the upper part of the head. It was opened, and little or no pus escaped; and, after a short time, the bone could be felt three or four inches in each direction round the wound. Thinking that the dead bone might eventually be detached, it had not been thought desirable to interfere. His general health was good, and he stated that he had not had syphilis.

Temporary Paralysis.—Mr. IKIN exhibited a case of temporary loss of vision, partial paralysis, etc., from lightning, in a staff-sergeant, aged 48. During a storm of thunder and lightning in January, he was in a room, and, immediately after a vivid flash, he felt "dazed", with violent pain down the left side of his head and arm, and said that he was blind of his left eye; during the night he became delirious, and had all the symptoms of an apoplectic seizure. Under treatment, he was better in a week or ten days, but was ailing for two months. The sight of his left eye was now as good as ever, but he had not entirely recovered the nervous shock.

Origin of Typhoid Fever.—Dr. BURNIE related two cases, the circumstances of which, he thought, tended to show the possibility of the origin of typhoid fever *de novo*.

Gall-stone.—Dr. MATTERSON related a case of gall-stone.

Dinner.—After the meeting, thirty-five members dined at the Great Northern Hotel.

SOUTH-WESTERN BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at the Royal Albert Hospital, Devonport, on Thursday, June 17th, at 1 P.M. About sixty members were present.

Dr. SPENCER THOMSON, the retiring president, in opening the business, thanked the members for the honour done him in electing him last year the president of so large and important a Branch of the British Medical Association. His duties had been very easy. His hope was to have held some meetings during the year, but he was informed that the members were too widely scattered over the two counties to permit of this being done. In such a town as Devonport, with Plymouth and Stonehouse near, he thought this desirable plan might be carried out. He concluded by introducing his successor, P. W. Swain, Esq., whose choice as president he regarded as an honour to the Branch.

President's Address.—Mr. SWAIN having taken the chair, delivered an address, which will be published in the JOURNAL.

On the motion of Mr. KERSWILL, seconded by Dr. THOMSON, the president was thanked for his able address.

Next Annual Meeting: Officers and Council.—It was agreed that the place of meeting next year be Exeter; and the following officers and Council were elected. *President-elect*: C. H. Roper, Esq. *Members of Council of Branch* (in place of those retiring): J. Bankart, M.B. (Exeter), A. Baker, M.D. (Dawlish), S. Budd, M.D. (Exeter), H. J. Edwards, Esq. (Teignmouth), E. M. Puddicombe, Esq. (Silverton), T. M. Ward, Esq. (Exmouth). *Representatives in the General Council*: W. Brown, Esq.; H. Harris, M.D.; R. W. P. Kerswill, Esq.; W. W. Macreight, M.D.; T. Owen, Esq.; P. W. Swain, Esq.; Spencer Thomson, M.D. *Secretary*: J. Woodman, Esq.

Votes of Thanks.—The President, for his conduct in the chair, and the ex-President, for his year's services, were thanked.

Communications.—Mr. W. P. SWAIN exhibited five cases of excision of the hip, knee, and elbow joints, which had been performed in the Royal Albert Hospital by himself, Mr. C. Bulteel, and Mr. R. J. Laity.

2. Dr. SPENCER THOMSON read notes on the Rapid Relief of Neuralgic Pain.

3. Mr. C. BULTEEL related a case of Renal Calculus, causing Suppuration in the Right Lumbar Region, its Removal by Operation: Death from Pneumonia and Erysipelas.

4. Mr. E. H. EDLIN read a paper on the Slings of Stumps after Amputation.

In the room was exhibited anatomical preparations; Mr. W. Heath showed microscopes and spectroscopes, and Mr. F. Codd a spectroscope with subjects showing the difference in the spectral analyses of blood and colouring matters.

After the meeting several members inspected the hospital, in one of the rooms of which was a large display of Millikin's surgical instruments. Later on, a large party went on board H.M.S. *Cambridge*, inspected the fine museum of modern ordnance, and witnessed the explosion of sea-torpedoes.

Dinner: In the evening the members, to the number of sixty-five, dined together at the Royal Hotel, where an excellent dinner was served. The president, Mr. P. W. Swain, in the chair, had the support of the mayors of Devonport (Mr. A. Norman), and of Plymouth (Mr. W. F. Moore), Mr. C. Bates, F.R.S., Mr. Risk (Port Admiral's secretary), Captain Carbell, R.N., Dr. Minter, R.N., and the Rev. R. Dunning.

CAMBRIDGESHIRE AND HUNTINGDONSHIRE, EAST ANGLIAN, AND SOUTH MIDLAND BRANCHES: ANNUAL MEETING.

THE annual meeting of the above Branches was held in the Anatomical Museum, Cambridge, on Friday, July 2nd, under the presidency of G. M. HUMPHRY, M.D., F.R.S. There was a large attendance of members of the three Branches.

Previously to the meeting, the members were entertained at luncheon by the President.

President's Address.—THE PRESIDENT, having been briefly introduced by the ex-President (J. C. Smith, Esq., of Yarmouth), gave an address, an abstract of which is published at page 35.

New Members.—The following new members were elected: J. Deighton, Esq., Cambridge; E. W. Parkinson, L.R.C.P., Melbourn; G. M. Sinclair, L.R.C.P., Ely; and George Roger Parker, Esq., Littleport. The above were elected members of the Association and of the Cambridgeshire and Huntingdonshire Branch; and J. B. Bromley, Esq., Castle Hedingham; Robert Lucas, Esq., Bottisham; and W. Armistead, M.B., Cambridge, were elected members of the Cambridge and Huntingdon Branch.

Next Place of Meeting.—Dr. DURRANT proposed, and Mr. SMITH seconded, that the place of meeting next year be at Lowestoft, under the presidency of Mr. Worthington.

Dr. BATEMAN proposed, and Mr. WILSON seconded, that the meeting next year be at Peterborough, in conjunction with the South Midland Branch.

Dr. BRADBURY proposed, and Dr. MEAD seconded, the following amendment: "That the next meeting be at Peterborough, if the South Midland members be agreeable; but, if they prefer to meet alone, the meeting of the Cambridge and Huntingdon and East Anglian Branches be held at Lowestoft."

The amendment was carried.

It was also resolved that the selection of President be left to the South Midland Branch, if Peterborough be the place of meeting.

Representatives in the General Council.—The following were re-elected for the Cambridge and Huntingdon Branch: D. B. Balding, Esq.; W. R. Grove, M.D.; G. M. Humphry, M.D., F.R.S.; J. B. Bradbury, M.D., Honorary Secretary, *ex officio*.

Legislation for Habitual Drunkards.—Mr. CADGE and Dr. PAGET brought before the meeting the subject of legislation for habitual drunkards, and petitions to the Home Secretary and both Houses of Parliament in favour of such legislation were numerous signed at the meeting.

Medical Advertising.—On the proposition of Mr. BALDING, seconded by Mr. WATSON, the following resolution was carried unanimously: "That, in the opinion of this meeting, the custom hitherto practised by some members of the profession, of continuously advertising medical works in the non-medical newspapers, is inconsistent with the dignity and honour of the profession, and should be at once discontinued."

Papers.—The following papers were read.

1. By W. Cadge, Esq.: On Sacculations of, and Stone in, the Bladder. The President took part in the discussion.

2. By W. Newman, M.D.: Three Cases of Operation for Cicatrix after Burn, mainly with reference to the Value of Antiseptic Dressings. Dr. Elliston took part in the discussion.

3. By H. F. Banham, M.A., M.B.: Case of Exophthalmic Goitre: with Remarks. There was a discussion on this paper by Mr. Foster, Dr. Bradbury, Dr. Eade, Dr. Paget, and Dr. Bateman.

4. By G. E. Paget, M.D., F.R.S.: Case of Œdema of the Glottis. Dr. Chevallier made some observations on the case.

5. By Peter Eade, M.D., Norwich: On the Treatment of Boils and Carbuncles. This paper was discussed by Mr. Read.

For want of time, a paper by Dr. Bateman was not read.

A. Mackay, M.B., of Stony Stratford, exhibited an interesting specimen of Fracture of the Skull of nineteen years' duration.

Dinner.—The dinner took place in the hall of St. Peter's College; the President in the Chair, and Dr. Bradbury acting as Vice-Chairman. Forty-three sat down to dinner, the Master of St. Peter's College and the Mayor of Cambridge being among the visitors.

NORTH WALES BRANCH: ANNUAL MEETING.

THE twenty-sixth annual meeting of this Branch was held at Rhyl, on Tuesday, June 15th. The retiring President, J. E. JONES, Esq., briefly introduced his successor, D. KENT JONES, Esq., who delivered an address, which is published at page 36.

Vote of Thanks to the President.—Dr. WILLIAMS (Wrexham) proposed a vote of thanks to the President for his interesting address. Dr. Kent Jones had nursed the North Wales Branch from its cradle, had watched over it, and had now launched it into a state of manhood; and while they all regretted that he had gone to reside in South Wales, they were greatly rejoiced to have him with them that day, as nobody could have been so appropriate a President under the circumstances, and by none could the annual address upon the history of the rise and progress of their Branch have been better delivered.—Dr. EVANS seconded the motion, which was unanimously passed, and acknowledged by the President.

Report of Council.—Dr. EYTON JONES, Honorary Secretary, read the annual report of the Council, who, whilst congratulating the members upon the increased efficiency of the Association, regretted that it did not yet embrace even one-half of the profession in the five counties of North Wales over which its operations and influence are supposed to extend, there being seventy members, and over one hundred who had not yet joined its ranks. In the course of the report, the Council called attention to the case of Dr. Rumsey, cordially recommending his case to the professional sympathy of the members.

The report was adopted, on the motion of Dr. HUGHES of Denbigh.

Next Annual Meeting: Officers and Council.—Bangor was fixed on as the place for holding the annual meeting in 1876. The following officers and Council were elected. *President-elect*: John Richards, L.K.Q.C.P., Bangor. *Secretary*: T. EYTON JONES, M.D., Wrexham. *Treasurer*: J. Lloyd Roberts, M.B., Denbigh. *Representatives in the General Council*: John Richards, L.K.Q.C.P., Bangor; Ll. Lodge, L.R.C.P.Ed., St. Asaph; W. Williams, M.D., Mold. *Representative to the Parliamentary Committee*: C. Williams, Esq., Northwich.

Papers, Cases, and Communications.—There was an interesting exhibition of new and improved microscopes and pathological specimens.

Mitral Constriction.—Dr. E. J. LLOYD of Denbigh showed a specimen of mitral constriction, and gave a history of the case. It was that of E. J., a youth aged 18, admitted to the Denbighshire Infirmary last autumn. He said that a fortnight before he was working in the garden with a spade, when he felt something give way in the region of his heart, and he fell on his head upon the ground. On examination, a loud mitral regurgitant murmur was heard at the apex. There were extreme anasarca of the whole body, and great difficulty of breathing, death ensuing in a fortnight afterwards. The peculiarity of the case was the extreme constriction in so short a time, and it was a question whether some mechanical lesion of the valve was the cause.

Morbid Specimens.—Dr. E. J. LLOYD showed on behalf of Dr. Turnour a head of a femur excised by him at the Children's Hospital, Rhyl; a specimen of colloid cancer of the foot, amputated by Dr. Turnour; the parts removed in the amputation first of the forearm, and next at the shoulder-joint, of a girl suffering from strumous and syphilitic disease of the hand and arm.

A Bead enclosed in a Worm.—Dr. J. WOLSTENHOLME of Rhyl described a case of a large intestinal worm in which was enclosed a cornealian bead. The patient was a child, who had, it was believed, swallowed some of the beads a year previously. It was supposed that the worm, when very small, had half crept through the bead, become fixed,

and continued to grow to its full size, when it was removed by medicine.

Ephidrosis Cruenta.—Dr. ROBERTS of Chester read a paper upon two cases (two brothers) of ephidrosis cruenta, or bloody sweat, treated successfully.

Lupus Exedens.—Dr. R. W. J. EVANS of Wrexham described a case of lupus exedens in a girl, the disease being hereditary.

Injury of the Head.—Mr. HAMILTON ROBERTS showed a piece of bone cut out of a quarryman's head by the fall of a piece of rock. The bone was found lying by his side. The man is alive, and works at the quarries.

Cases were also described by Dr. Davies of Cerrigydruidion, Dr. Llewelyn Lodge, and Dr. Wm. Jones of Ruabon.

Bone-setters.—Dr. EYTON JONES called attention to the case of two of the associates, Mr. Hamilton Roberts and Mr. Rees, who had been placed in a position so abhorrent to professional men, that they had resigned the appointments held by them at the Bethesda and Llanberis quarries. He instanced two cases in which amputation had been necessary owing to the treatment of a bone-setter, and urged that the thirty-sixth section of the Medical Act should be put in force by a Committee to be specially appointed for that purpose.

Mr. HAMILTON ROBERTS stated that it had been his intention to prosecute the bone-setter; but the Committee had promised that no bone-setter should come near his hospital during the time he was in charge.

On the motion of Dr. WILLIAMS (Wrexham), seconded by the PRESIDENT, a special Committee was appointed to take proceedings under the Act against bone-setters and quacks; the Committee to consist of Mr. Kent Jones; Dr. Eyton Jones; Dr. Griffith, Portmadoc; Dr. Lloyd Roberts, and Dr. John R. Hughes, Denbigh; and Mr. Williams, Mold.

On the motion of Dr. HUGHES of Denbigh, seconded by Dr. ROBT. DAVIES of Llanfairtalhaiarn, a resolution was passed expressing unqualified disapproval of the conduct of any medical practitioner in accepting the appointment of surgeon to a friendly society or hospital in conjunction with an unqualified person appointed as assistant bone-setter. The spirit of the meeting was greatly roused on this subject, it appearing that in Mr. Rees's case the appointment of his successor had actually been made; and in Mr. Hamilton Roberts's case, applications were advertised for his appointment.

The Dinner was held in the evening at the Belvoir Arms Hotel; the President, D. Kent Jones, Esq., in the Chair.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

ENTERIC FEVER AND MILK-SUPPLY.

DR. E. DUNCAN has prepared a careful report on the recent epidemic of enteric fever in Crosshill and Eaglesham. He commences by explaining, in terms which can be generally understood and appreciated by the non-professional portion of the public, how this disease may be spread; one of his main objects being to remove the general ignorance prevailing on this subject, in the hope that, by so doing, the public may exhibit more interest in sanitary questions. Dr. Duncan at the onset expresses the conviction that enteric fever does not arise *de novo*, and that the cases in which the disease does appear to originate simply from the inhalation of decomposing animal matter, are really instances in which the poison has been communicated by some article of food: a method of infection illustrated by his report. The outbreak in question commenced in the month of January last, in Crosshill, near Glasgow. It appeared to die out after the middle of February, but recurred with renewed violence after that date, about 280 cases occurring up to the end of March, in a population not exceeding 14,000. The inquiry into the means by which the disease was spread appears to have been conducted by a process of exclusion, the various conditions favouring such spread being considered separately. The nature of the soil is first dealt with, reference being made to Professor von Pettenkofer's views on this subject; but consideration of this subject led the writer to conclude that the soil had no connection either with the origin or the spread of the fever. The prevailing atmospheric conditions are next briefly adverted to, and also set aside. The various conditions of sewerage and drainage are dealt with at some length; and, although defects were found, as might have been expected, yet, in many of the houses where the disease appeared, some of those defects which are so much associated with the spread of this dis-

ease were absent, and in other houses, which were not affected, grave defects were discovered. In short, it is evident from Dr. Duncan's description, that the epidemic was not caused by defects of sewerage, although it was probably to some extent propagated by them. With regard to the water-supply, it does not appear to have been at fault; and it is specially pointed out by Dr. Duncan that, although the water-supply is an intermittent one, yet, since the water-closets are in every case supplied by means of a cistern, such pollution of water as arose at Caius College and at Lewes cannot have taken place. The pollution to which water may be subjected in the mains is, however, by no means limited to suction of foul matters from closet-pans in the manner in which it occurred at the two places named. Foul and even excrementitious matters can be drawn into the mains from the soil which they traverse, wherever there is a cracked or faulty pipe, and the supply is an intermittent one; the filth being taken up by the water, or deposited in the house-cistern; and we have but little doubt that some of the deposit in our London cisterns reaches the mains in that way. It does not, however, appear that any such mishap caused the epidemic under discussion, there being an absence of any evidence implicating the water-supply. Finally, Dr. Duncan considers the question of the milk-supply. This subject is examined at considerable length, and the result of the investigation tends in the strongest manner to show that the disease was spread through the agency of this article of diet. Enteric fever had prevailed for some time in a certain district whence a considerable portion of the milk-supply was derived, and it had attacked the families of farmers whose milk was conveyed to the affected locality. Indeed, out of a total of 262 families receiving milk from what we may now term the suspected dairies, 94 were attacked with enteric fever; whereas, out of 242 families receiving other milk-supplies, only 18 were affected, and of these 18 families it was ascertained, on subsequent inquiry, that 10 got occasional supplies from the suspected dairies. With regard to the remainder of these exceptional cases, it is only a matter of surprise that the number was so small, in view of the large area over which the epidemic was spread.

With regard to the method in which the milk of the various farmers became infected, we cannot now follow Dr. Duncan throughout the many details with which he deals; but one example is well worth recording. In November last, enteric fever attacked the family of a dairyman at Eaglesham. On his premises was a dung-stead which partly drained towards and into two wells, the contents of which were used for the dairy and farm purposes, and which were also drunk by persons residing in a back row. In December, the residents of this row were attacked with enteric fever, the stools of as many as twenty patients being thrown into adjoining privies. Constant soakage must have taken place from the privies towards and into a streamlet close by; but just at this date the privy-contents were frozen up, and the soakage was thus stayed for five weeks, at the end of which time a thaw ensued, rain came on, and the accumulated contents of the now specifically diseased privies soaked and drained towards the stream. This water-course, which also receives some of the drainage from the dung-stead above referred to, formed the principal source of water for another dairy-farm; and, following on this thaw, both the farmer's family and the persons residing within the area of the distribution of his milk became affected with enteric fever. This indicates very clearly the wisdom and propriety of a sanitary survey of farms from which a town milk-supply is drawn: such, for instance, as is regularly instituted by the Aylesbury Dairy Company for all its farms.

The whole history of this epidemic has been carefully worked out by Dr. Duncan, and a perusal of his report will repay those who are interested in such investigations. His views concerning the spread of this outbreak are also confirmed by the opinion of Dr. Littlejohn, who promises a further report on the subject, but who has already, as the result of an inquiry made on behalf of the Board of Supervision, expressed his conviction that the importation of the disease into the affected district had been conclusively traced to the use of an infected milk-supply.

MILITARY AND NAVAL MEDICAL SERVICES.

MALTA.—Several changes have recently taken place among the medical officers of this station. Surgeon Dustan has been transferred home on completion of five years' foreign service. Surgeon G. W. L' Etrange has resigned his commission rather than continue to serve in the "military hothouse of the Mediterranean". Surgeons Lyons and Wood have been invalided; and, as the duties of all these officers are performed by those still remaining, a reinforcement of the staff is expected, else it will be a case of "all work and no play" more than ever, if possible. Surgeon-Major Crerar is head of the department

in the absence on leave of Surgeon-General Ker James, C.B. After an unusually cold winter, the hot season is entering in with great rapidity, and the leave roster is in great request.

FLEET-SURGEON S. S. D. WELLS has received the appointment of Deputy Inspector-General of Hospitals and Fleets. The delay in filling up the appointment is said to have been caused by the anxiety of the authorities to decide fairly claims and services of the various officers who were qualified for the appointment.

UNDERMANNED.—We take the following from our contemporary, the *Army and Navy Gazette*. "Dr. Nelson is sick and unable to serve, and Dr. Mackay is engaged at the Admiralty; so, if a casualty should occur at any of the foreign or home hospitals, there would not be a single deputy inspector (excepting Dr. Wells, who is still doing duty at Haulbowline Hospital) available, as all the others are employed. Surely Mr. Ward Hunt has not taken this matter into consideration, or can he have been baffled by the Treasury? It would seem that the medical, like all the other lists of the navy, is in an unsatisfactory condition."

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Friday, July 2nd.

The Rivers Pollution Bill passed through committee.

Monday, July 5th.

Sale of Food and Drugs Bill.—The report of amendments on this Bill was received on the question that the report be adopted.—Lord EGERTON of TATTON moved the omission of the word "knowingly" in the 3rd and 4th clauses.—Lord ABERDARE supported the amendment, and said that, as the retailer and his wife could give evidence as to the state in which they had received the goods, no hardship would be done to the retailer by the omission of the word.—The Duke of RICHMOND said that since the Bill passed through committee he had received a vast number of communications, urging upon him the objections which had been raised by the noble lords. He should, on the motion for the third reading of the Bill, move the omission of the word "knowingly" and the insertion of such other words as might be necessary to meet the objections which had been urged.—Lord PENZANCE moved the omission from clause 5 of words which excepted from punishment for adulteration persons who sold articles containing harmless foreign matter, mixed with them for the purpose of making them portable or palatable, of preserving them, or of improving their appearance, provided such matter was not used for the purpose of concealing the inferior quality of the article.—The Duke of RICHMOND observed that an article might be "portable" without requiring a handle—as, for instance, ether. Then, as to the mixing of articles, he did not suppose it would be possible to get lard without salt. However, he would endeavour before the third reading to give effect to the noble lord's views.—Earl GRANVILLE thought the words might be omitted now and the amendment introduced afterwards.—The LORD CHANCELLOR said that it was particularly important that an amendment should not be lightly made, because, if he mistook not, the words in question were introduced into the Bill in the other House of Parliament.—Earl FORTESCUE called attention to the danger which might arise from the dilution of drugs even with harmless ingredients, and urged the advantage of having drugs of identical strength throughout the United Kingdom.—Lord PENZANCE consented to withdraw his amendment.—The Marquis of SALISBURY remarked that if the clause were made too stringent it would be unworkable.—Lord PENZANCE said absolute chemical purity was not required. A number of articles of food were commonly prepared in a particular way, and, if the purchaser obtained them of the nature, substance, and quality he demanded, he had no reason to complain.—The amendment was then withdrawn.—An amendment, proposed by Lord REDESDALE, to the effect that it should be stated on each article sold what was mixed with it, if anything, and in what quantity, was negatived, after some conversation, and the report was agreed to.

Public Health Bill.—The House went into committee on this Bill.—On the 110th clause, relating to various trades, the Duke of NORTHUMBERLAND moved to include in it "manufacturing, smelting, or burning of ore, or minerals giving off sulphuretted hydrogen, sulphurous acids, or ammoniacal gases".—The Duke of RICHMOND opposed the amendment, which was rejected by 54 against 33.—The remainder of the clauses passed through the committee with verbal amendments, and, the schedules having been agreed to, the Bill, with amendments, was reported to the House.

HOUSE OF COMMONS.—Friday, July 2nd.

Physical Training for the Young.—Mr. BUTLER-JOHNSTONE called attention to the advisability of introducing physical training into our public elementary schools. He quoted statistics and scientific authorities to prove the advantageous effect of such training in improving the physique and health of the people.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 1st, 1875.

Collins, Henry Abdy, Bayswater
O'Callaghan, Kenneth MacCall, Blackrock, co. Cork
Rees, Alfred, Maesteg, Glamorganshire
Saunders, Edward Argent, Haverfordwest, South Wales

The following gentlemen also on the same day passed their primary professional examination.

Jenkins, Percy Septimus, St. Mary's Hospital
Skerman, Sidney, King's College

MEDICAL VACANCIES.

The following vacancies are announced:—

- ADDERBURY, Oxon. Medical Officer for the Districts of Adderbury East, Adderbury West, and Milton. Salary, £100 per annum. Applications on or before the 20th instant.
- AMERSHAM UNION—Medical Officer and Public Vaccinator for the Workhouse and the Amersham District. Salary, £50 and £25 respectively. Applications on or before 10th instant.
- ARMY MEDICAL DEPARTMENT—Surgeons. Examination on August 9th and following days.
- BOSTON UNION—Medical Officer for the Boston District and the Workhouse.
- BURY UNION—Medical Officer for the Radcliffe District.
- CARNARVONSHIRE and ANGLESEY INFIRMARY—House-Surgeon. Salary, £50 per annum, with board and lodging. Applications on or before the 20th instant.
- CHORLTON UNION—Assistant Medical Officer at the Workhouse.
- DENTAL HOSPITAL OF LONDON, Leicester Square—Assistant Dental Surgeon. Applications on or before the 12th instant.
- EAST LONDON HOSPITAL FOR CHILDREN and DISPENSARY FOR WOMEN, Ratcliff Cross—Resident Medical Officer. Salary, £60 per annum, with board, lodging, and washing. Applications on or before the 15th instant.
- HAY UNION—Medical Officer for the Workhouse. Salary, £55 per annum.
- HOSPITAL FOR SICK CHILDREN, Great Ormond Street—Surgeon-Dentist. Applications on or before the 15th instant.
- INDIAN MEDICAL SERVICE—Ten Surgeons. Examination on August 9th and following days.
- KILBURN DISPENSARY—Assistant Resident Medical Officer. Salary, £80 per annum, with apartments, coals, gas, and attendance. Applications on or before the 10th instant.
- LEIGHTON BUZZARD UNION—Medical Officer for the Upper District.
- LIVERPOOL NORTHERN HOSPITAL—House-Surgeon, Physician, and Assistant House Surgeon. Salaries, £120, £40, and £30 respectively, with board and residence. Applications on or before July 10th.
- LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE—Demonstrator of Anatomy. Salary, £100 per annum, and other emoluments. Applications on or before the 31st instant.
- MARLBOROUGH UNION—Medical Officer for the Second District. Salary, £80 per annum, and fees. Applications on or before July 31st.
- METROPOLITAN FREE HOSPITAL, Devonshire Square—Assistant House-Surgeon.
- POPLAR UNION—Medical Officer for the Western District.
- ROYAL CORNWALL INFIRMARY—House-Surgeon, Secretary, and Dispenser. Salary to commence at £120 per annum. Applications on or before the 31st instant.
- ROYAL SURREY COUNTY HOSPITAL—House-Surgeon. Salary, £75 per annum, with board, residence, and washing. Applications on or before July 31st.
- VICTORIA HOSPITAL FOR SICK CHILDREN, Chelsea. Assistant Physician. Applications on or before the 13th instant.
- WORKSOP DISPENSARY—Resident Surgeon. Salary, £100 per annum, with furnished apartments, coals, gas, and attendance. Applications on or before the 30th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

- COBBOLD, Charles S. W., M.D., appointed Assistant Medical Officer to the Metropolitan Asylum, Leavesden, Herts.
- *WILSON, John S., M.R.C.S., L.R.C.P.Ed., appointed Medical Superintendent to the Greenock Amalgamated Friendly Society Medical Association.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTH.

KERR.—At 42, Grove Road, Regent's Park, on July 2nd, the wife of *Norman S. Kerr, M.D., F.L.S., of a daughter.

DEATH.

CLARKE, James Fernandez, M.R.C.S.Eng., in his 63rd year, at 23, Gerrard Street, Soho, on July 6th.

OPERATION DAYS AT THE HOSPITALS.

MONDAY Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

TUESDAY Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY... St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.

THURSDAY... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.

FRIDAY..... Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.

SATURDAY... St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M.—Royal Free, 9 A.M. and 2 P.M.

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

RAILWAY FARES TO EDINBURGH.

IN reply to several correspondents, we may state that every effort has been made to induce the railway companies to issue return tickets at reduced fares; but after full and courteous consideration of the reasons urged, the companies have (as heretofore) declined to make any reduction; deciding that, "with every desire to deal liberally with the medical profession, there is, in face of the recent reduction in fares and extension of time for return-tickets, no case for granting the special facilities sought".

C. W.—Dr. William Squire's book on the *Period of Infection in Epidemic Disease* is published by Messrs. Churchill, New Burlington Street. Price Half-a-crown.

SNAKE-POISONING IN AUSTRALIA.

IN a letter to the *Standard*, an old resident in Australia makes a vigorous defence of Professor Halford's treatment of snake-bites, by the intravenous injection of ammonia, against the attack made upon it by the commission appointed by the Government to test it experimentally. The members of the commission reported that the result of their investigation was, that the intravenous injection of ammonia, instead of being of the slightest benefit, actually accelerated death; and their report is naturally looked upon with great surprise and complete incredulity by many Australians, the writer in the *Standard* included. As an old resident, he is considerably fascinated by the subject of snakes, as he may any day tread on one, and require the treatment, in which he still puts implicit confidence, notwithstanding the Calcutta gentlemen and their dogs; but his faith in this treatment is no stronger, and the reasons for believing it no better, than those of the Hindoos for their trust in the antidotal power of certain plants, snake-stones, and snakes gall. Although residents in Australia may disbelieve in these remedies, yet they are as confidently trusted elsewhere as even the ammonia treatment has been, until, like it, they are carefully put to the test, and shown by exact experiments to be valueless.

VACCINATION.—During the small-pox epidemic of 1870, I vaccinated two children, of one family, and, on the eighth day following, the scars had disappeared; but three weeks later there was a full crop of vesicles in each child. Five weeks ago, I vaccinated a child in the right arm, without apparent effect; a week later, I vaccinated the child in the left arm with the same result; but I have just seen the child with a well developed vesicle, the result of the first operation.—T. G.

SALE OF DEGREES.

A CORRESPONDENT writes to us:—In the *Saturday Review* for June 19th, there is an advertisement, which states that gentlemen requiring degrees, etc., can obtain them by writing to the advertiser. Curious to know what it was about, I wrote for particulars, and received the enclosed letter. Cannot such a thing be put a stop to?

"Jersey, England, 23rd June, 1875.

"Dear Sir,—I shall be happy to procure you the M.D. degree from the American University of Philadelphia. The total cost of a promotion *in absentia* is £20, inclusive of a handsome diploma, with certificate of registration.

"Awaiting your reply. "I remain, dear sir, yours faithfully,

"P. F. A. VAN DER VYVER."

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

UNQUALIFIED ASSISTANTS.

SIR,—Will you kindly allow me, through your valuable JOURNAL, to make a few remarks on the subject at present occupying the attention of the Medical Defence Association in regard to unqualified practice? A letter appeared in the JOURNAL of the 29th ultimo from the pen of an unqualified assistant, now allowed to practise in Wales; and as it is rather invidious, and couched in sophistical phraseology, with an attempt at a display of erudition, it calls for a few remarks from one of the impeached party. If such be the individuals who uphold the much-to-be deplored practice of employing unqualified assistants, and if such are to speak for the general body of educated English gentlemen without diplomas, who must necessarily visit and prescribe, at best, under a fictitious garb, I must say they are weakly represented in the person of your correspondent. Unqualified assistants, as a rule, are those medical students who have spent three or four years at a recognised place of medical education, have had experience in hospital practice, by acting as dressers, clinical clerks, or resident pupils; not those who have never entered college, never attended classes nor hospital practice, merely acquiring an acquaintance with drugs by acting in a menial capacity with practitioners who keep a drug-store and open surgery. The former class may in some cases be useful to their employers; but the profession must be seriously degenerating if the uneducated, conceited apprentice in the drug-store of a medical man, entrusted with a few cases occasionally, and in time furnished with a testimonial and reference, eventually becomes more successful in practice than the educated gentleman who has learned the science by progressive gradation, and is possessed of a license or degree. Medicine being a science, and undoubtedly technical in its acquisition, its professors are responsible for its open practice. If medical qualifications are so easily obtained, surely there ought not to be such a class of assistants as "gentlemen who have had the advantage of a training under the eye of a general practitioner with extensive practice, and a few lessons at hospital and collegiate studies"; but with these very necessary adjuncts, they ought to be able to conjoin a knowledge of human anatomy, physiology, and pathology, necessarily implied in the possession of a medical qualification. The uneducated unqualified man must inevitably descend to "mean subterfuges, contemptible quackery, and a system of pandering to the ignorant", which bring discredit on his principal, and often fatal results to the poorer class of patients entrusted to his care. I have known many fatal deeds accruing from the unskillful manipulation of an unqualified assistant, who passed in society—at least among the poorer classes—as if qualified. With a daring presumption, and without the slightest acquaintance with the principles of obstetrical or simple anatomy, he undertook the management of critical obstetrical cases, told his principal he had achieved wonders, who praised his deeds of "fearlessness"; but very often this contemptible quackery and pandering to his ignorance brought about disastrous events. So long as this class of practitioners are allowed to wield instruments and drugs—attended with some degree of danger even in the hands of the more educated—not confining themselves to minor operations and simple cases, but with daring presumption and unblushing audacity usurping the place of those in the position to which most of them aspire, legislation must be denominated lax; the medical profession will present various shades in quackery; appropriate means will not be taken for the alleviation of the ailments of the poorer classes; and medical men will be thought mercenary who employ quacks and ignoramuses for the sake of the difference in salary, instead of those who are on a footing with themselves by being in the professional ranks and recognised as competent to deal with critical emergencies.—I am, sir, your obedient servant,

South Wales, June 3rd, 1875.

VIGILANS.

ESPRIT DE CORPS.—Dr. Ricord, a short time ago, had a corn extracted, and gave the operator twenty francs, which was declined, on the ground that "between professionals" no fees were taken.

ROYAL COLLEGE OF SURGEONS.

THE largest batch of students who have complied with the full educational curriculum required of candidates for the license in dental surgery of the College, underwent the written portion of their examination on Tuesday, June 22nd, when thirty gentlemen presented themselves, to whom the following questions were submitted.

Dental Anatomy and Physiology.—1. State the different stages of growth in the development of a canine tooth and a molar tooth, from the commencement of the calcification of the cusp or cusps, to the completion of the fang or fangs. 2. From which of the embryonic oral structures is the enamel developed? What is the form of the enamel prisms? Describe their arrangement on the crown of a molar tooth; and explain the advantages of such an arrangement. 3. What are the soft structures connected with the permanent teeth after their complete development? Enumerate the histological elements which enter into their composition; and state how they are arranged.

Dental Pathology and Surgery.—1. Give examples of reflex disturbance in relation to irritation connected with the teeth during their eruption; and explain fully the pathology of reflex nervous action. 2. Enumerate and briefly describe the several casualties that may arise in tooth-extraction. 3. Describe the different modes of treating inflamed and exposed tooth-pulp.

Candidates were required to answer at least two out of the three questions, both on dental anatomy and physiology, and on dental surgery. The examiners were Messrs. Cartwright, G. A. Ibbetson, and S. J. Salter.

The following questions were also put.

Anatomy and Physiology.—1. Give the dissection necessary to display the pterygoid muscles. Describe their attachments and action; and state whence they receive their vascular and nervous supply. 2. Describe the structure, relations, and functions of the soft palate.

Pathology and Surgery.—1. Describe the different methods of excising a portion of the tonsil; and state under what circumstances this operation may be required. 2. Mention the several causes, and describe the symptoms and treatment, of abscess of the antrum.

Candidates were required to answer at least one of the two questions both on anatomy and physiology, and on pathology and surgery. The examiners were—Mr. H. S. Hancock, Chairman; Mr. Le Gros Clark, President of the College; and Mr. W. Savory.

The oral examinations took place on Tuesday, June 20th.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

FLUENT DYSPEPSIA.

SIR.—I presume A Member is not at present using either tea or coffee, nor tobacco or alcohol, in any form. I venture to recommend him to try a diet somewhat as follows:—Breakfast: Two or three slices of dry stale bread, with about six ounces of fresh milk, thoroughly well iced. Lunch: Three or six ounces of beef tea (made from fresh beef, or Brand's essence, instead of the milk—the beef-tea to be well iced. Dinner: A slice or two of underdone roast or broiled meat, or else a moderate allowance of fish, with bread only, and half a tumblerful of water, also well iced. Evening meal, a repetition of the morning; and, if hungry at bed-time, a few biscuits, with iced water or milk. If thirsty through the day, a wineglassful of iced water. I have known a month's strict adherence to a diet of this class signally benefit cases resembling that of A Member, and I can assure our friend that he will not starve upon it. Has his urine been thoroughly examined by a competent hand?—I am, etc.

Liverpool, July 4th, 1875.

THOS. CARSON.

SIR.—In reply to your correspondent, who seeks advice with reference to the above mentioned ailment, allow me to suggest that he should give a fair trial to the following method of treatment. In addition to strict attention to obvious hygienic rules, such as regularity of meals and daily exercise, amounting to actual perspiration, in the open air, let him take from time to time a dose of the following mixture. R. Magnesie ponderos. ʒij; sodee bicarb. ʒij; antimoni tartariz. ʒv; antimoni tartariz gr. iss. Mij; fiat pulvis, cujus sumatur, pro re nata, ʒj ex aqua horâ somni. By acting upon both the offending organs simultaneously, this draught is frequently productive of the most beneficial effects.—I am, sir, your obedient servant,

C. O.

SIR.—If A Member, who suffers from flatulent dyspepsia, have not already attended to the following suggestions, I can assure him they are of considerable practical value. In the first place, it is necessary to maintain for some time a lax condition of the bowels. In order to get rid of the tendency to the accumulation of gas in the upper part of the intestinal canal, it is absolutely necessary that not even a temporary block should be allowed to exist in the lower regions; hence the value in such cases of a mild Carlsbad course, which secures two or three loose evacuations before any food is taken. Even in cases of organic constriction it often proves of the greatest service. I have known some patients with whom no aperient produced so much relief as castor-oil—the comfort of each day depending on a desertspoonful of this medicine, taken in the early morning. The Hunyadi water also answers well, and is often efficient in small quantities. No breakfast should be taken until the bowels have been freely relieved.

With regard to food and drink—tea, coffee, cocoa, and all hot and sweet beverages must be entirely banished from the dietary. In such conditions, tea or coffee will almost immediately disturb the heart's action. Malt and sherry are also under the ban. Sound claret and water, milk mixed with some alkaline effervescent water, and cold whisky and water, are the safest beverages; but much fluid of any kind is hurtful. Oatmeal-porridge is still better; the Revalenta Arabica is an excellent food. Animal food should be restricted to roast or boiled mutton, the lighter kinds of fish, and a little broiled fat bacon. Fruit, jellies, and marmalade, should take the place of butter.

Of drugs, I have found great use in a pill of creasote, carbonate of magnesia, and extract of hop, taken immediately after every meal; and when this has failed, I have seen excellent results from a few grains of ox-gall made into a pill with powdered rhubarb, and taken after breakfast and dinner.

If, however, A Member wish for something more than temporary relief, and desire to avoid the necessity of constant dosing, he must, if he can, cast off all anxiety of mind, and walk from ten to twenty miles a day, for three weeks or a month, in the finest air accessible. If he cannot get to the glaciers of Switzerland or the moors of Scotland, there are the Surrey hills within an hour of London.—I am, sir, your obedient servant,

I. BURNEY YEO.

Hertford Street, May Fair, July 5th, 1875.

SIR.—A Member and Sufferer solicits advice (*vide* BRITISH MEDICAL JOURNAL, July 3rd, 1875). He should take for breakfast half a pint of hot milk, flavoured with tea, one or two scalded eggs, bread and butter, with from three to five grains of Boudault's pepsin. Dinner, at two o'clock, mutton chieftly, and nothing absolutely to drink with it, or (but better avoided) a table-spoonful of brandy in hot water; no vegetables. Drink—pure water between meals. Supper—brown bread, as little as possible; a table-spoonful of whisky or brandy in hot water; no malt liquor; no wine of any kind.—I am, etc.,

P.S.—Please report progress.

A FELLOW SUFFERER.

SIR.—If A Member have not tried nitrate of silver for his gastric trouble, I would recommend him to do so. I have found great benefit in more than one chronic case similar to his. Let it be used in the form of a weak watery solution (about one grain to the ounce), and a few drops be taken before meals. It has a wonderful tonic action on the disordered gastric and intestinal nerves.—I am, etc., N.

SIR.—Having formerly been much troubled with this affection, I gladly respond to the appeal of A Member, and offer a few suggestions, in the hope that he may find them of some service. Much that I would venture to recommend might be briefly expressed in the words—diet and quiet. It is an axiom, that organs whose functions are deranged should have rest; and the quieter a dyspeptic is, within certain limits, the less demand will there be for the assimilation of nutriment; and the more digestible the food, the easier will be the work for the digestive organs. A well defined plan of diet is therefore strictly necessary. I would say, let the breakfast be as light as possible, consisting of nothing but bread, toasted or not, and a little butter; an early dinner of mutton or beef, with bread and potatoes; tea as breakfast; and supper of meat and bread. Coffee and tea should not be taken strong; and I would recommend a cup of Cadbury's extract, or some similar preparation of cocoa, without milk or sugar, as a beverage for dinner or supper. When properly prepared, the flavour is very delicate, but, like claret, may require a few days to become used to it. A moderate amount of exercise is of course necessary, and the best is that obtained by quiet walking; the jarring of riding is objectionable. Should there be excess of urates, or of uric acid, a little nitrate of potash should be taken early in the morning, and an occasional compound rhubarb and blue pill at night. Tepid bathing is useful in the evening, but I am not so sure about the use of cold baths in the morning.

Lastly, avoid all excitement and harass, and do not be in a hurry to change the treatment as the symptoms improve, should they fortunately do so.

July 6th, 1875.

I am yours truly,

W. L.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than Thursday, twelve o'clock.

POCKET TEMPERATURE CHART.—We have received a specimen of Pocket Temperature Charts, prepared for the Practitioners' Visiting List, and published by Messrs. Salt and Son of Birmingham, which will, we think, be found very useful. The charts give both the Centigrade and the Fahrenheit scales, and have a novel feature in dotted lines shewing the limits of variation in temperature compatible with health. The charts also give space for notes on urine, pulse, and respiration; and on the back of each is a form for short notes of the case. These charts have been prepared at the suggestion of Dr. Foster of Birmingham. They are published in books of fifty; and are perforated, so as to be easily removed for use.

MEDICAL BOOKS.

JUDGING from Dr. Cross's description of the case named under the above heading, it is an instance of true leprosy—the tubercular form in its first stage. If this be so, the patient has probably been resident in a foreign country at some time in her life; cases of true leprosy in persons who have never left England being rare; possibly supposed to be the case from not being always recognised. Brighton, June 1875.

W. E. C. NORTON, F.R.C.S.

CHEMISTRY (Reading) can, no doubt, obtain a copy of the analysis on writing to the office of the importers.

L.R.C.P.—The observations of Dr. Theodore Williams on the Temperature in Phthisis were read to the Royal Medical and Chirurgical Society, January 26th, 1875, and will appear in the next volume of the *Transactions*. An abstract of the paper and of the discussion on it appeared in the BRITISH MEDICAL JOURNAL for February 6th of this year.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Bristol Daily Post; The Daily Bristol Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Glasgow Herald; The Sunderland Daily Echo; The Carnarvon and Denbigh Herald; The Manchester Guardian; The European Review; The Hackney and Kingsland Gazette; The Worcestershire Chronicle; The Birmingham Daily Post; The Brighton Daily News; The Sussex Daily News; The Glasgow Herald; The Cork Examiner; The Scotsman; The Cork Daily Herald; The Southampton Times and Hampshire Express; The Hampshire Advertiser; The Birmingham Morning News; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. Robert Barnes, London; Dr. G. M. Humphry, Cambridge; Mr. H. Lee, London; Mr. I. Harrinson, Reading; Dr. George Johnson, London; Mr. P. W. Swain, Devonport; Mr. G. F. Hodgson, Brighton; Dr. Edis, London; An Old Member; Mr. W. Fairlie Clarke, London; M. D.; Dr. Finlayson, Glasgow; Mr. Gordon, Edinburgh; Dr. A. Smart, Edinburgh; Dr. Anderson, Selkirk; Dr. Harris, Redruth; Dr. Constable, Leuchars; Dr. A. Fraser, Aberdeen; Mr. W. Brown, Edinburgh; Mr. A. Lyall, Leven; Dr. J. Watson, Manchester; Mr. H. Thompson, Sevenoaks; Dr. J. Sawyer, Birmingham; Mr. J. Westmorland, Manchester; Mr. R. S. Fowler, Bath; Mr. E. Bevan, London; Mr. Sandham, Cork; Dr. D. Stewart, Liss; Mr. J. Woodman, Exeter; Mr. Jackson, Wolverhampton; Dr. W. A. Finlay, Edinburgh; Mr. J. W. Orton, Aldershot; Dr. Braddy, Cambridge; Mr. C. A. Bush, Chippenham; Dr. Caton, Liverpool; Mr. R. C. Gardner, Painswick; Mr. Berkeley Hill, London; Mr. H. Moore, Milnthorpe; Dr. Althaus, London; Dr. J. B. Tuke, Edinburgh; Mr. Griffiths, Hincley; Dr. J. W. Cousins, Southsea; Mr. H. Brown, Northallerton; Mr. A. Wood, Kirkby-Moorside; Dr. Lambart, Liverpool; Mr. Cuffe, Horncastle; Dr. W. J. Fleetwood, Chester; Mr. J. Farrar, Bradford; Dr. W. Taylor, Edinburgh; Mr. G. R. Gilruth, Edinburgh; Dr. Dewar, Melrose; Mr. Thorn, Crieff; The Registrar-General of England; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. Eastes, London; Mr. W. M. Clarke, Bristol; Mr. J. Ashburton Thompson, London; Mr. Llewelyn Thomas, London; Mr. W. Cadge, Norwich; Mr. John J. Merriman, London; Dr. Robert T. Cooper, London; Dr. Balthazar W. Foster, Birmingham; Dr. J. Hughlings Jackson, London; Dr. I. B. Yeo, London; Dr. T. L. Rogers, Rainhill; Dr. T. Claye Shaw, Leaveness; Mr. John Woodman, Exeter; Dr. Charles Cobbold, Leaveness; Dr. Dudfield, London; Dr. F. S. B. De Chaumont, Woolston; Dr. J. W. Moore, Dublin; Mr. F. Copplestone, Crewe; Dr. Parsons, Dover; Mr. Alfred Smea, London; Mr. H. R. Hatherly, Nottingham; Dr. T. W. Grimshaw, Dublin; Mr. R. H. B. Wickham, Newcastle-on-Tyne; Our Dublin Correspondent; Dr. Mortimer, Turrif; Mr. H. B. Miller, Norwich; Mr. W. J. Simpson, Scarborough; Dr. L. W. Sedgwick, London; Dr. Tom Hewitt, Winkfield; Dr. F. Haynes, Leamington; Dr. T. D. Nicholson, Clifton; Mr. E. Chesshire, Birmingham; Mr. T. R. Scott, Manchester; Dr. J. W. Langmore, London; Mr. David Gibbs, Airdrie; Dr. Blandford, London; Captain Mercier, London; Dr. G. E. Shuttleworth, Lancaster; etc.

BOOKS, ETC., RECEIVED.

A Treatise on Food and Dietetics: Physiologically and Therapeutically considered By F. W. Pavy, M.D., F.R.S. London: J. and A. Churchill. 1875.
Lessons on Prescriptions and the Art of Prescribing. By W. H. Griffiths, Ph.D., L.R.C.P.E. London: Macmillan and Co. 1875.
The Skull and Brain: their Indications of Character and Anatomical Relations. By N. Morgan. London: Longmans, Green, and Co. 1875.
Nature and Treatment of Deformities of the Human Body: being a Course of Lectures delivered at the Meath Hospital; with numerous Notes and Additions. By L. H. Ormsby. Dublin: Fannin and Co. London: Baillière, Tindall, and Cox. Edinburgh: MacLachlan and Stewart. 1875.

ABSTRACT OF AN ADDRESS ON THE PROGRESS OF MEDICINE.

*Delivered at the Annual Meeting of the South-Western Branch,
June 17th, 1875.*

By PAUL W. SWAIN, F.R.C.S., Devonport,
President of the Branch.

IN commencing his address, Mr. Swain said: I feel deeply the honour you have conferred upon me in selecting me to preside over this meeting. This is particularly gratifying when I see that it is the most numerous assemblage which has ever met to discharge the duties of the South-Western Branch; and, indeed, everything connected with the British Medical Association seems in a most prosperous condition. When I joined the Society in 1832, we were three or four hundred, and now we number over five thousand. I can only wish, both for the sake of the profession and the sake of the nation, that even this large number were doubled.

It is exactly half a century since I joined the ranks of the medical profession; and I can say with sincerity that, if I had my time to go over again, I should follow a like line of life. It may not be uninteresting on the present occasion to take a brief retrospect of my professional lustra, and to review the progress which has been made, and the changes in the education, the opinions, and the practice of the profession. The apprenticeship system was in full force fifty years ago, but I am not by any means sure that the abolition of the custom has been attended with unmixed good. To send a youth fresh from school, and from under the watchful care of loving parents, into the vortex of metropolitan life, with no one to guide him, is a course which cannot be contemplated without anxiety. Besides, the four years of the enacted five, spent in the surgery, however scant the actual teaching was, were not quite barren to youths of ordinary talent. I can only say for myself that, having a strong taste for the pursuits collateral with practical medicine and surgery, I picked up a very fair share of acquaintance with physiology and the other branches of the medical sciences, so that when I went to Guy's Hospital I was enabled to dispense with attendance on many of the lectures, and to devote a large share of my time to the acquirement of thorough knowledge of practical surgical anatomy. But it must be remembered how small a compass of physiological and other knowledge was necessary to fill up the curriculum at that time, compared with the demands made on the student of to-day: all those elaborate experiments in vital things to which I shall presently allude were not even anticipated. There was no microscope, and organic chemistry was at a very low ebb. The thermometer, though sometimes used, was in a state of barbarism compared with its delicate and exact registration as we now use it; the stethoscope was in its infancy; the speculum vaginae was regarded by the public, and by not a few medical men, as a French innovation. Pharmacy had not bestowed on us iodide and bromide of potassium, hydrocyanic acid, morphia, chloral, and many other substances which now essentially aid the prescriber. Many distinguished pure surgeons look with something like contempt at elaborate prescription; and I know one at the head of his profession who seldom deviates from compound rhubarb pill. In his autobiography, Sir B. Brodie stated that, having placed himself to learn a little pharmacy with an apothecary of the olden time, he found that his instructor had four bottles labelled respectively *mistura purgans*, *mistura astringens*, *mistura diaphoretica*, and *mistura tonica*: and he adds, that the apothecary made as many cures as his more learned brethren. And when we look back on the comparative scantiness in the means of diagnosis, one is inclined to think that the sarcasm of Sir Benjamin might not have been far from the mark. I would especially beg my younger friends to try to realise the performance of operations such as they often see in this hospital on patients sensible to every touch of the knife. It is quite certain that extensive operations, such as excision of joints and ovariectomy, could never have become general but for the use of anaesthetics. At the period of which I write, depletion by the lancet and the cook was the order of the day. I look back with something like awe at the quantities of blood I have seen shed. I could bleed with either hand, and a day seldom passed without its venesection. I remember once seeing ninety ounces taken in one day from a soldier in the military hospital, for a presumed pleuropneumonia. The man, notwithstanding,

rapidly recovered. In the *Greville Memoirs*, notice is taken of an illness of George IV. He was bled in the morning to twenty ounces, and the credit of saving his life was awarded to Sir Matthew Tierney for drawing forty ounces more on the following night. These instances show that, after all, the loss of blood was not so deadly a process as has been maintained; and I am decidedly of opinion that we have erroneously allowed ourselves to drift into the opposite extreme. In prescribing, mercury, combined with antimony, was universal; and Pemberton's *On Purgatives* was a favourite handbook. Abernethy's blue pill and black draught found favour not only with the profession, but with the public in general; and medicine being charged for by the general practitioner, the patient was mercilessly dosed with six draughts a day, and other like pharmaceutical favours. The discoveries of Sir Chas. Bell regarding the functions of the anterior and posterior columns of the spinal cord were thoroughly understood; but Marshall Hall had not explained the wonderful phenomena of reflex nervous action. The knowledge we then had of the inflammatory process was extremely vague. I do not know of any important work on inflammation since the days of John Hunter, except that written by one of our late members, Mr. James of Exeter. It is curious, from our present standpoint, to contemplate the scanty information to be derived from the perusal of this work on the nature of the inflammatory process, though the book was regarded as a text-book at the time, and was translated into French. It gives clear descriptions of the external appearances and effects produced by inflammation; but the author admits his inability to account for all those phenomena which we now know to depend on the vaso-motor nerves.

Mr. Swain then commented on the modern discoveries relating to the nature of blood, and the construction of the extreme vascular terminations. Besides the red corpuscles in the blood, he said there existed certain other bodies, termed white corpuscles or leucocytes, which were endowed with remarkable properties, possessing an individual life, and something like a will of their own. Mr. Swain explained the method by which the leucocytes escaped through the structureless sides of the capillaries, the walls of the vessel completely closing up after the extrusion was effected. He illustrated the process by showing how soap-bubbles would allow wetted glass rods and smaller bubbles to pass through them without destroying their continuity. He also described the way in which the leucocytes made their way through the tissues of the body and became pus-lobules, or their parents. The bearing of these discoveries on many difficult questions arising out of inflammation was obvious. They taught how pus migrated towards the surface, and how different foci of suppuration were established at a distance from the original point of injury. The description was taken from Dr. Burdon Sanderson's article in Holmes's *System of Surgery*, in which are quoted the following appropriate lines from Milton.

"The griding sword with discriminating wound
Passed through him, but th' ethereal substance closed
Not long divisible

for spirits that live throughout
Vital in every part, not as frail man,
In entrails, heart or head, liver or reins,
Cannot but by annihilating die;
Nor in their liquid texture mortal wound
Receive, no more than can the fluid air.
All heart they live, all head, all eye, all ear,
All intellect, all sense; and as they please,
They limb themselves; and colour, shape, or size
Assume, as likes them best, condense or rare."

Paradise Lost, Book vi

A good illustration this, Mr. Swain said, that the stern scientist can, shall I say, bend or rise to the appreciation of sublime poetry.

Speaking of vivisection, Mr. Swain said: And here I would say a word to those well intentioned persons who are so exercised about vivisection. In their want of an acquaintance with the nature of nervous action, they imagine that the lower animals feel as they themselves would do if subjected to the same processes. Now, if there be one proposition in physiology which is incontrovertible, it is that sensation depends on the brain, and that consciousness of pain will be in proportion to the size of this organ. The lower vertebrata have very little, if any, brain, properly so called, but a simple track of spinal nervous matter to regulate their movements and purely animal functions; and it would be unreasonable to suppose that they feel "a pang as great as when a giant dies". It is related on unquestionable authority, that a perch caught by the eye by a fisherman, in his struggles contrived to regain the water, leaving his eye on the hook. The fisherman thought it not a bad bait, and actually caught the very same fish, who had taken his own eye for bait. But what should we do without the frog? From Galvani downwards, the batrachian has been appealed to on all questions of physiology. Without the frog, how would Marshall Hall have demonstrated excito-motory action? Where would the important dis-

to which I have alluded, and all their bearings on the relief of the suffering, been but for the frog? Now we have recourse to the merciful anesthetics; and I trust none of our researches will be made but under their influence, and even then no vivisection should be done except for the establishment of facts, and not for the mere curiosity of ourselves in verifying what others have well established.

Few subjects have undergone greater modification than the treatment of stone. The late Mr. Cornelius Tripe, to whom I was bound, was singularly successful, and I saw him operate several times. When I look at the small, handy, exquisitely made lithotrite of the present time, I smile to think of the apparatus of Baron Heurteloup, who came to exhibit it to us at Guy's Hospital. A heavy table, with all sorts of straps, kept the patient immovable. Some sort of instrument was passed into the bladder to secure the stone, and then screwed into a vice; lastly, the stone was attacked with a hammer and steel rod. I cannot remember how successful the operation was, nor did I see more than a faint emanation.

Certainly wonderful progress has been made in the general treatment of women. In my early recollections there occur to me a very large number of cases in which young women were consigned to the supine position for indefinite periods, sometimes extending over years, under the impression that they had spine-disease. You seldom find the spinal column of a young girl absolutely perpendicular; and the practice was, if the slightest curvature were observed, or if any tenderness were produced by passing the finger over her spinous processes, down she went on her back, or an inclined plane. No doubt most of these cases were uterine or hysterical, or both. The effects of uterine displacement in unmarried young women are fully recognised now. We ourselves have known most serious loss of power in the lower extremities result from this cause, which disappeared entirely when the uterus was rectified. But I am inclined to suspect the existence of a *nimia diligentia medicandi* in these displacement cases. This, perhaps, applies more especially to the specialists of the metropolis than to us provincial surgeons. Of course, devoting their whole attention to these cases, they obtain a singular facility in discovering them. I wish I could congratulate them and ourselves on greater success in curing them. I find a large number of patients returning little the better for their sojourn in the metropolis.

I was for a short time clinical clerk to Dr. Bright while he was investigating that class of diseases which bears his name. I have no doubt that subsequently he became aware of the microscopic anatomy of the kidney, as demonstrated by Todd and Bowman; but at the time of which I speak, the search was for *fat*. We used to soak the specimen in alcohol or ether, and fry it, to estimate as nearly as possible the amount of oily matter. It was reserved for my friend Dr. G. Johnson to point out definitely the relations existing between the tubular structure of the kidney, the functions of the Malpighian bodies, and the various forms of cast which we find in the urine of those suffering from any form of albuminuria. I regard his work unrivalled as a monograph, and a fine specimen of inductive conclusions.

Mr. Swain then briefly referred to the plan of enucleating a fibroid from the substance of the uterus, the great success of ovariotomy, and the value of the speculum vaginæ. He said that, when in Italy last year, he saw in the National Museum at Naples, among the Pompeian relics, a three-valve speculum vaginæ, which was made to expand by a rack and pinion movement.

The battle of the microscope was now being hotly waged over the bacteria, and no doubt the majority of the members present had read the discussion on the germ-theory at the Pathological Society. The presumed spontaneous generation was a very different matter now from what it was in Virgil's time, when bees were said to be produced from carcasses. Nor did it approach to the comparatively recent announcements of Mr. Crosse, that he had obtained fully developed acari from gelatinous siles, under the influence of electricity. The organisms under discussion were the most minute and simple beings in creation. He quite entertained the opinion that inorganic matter might be converted into protoplasm by the direct combined influences of the forces of nature.

In concluding, he said: When one turns from the known to the unknown, we enter into a transcendental region, where speculation is all we can indulge in, and where imagination imparts a somewhat poetic glamour to these atomic beings which are assembled together, and, under the reign of law, combine to make up ourselves. Their very smallness astonishes us; and it would seem the less they are in bulk the more remarkable is the power they exercise. Contemplate the protoplasm of the brain; the exquisite cells which Beale describes, with their delicate offshoots interlacing with one another, and which make up the grey matter of the cerebrum. What is their condition, when they despatch their behests along the nervous lines of communication too deli-

cate to be even compared with an electric wire? Still more subtle is the speculation as to their conduct when the will is at rest, but thought and imagination busy. Does every emotion wear away its parent? and is thought the result of some chemico-vital process? I fear no microscope can solve this problem. Again, think on the curious effects produced on the protoplasm by those diseases which leave behind them an immunity from future attacks. Nearly fifty years ago I had scarlatina: not one cell or particle of protoplasm which made me up then now remains; nothing but my identity, yet I am protected. All my life long each cell has been bequeathing my safety to its successor. Still more extraordinary are the circumstances connected with the reproduction of the species. Lionel Beale tells us that a single spermatozoon weighs as much only as the one-hundredth part of a red blood-corpuscle, and yet think of the force with which it is endowed. Within its infinitesimal limits it contains a power which can determine the external lineaments of the future man; cause him to be tall or short, black or white; confer beauty or deformity; nay, endue him with the highest intellect or make him a fool; determine whether he shall be a Borgia or a Howard. Queen Eleanor says to her youngest son, King John, speaking of the Bastard Faulconbridge:

"He hath a trick of Caesar's face;
The aspect of his tongue, as if he had
Do you not read some tokens of my son
In the large composition of this man?"

Considerations such as these, as Hamlet says, "must give us pause". They strike forcibly at the roots of our materialism; they refer to forces moved by such tiny agents that we hesitate to call them functions. No intellectual microscope can reach them; and we peer beyond in the reach of some ministering spiritual essence which plays upon them, possesses an independent existence, and will survive when all its tiny minions become "motes in the sunbeam".

THE RISE AND PROGRESS OF THE BRITISH MEDICAL ASSOCIATION.

Excerpt from an Address delivered at the Annual Meeting of the Lancashire and Cheshire Branch.

By T. DAVIES-COLLEY, M.D.,

Senior Physician to the Chester General Infirmary; President of the Branch.

IN taking the chair as your President, I feel bound to offer you my sincere thanks for the honour you have conferred upon me. It is no light task to preside over the deliberations of so large a number of my medical brethren as are included in the Lancashire and Cheshire Branch of the British Medical Association. I only hope that by your assistance I may be able to discharge the duties appertaining to my office satisfactorily.

When I became a member of the Association in 1840, at the annual meeting held in Liverpool, under the presidency of the late Dr. Jeffreys, a relative of mine, the Society had then been established a comparatively short time by Sir Charles Hastings. Of those who then attended from all parts of the country, and whose names have become a part of its medical history, I fear most have passed away, and I know of two only in Chester, besides myself, who survive. Previously to 1840, the Society had held several meetings at Worcester, Bath, Birmingham, Oxford, Cheltenham, and Manchester. It had secured to itself a very large amount of support, and had corresponding members connected with almost all the medical societies on the Continent. The name of the Provincial Medical and Surgical Association was given to it at first, and its members at the time named amounted to 1,180. It confined itself to the publication of an annual volume of *Transactions*, in which, among other papers, were to be found the results of inquiries specially instituted into the hygiene of different large districts of the country, the occurrences and causes of epidemics, the prevalence and practice of vaccination, and its success in warding off small-pox, and reports on efforts to reform abuses in the profession, whether arising in the corporate bodies granting degrees, or in the regulations affecting medical men in the army and navy, or in administering relief under the Poor-law. Who that has watched the gradual progress of this Association has not seen cause to admire the far-seeing sagacity of its founders and early friends, and also to value the important work it has accomplished?

It was early found necessary to substitute a weekly journal for the annual volume. This added greatly to the influence of the Society, forming as it did a bond of union for the increasing number of members, a means of circulating information on professional subjects, and an opportunity for advocating the interests of the profession, which was

greatly needed. For more than twenty-five years, this JOURNAL has continued the organ of our Association, and it has increased in value year by year, until, under the able management of its present editor, it has arrived at such a state of efficiency as may enable it to compare advantageously with the best medical journal of the day.

It became necessary, as the members of the Association increased in numbers and its area of operations extended, to substitute the name of British Medical Association for that of Provincial. Scotland and Ireland were included in its sphere of operations. Several of the annual meetings of the Association have taken place in distant parts of the country, and, as you are aware, the annual meeting of the Association this year will take place in Scotland. Recently, the Association has been incorporated, in compliance with the requirements of an Act of the legislature.

The influence for good that the British Medical Association is capable of effecting is very great, and it only remains for its constituents to act with unanimity, bringing their legitimate influence to bear upon the eradication of such abuses as are capable of being removed by the legislature, and advocating the cultivation of scientific medical inquiry for the good of the community and the credit of our noble profession.

For the third time, gentlemen, this Branch meets within the walls of this remarkable city. I need hardly say, on the part of the resident members, we welcome you heartily, and, were there time, we would gladly take you round and show you some of the many objects of interest to be found in the neighbourhood, and especially our hospital, founded in 1755, and to which has recently been added a supplementary building for the treatment of small-pox and other infectious diseases. But the long list of papers laid before the meeting will, I fear, prevent our having the pleasure indicated.

Dr. Davies-Colley then proceeded to give an historical sketch of Chester, principally with regard to medicine.

ON THE HISTORY OF BLEEDING, AND ITS DISUSE IN MODERN PRACTICE.

Extracts from an Address delivered at the Annual Meeting of the Bath and Bristol Branch.

By W. MICHELL CLARKE, M.R.C.S. Eng.,

Consulting Surgeon to the Bristol General Hospital; President of the Branch.

AFTER describing his experience of the mode of practice followed when he commenced the study of the medical profession as an apprentice, Mr. Clarke said: Since that time, the management of disease by the antiphlogistic treatment has been gradually and completely given up; and this, I think, is the greatest change that has been made. There have been many others; but this abandonment of the old heroic plans, and the substitution of a more careful following of natural processes, stands preeminent, and is so great that, as I said before, the whole condition of things is altogether so altered that it appears to be entirely new.

We are not likely to see so great a transformation again, and more particularly as to the complete way in which the principal item of the antiphlogistic class, viz., bleeding, has been given up. It would be difficult to overestimate the influence that bleeding has had upon medical practice, from a period almost beyond the beginning of the history of medicine, or how in a vast number of cases the chief point considered was whether the patient should be bled or not. No doubt, there have been great variations in the amount of bleeding done, and there have been opponents of the practice asserting that it was never necessary from the earliest times; but, on the whole, it has been the most important part of medical treatment from very early times.

It is not easy to trace the exact beginning, but it was in free use in the time of Hippocrates, from which it may be fairly inferred that it was introduced long before by the schools of the Asclepiadæ. The discovery of the probe and the employment of bandages for wounds is attributed to one of the three individuals who were distinguished by the name of Æsculapius; but there is no mention of the lancet at so early a period.

The practice of purging, too, is recorded of a time long before we have any mention of bleeding. Thus Melampus is said, long before the times of any of the Æsculapii, to have cured the daughters of Prætus king of Argos, by the free use of hellebore; and we have retained until modern times the name *Melampodium*. But no mention of bleeding is made so early, nor, indeed, until we find it used as an ordinary remedy by Hippocrates and his school. Homer makes no note of bleeding in either the *Iliad* or the *Odyssey*, although it has always been a matter of wonder how ingenious he was in inventing various kinds of wounds and

injuries. We know from this author that two surgeons, at least, accompanied the Trojan army to the siege of Troy, Podalirius and Machaon, reputed sons of the Æsculapius who is said to have first used the probe and bandages. They do not appear to have practised bleeding. Perhaps, if Homer had known what we do, they would have been esteemed still more for that omission.

Podalirius, it is said, was cast, on his return, by a tempest on the shore of Caria. A shepherd rescued him; and, learning that he was a physician, says Renouard (a surgeon would have been more correct, as Celsus says they only treated wounds, "sed vulneribus tantummodo, ferro et medicamentis, mederi solitos esse"), he conducted him to Dametus, the king of the country, whose daughter had lately accidentally fallen from the top of the house. She was insensible and motionless, and the attendants already supposed her dead; but this skillful surgeon bled her from both arms, and had the happiness of restoring her life.

Here is the first example of bleeding practised for the purpose of a cure; unhappily, it is not very authentic.

There is, in truth, no certain notice of phlebotomy until it stands out clearly as a common practice in the time of Hippocrates; and a search after the precise time, or the particular operator who first was bold enough to plunge in the lancet and abstract blood, will only lead to disappointment.

The Greeks derived their earliest medical knowledge from the Egyptians; but there is no evidence that they learned from them the art of bleeding, or that it was ever employed by them.

The Chinese claim even a greater antiquity than the Egyptians; but there is no evidence of the practice having been employed by them, nor by any other of the ancient Eastern nations. (Bancroft.)

Although, however, we cannot ascertain the exact period during which bleeding has been in vogue, we know that it was in use for nearly 2,500 years; and I have often thought that the remarkable and abrupt cessation from its use in our own times has not surprised us so much as, when we consider the subject, it ought to have done. Whether we consider the antiquity and duration of the practice, and the universality of its employment, or the completeness of its abandonment now, it is equally astounding—nothing less than a complete revolution in the practice of medicine.

Experience must, indeed, as Hippocrates says in his first aphorism, be fallacious if we decide that a means of treatment, sanctioned by the use of between two and three thousand years, and upheld by the authority of the ablest men of past times, is finally and for ever given up. This seems to me to be the most interesting and important question in connection with this subject. Is the relinquishment of bleeding final? or shall we see by and bye, or will our successors see, a resumption of the practice? This, I take it, is a very difficult question to answer; and he would be a very bold man who, after looking carefully through the history of the past, would venture to assert that bleeding will not be profitably employed any more.

There have been opponents of the practice from the earliest times; and this is one of the strongest arguments against those who have held, or hold now, that bleeding has gone out because of a change in the type of disease, or because of a deterioration in the strength of the present race of patients. There have been, also, periods when it has been scantily, and others when it has been profusely, employed; and some of the facts connected with this point seem to show that, although the change of type theory cannot afford the whole explanation, yet there have been times when bleeding has been better borne, or more beneficial than at others.

Nearly as early as the time of Hippocrates, who "sometimes carried bleeding to a great extent, even in chronic diseases" (Hamilton), we find that Chrysippus, a pupil of Eudoxus of Cnidos, had an insuperable objection both to purgatives and venesection. (Hamilton, p. 71.)

Again, Erasistratus, who is supposed to have been a contemporary with Herophilus, and to have flourished in the reign of Seleucus, about three hundred years before our era, and is admitted by all but Galen, whose inordinate veneration for Hippocrates too often leads him to be unjust to the merits of others, to have been an anatomist of the first skill, and a practitioner of the first reputation, according to Galen, wholly banished the use of the lancet; but we are informed by others that, without absolutely interdicting it, he was much more sparing of bleeding than other practitioners. (Hamilton, pp. 85 and 89.)

There is no difficulty in finding evidence of the free use of bleeding in most periods of medical history; and, although not so distinct, there may yet be traced with sufficient clearness marks of the varying frequency with which it was employed. I have alluded to two instances of abstinence from bleeding at very early periods; my next illustration belongs to another time and another school.

Galen, in his work addressed to the Roman followers of Erasistratus,

details how, when he first came to Rome, he saw patient after patient die, suffocated with pneumonia and angina, because the physicians refused to bleed; by way of contrast, he triumphantly records how he had been called to see the steward of a rich man in the suburbs of Rome, who had been suffering under ophthalmia for twenty days, and had been treated without benefit by the family physician, who was of the Erasistratean sect. "I found the patient," says Galen, "a plethoric young man, with intense inflammation, swelling, and pain and discharge. Knowing what the treatment had been, I said that it was impossible I could take charge of such a patient in the suburbs, and that I ought to see him very frequently for at least three days. Let me take him home, I said, for three days. They assented gladly. I at once drew three pounds of blood; and, at three o'clock, one more." He was wonderfully relieved next day; and, with other treatment, much as we should employ it now, the patient recovered. We learn, also, that the master of the steward, on hearing what had made so admirable a cure, nicknamed his Erasistratean physician *Αἱμαφθός*, Anglicè Blood-funker. (Cooper's *Surgical Dict.*, p. 54.)

For the practice of bleeding largely in pleurisy and pneumonia, which Hippocrates and Galen had enjoined, the Arabs substituted one entirely opposite; they prescribed pricking slightly the vein of the foot, to let the blood flow drop by drop. Their method prevailed throughout Europe until the commencement of the sixteenth century; then, a pleuritic epidemic having appeared several times in the capital of France, a physician of Paris, named Pierre Brisset, distressed to see the most of his patients perish, and encouraged, also, by reading the Greek authors, dared to revive their practice. The success he obtained filled him with enthusiasm; he hastened to publish it, and proclaimed boldly the superiority of the method of Hippocrates to that of Avicenna. (Renouard, *Trans.*, p. 323.)

It has generally been, I believe, during the occurrence of some epidemic in which the treatment at the time in fashion has been found to be unsuccessful, that bleeding has been resorted to at one time, and abandoned at another; and this, I think, speaks plainly in favour of the landmarks by which both modern and ancient physicians profess to have been guided.

I cannot find time to cite the numerous instances in which bleeding was avoided. Abernethy appears to have had a wholesome dread of it, whilst yet he bled freely. He says: "I have seen a patient bled and bled; and, two or three days after, the medical man has been glad to throw in the bark, and try every means when it was too late." Again: "I have lived in London all my life, and am very chary of taking blood; but still, if some were to see how I would bleed a patient in inflammation of a vital organ, they would wonder." (Cooper's *Dict.*, p. 56.)

But it is not only with regard to very long periods of history that this change with regard to the practice of bleeding has occurred. Dr. Adams, the learned translator of Hippocrates for the old Sydenham Society, says: "Then there is given a general rule for bleeding in disease which certainly is well deserving of attention at the present time, when professional opinions on this point are very much unsettled. Now-a-days we have abandoned all general rules of practice, and profess to be guided solely by experience; but how variable and uncertain are its results in the present case. I myself—albeit but verging towards the decline of life—can well remember the time when a physician would have run the risk of being indicted for culpable homicide if he had ventured to bleed a patient in common fever; about twenty-five years ago, venesection in fever, and in almost every disease, was the established order of the day; and now what shall I state as the general practice that has been sanctioned by the experience of the present generation? I can scarcely say, so variable has the practice become in fever and in many other diseases of later years." (Sydenham Society's Translation of Hippocrates, vol. i, p. 307.)

We certainly cannot say now that the practice is variable, for we are most decidedly living in one of the periods when the lancet is carried idly in its silver case; no one bleeds; and yet from the way in which I find that my friends retain their lancets, and keep them from rusting, I cannot help thinking that they look forward to a time when they will employ them again. And there certainly may come a period when a recurrence of similar conditions may lead to a revival of the practice; we can only hope that this will not be, except upon the most substantial evidence, not upon the apparent success of some popular practitioner.

There can be no doubt that, at some periods, bleeding was used in frightful excess, and such seems to have been the case at the time just preceding that of which I am writing. We cannot read the accounts that have been given by Stokes and others without seeing how the practice was abused; and most of the older of us will have met with instances in which permanent injury had been done to the individual

by it. It appears in this place to have been carried to as great, if not to a greater, excess than anywhere; and I have heard many stories of the way in which the patients at the infirmary and other places used to be bled all round by the students, and that in the most lavish manner. When we come to inquire as to what immediately led to the giving up of bleeding, I think we shall be inclined to say that it was the excess of the last generation that caused the utter collapse of the practice.

Dr. Bennett alleges that it has paled before the brighter light of modern pathology; and, no doubt, the more correct discrimination of disease that we make now, the better diagnosis that we attain, has had much to do with confirming and endorsing the relinquishment of the practice; but the proof of the advantage, so far as it has been derived from statistics and advanced pathological science, seems to me rather to have followed than to have preceded it.

The statistics which prove pneumonia, apoplexy, etc., to have a better rate of recovery without than with bleeding, certainly were produced after the use of it was given up, and when it was being sought to account for this change; but, no doubt, they settled and established the issue.

The consideration of the subject of apoplexy will show how much our advanced and increased knowledge of its causes must influence us when we deliberate upon the advantage or disadvantage of employing bleeding as a means of treatment of it. Thirty years ago, everyone falling into a fit, or even threatening to do so, would inevitably have been bled, and that profusely; but, from what we know now, we may, I think, say that many were fatally bled. At that time, most of the cases of sudden hemiplegia, with or without coma, were attributed to apoplexy, which was divided in the works on medicine into sanguineous and serous; and to the latter class were assigned all the cases in which very slight morbid appearances, or none at all, were found after death; if the serum were but visible, why then it had undergone *post mortem* absorption or transudation, or, at all events, it had been there, but had disappeared.

At this time, we know that many of these cases must have depended upon defective circulation, some upon embolism, some upon minute vegetations detached from one of the valves of the heart, and washed along in the blood until arrested by a cerebral artery, and other conditions in which bleeding is, and must have been, absolutely injurious.

Of these cases, large numbers must have been of the pseudo-apoplectic character, which Stokes has so well described, and which, he says, "differ from ordinary sanguineous apoplexy in three particulars, namely, the frequent repetition of the seizures, the rarity of consequent paralysis, and the fact that there is not only danger from an antiphlogistic treatment, but benefit, both remedial and preventive, from the use of stimulants." (Stokes on *Diseases of Heart and Aorta*, p. 322.)

I do not think that this condition is even yet sufficiently apprehended; but it is fortunate, because it is not always easy to say with which condition we are dealing, that statistics are forthcoming to show that bleeding must have been injurious even in sanguineous apoplexy.

Again, our whole knowledge of the conditions that we now class under the names of septicæmia, pyæmia, embolism, etc., has been acquired in the last twenty or thirty years; and what a difference our recognition of these, imperfect and crude as it is, has made in our estimate of the propriety of bleeding. In a pleurisy, or a pneumonia, a pericarditis, or arachnitis that proceeds from septic conditions, no one would dream of bleeding; and yet these acute affections—most acute and intense, indeed, when produced by blood-contamination—are the ones for which bleeding would have been most severely practised.

No one can imagine that the cases we are writing of have resulted from any change in type or character of constitution, although there can be no doubt that they are much more rare at some times than others, nor can we doubt that they must have occurred through all time. At present, they are the most common conditions, especially in connection with surgery and midwifery; but they occur much more frequently than is yet generally recognised without obvious cause, and in connection with diseases that we are accustomed to call medical.

That they occurred in early times as well as now may, I think, be easily shown. No one can question that the following case, taken from Hippocrates, *On Epidemic Diseases*, was one of pyæmia. "He, whose tibia was cut, had a blackness come upon the part. The ulcer was large on the outside, and the discharge from the hinder part. When it was cleansed, he was seized with a pain of the side and left breast, opposite to it, grew feverish, and died of his fever." (Clifton's Hippocrates, p. 127.)

The hurt bone, in connection with which pyæmia so constantly occurs, the sharp pleuritic pain, the fever, and the fatality, bear the closest resemblance to the disease as we have it now, and we cannot but admire the clear and graphic way in which the case is recorded.

Nothing is said about bleeding in the record; but it shows that sep-

ticæmic conditions played their part at the very beginning of the history of medicine as they do now at the latest period of the same; and that it is almost certain that all through the intermediate time they have done the same; and equally certain that the insight that we now have into the nature and character of these has had an immense influence over medical treatment. That bleeding was formerly and in most times resorted to in such cases might, I think, be abundantly proved.

Sydenham says: "I think pleurisy is a fever originating in a proper and peculiar inflammation of the blood—an inflammation by means of which nature deposits the peccant matters in the pleuræ." (We might think he was writing of septicæmic pleurisy only.) "Sometimes she lays it in the lung itself, and then there comes a peripneumony. This differs from pleurisy only in degree. In my treatment, I have the following aim in view: to repress the inflammation of the blood, and to divert those inflamed particles, which have made an onset on the lining membrane of the ribs (and have there lit up so much mischief) into their proper outlets. For this reason, my sheet anchor is venesection." "Such", says Bennett, "was the pathology and practice of Sydenham, the latter following consistently enough on the former; and the essential idea of diminishing the morbid matters in the blood has not only descended from Hippocrates to the days of Sydenham, but has come down from his to our own times." (*Principles of Medicine*, p. 267.)

What a far-reaching influence Bright's researches must have had on the treatment of inflammation! We should hesitate to bleed for the serous inflammations, the pneumonias, the apoplexies that occur in the course of diseases of the kidneys, although there is one condition—that of puerperal convulsions—in which our colleague Dr. Swayne still advocates venesection.

It is difficult to conceive a time when disease was not the same in most respects as it is now. There may be, and there undoubtedly is, as the result of civilisation and the artificial and enervating modes of living begotten of it, a great deterioration of vital power and degradation, and gradual degeneration of the race; and, amongst other causes, this is, no doubt, promoted by the medical skill which saves weakly and unhealthy children, to live to procreate an unhealthy offspring. But, after all allowance has been made for this, we cannot imagine but that the conditions that I have referred to must have existed through all time. Injuries must have been made fatal by blood-poisoning, and the parturient woman must have encountered the same dangers that she does now; and the various other causes which our advancing knowledge has made clear to us must in old time, as now, have existed, and influenced and modified disease. The amount of influence that the advancing progress of pathological knowledge has had in the last thirty years it is difficult to calculate, and certainly it is not even yet adequately acknowledged or appreciated in many of the books which profess to teach medicine and surgery. In the text-books that I used as a student, there is no mention of pyæmia, or septicæmia, or any hint of their influence; and directions were given to bleed for almost everything. In all inflammations of lung or pleura, free bleeding, repeated again and again, was directed; and in those of the peritoneum, the abdomen, after bleeding, was to be covered with leeches. But even then, as I have said, I was startled to find that the writers who laid down those rules had ceased to practise them. It is strange that even now the best text-books give the same directions as to bleeding, although it has become so utterly a thing of the past; and it certainly is time that the teaching should be brought into accord with the practice.

Although something may be said for the varying character of epidemic influence, and for the deteriorating effect of large aggregations of people in cities, I think we may fairly congratulate ourselves that the altered practice we have been considering is not only the greatest change, but also the greatest advance, in our time; and that it is due to the real progress that we have made in our knowledge of the nature of disease.

Mr. Clarke then referred to the abandonment of two other members of the antiphlogistic group—antimony and mercury; expressing the opinion that their disuse had been too universal. He did not think mercury necessary for the subduing of acute inflammation, but believed that it was useful in removing the products of inflammation.

It is a great misfortune, as I think Sir William Jenner has somewhere said, that it so often happens that, because a remedy does not do all that it has been said to do, and because its action is not in the way that previous theory had indicated, it should be entirely given up. The patient may be the better for a medicine, although some other explanation of its action than the one generally received may be the true one, and even though we may not be able to explain its action at all. As in the days of Celsus, so now, there are to be found theorists and empirics; and I am afraid that, as then, so now, unless for the one class the stamp of experience, or for the other of a perfect explanation,

can be obtained, they will not adopt the practice. But even experience itself teaches that neither empiricism nor theoretics is an infallible guide. The experience of ages may mislead; very plausible theories may be false; but we must still hold that the guiding of experience is the perfect pilot; whilst, on the other hand, we cannot discard reasoning because its conclusions are often untrue. Happily, we may say, as it has been said before, that men whose opinions have been directly opposite to one another have, notwithstanding, equally restored their patients to health.

Celsus has wisely said that "medicine ought to be rational, but to draw its methods from the evident causes; all the obscure being removed, not from the attention of the artist, but from the practice of the art". It is not to be wondered at that, during such a remarkable transition as we have been considering, when plans of treatment that had endured the test of ages of experience were almost completely set aside, some, and even men of education and intelligence, should have made shipwreck of their medical faith, and thought that they had found in infinitesimal doses better results than had been obtained from the former heroic treatment, or that others should have passed over to the very opposite extreme, and endeavoured, by an inordinate use of stimulants and cramming, to make up in our generation for the depletory treatment of ages. But, fortunately, most men took a more reasonable view of the change, and accepted the more promising practice of the present time, the main guiding principle of which is to support and aid the natural tendency to recovery.

There can be no question, I think, that the change has been greatly due to a more scientific investigation of the natural history of disease than has ever been made before; the symptoms and phenomena during life carefully followed up and compared with what was to be found after death, greatly aided by the discovery of numerous instruments of precision—discoveries which have been excelled in no department of science, and which afford a subject of the greatest congratulation and encouragement.

Mr. Clarke then proceeded to give a notice of the discoveries to which he alluded, mentioning the aid which medical science and practice derived from the stethoscope, the microscope, the laryngoscope, the ophthalmoscope, the thermometer, the uterine sound, the various specula, the sphygmograph and endoscope, etc. He expressed the opinion that medicine and surgery had made more progress within the last century than in the preceding 3,000 or 4,000 years; and, among their achievements, spoke specially of the discovery of vaccination and of the use of anaesthetics, giving an interesting historical sketch of each. He next referred to the progress of surgery, dissenting from the opinion that it had become an exact science, but admitting that the improvements in it had been very striking. Among them, he referred especially to the substitution of excision for amputation—holding, however, that excision itself might often be avoided by proper management. He also noticed ovariotomy, Esmarch's method, skin-grafting, the compression-treatment of aneurism, pneumatic aspiration, the operations for the remedy of defects and deformities, subcutaneous injection, etc.; and concluded his address as follows.

Whilst medicine, and surgery, and obstetrics have made enormous advances in our times, we must still freely admit that much ground remains unreclaimed. We seem as far off as ever from any perfect theory on which diseases may be treated; and, although we derive great aid from physiology and chemistry, and other allied sciences, we are still compelled, in our treatment of cases at the bedside, to fall back upon a refined experience. We rely upon the stored-up wisdom of the past, guided and directed by what we ourselves have learned from observation.

We cannot yet say, in many cases, here is such and such a group of symptoms; they indicate a definite derangement, which can be met with mathematical precision by such and such remedies; in some cases, we do almost attain to this accuracy, and it is highly desirable that the number should be increased; but, in the meantime, in the majority, we take a safer course in following the path that the stored-up information that has been gathered in the past leads us.

We must admit, too, that many of the most painful and terrible diseases to which "flesh is heir" remain inexorable to any remedies that we at present possess, and bid defiance to every effort made for their cure. It is only the charlatan who promises to cure everything. For us, the grandest aim is to be true, and all the great in our art have been men who have tried to see clearly and to tell fairly what is likely to be the issue of the storm that they often cannot quell; and nothing, in my opinion, shows more clearly the secure foundation on which our knowledge rests, than the certainty with which we can foresee and foretell the course that a disease will take, thereby often affording most valuable guidance to those we cannot cure. Too much, no doubt, is often expected of us in these days; every one

seeks to be healed of his disease, and wonders why, in his case, we fail, not recognising that, in this world, we are not to reach the land where there shall be no sickness nor any more deaths.

MEDICAL TOPICS OF THE YEAR.

Being the Address delivered at the Annual Meeting of the South-Eastern Branch.

By JAMES R. STEDMAN, M.D.,

Consulting Surgeon to the Royal Surrey County Hospital; President of the Branch.

IF I feel very great pleasure and, at the same time, but little confidence in my power efficiently to carry out the honourable position as your President, in which my too partial friends have placed me, it is from an honest feeling of self-blame, which tells me I have not sufficiently attended to, I fear, for many years the duties incident to the position of a member of our Association so well as to make myself so fully conversant with the duties of your President as I ought to be. I, therefore, crave your indulgence, and promise to do better for the future. I this day, on behalf of myself, our Vice-President, and the local committee who have acted so kindly and indefatigably with me, bid you most hearty welcome, and trust this present meeting may recall the two former Guildford meetings; the first under the presidency of my father twenty years since, quite in the youthful days of the Association; the second, which, doubtless, many may remember in this room, a few years since, most successfully carried out by my old friend Mr. Napper.

Owing to the warm and most kind wish of Dr. Brushfield of Brookwood Mount, one of our vice-presidents, to show the great County Lunatic Asylum at Brookwood to the members of our Branch who may meet here to-day, I have ventured to depart from the usual order of our meeting in making but a very short address to you; but, in the few minutes we may have to spare, may I presume to call your attention, however briefly, to subjects which at the present time are of importance and interest to the profession? I do this not so much for the purpose of imparting information, as of eliciting discussion at such meetings as may be held during the coming year.

I think we must admit that, although the private position of the medical practitioner, as far as affects his relations to those who seek his advice, remains much as it has been for nearly half a century, the public demands made on him have much increased, requiring a greatly additional and varied amount of information, especially on subjects on which the public will look to him as a skilled opinion.

Among the public duties of the profession, we class sanitary legislation, as affecting the position of medical officers of health; and we should endeavour to determine if the sanitary condition of the country be best forwarded and ensured by the appointment of a single medical sanitary officer acting over a wide district, or by those parochial medical officers whose care extends over a much more limited sphere.

The much increased duties and strict attention to analysis required of those acting as medical analysts requires notice.

The very important question of how our rivers are to be freed from pollution demands instant attention, and the advice of the medical profession of the country should be sought in aid of the engineers whose special duty it must be to carry out the great work of preserving in its purity the water which is bestowed on us, and of restoring the results of our sewage to an innocuous state.

The newly raised question of burial, brought before the public with much ability and spirit by a distinguished member of the profession, Mr. Seymour Haden, will not, I hope, be allowed to fall out of the sphere of public opinion and public observation from want of support from the medical profession, especially from those of our members who may have the opportunity afforded them of watching either the result of cremation, as practised in the case of Lady Dilke, or the, in my opinion, preferable plan proposed by Mr. Haden, which is more agreeable to the feelings of the living and highly practical, as regards the speedy passing away of the dead; indeed, by the means suggested by him, the injunction of "earth to earth" will be best carried out. I may here notice that, in Spain, arrangements are always made for the purchase of graves for a certain number of years. The interest of the holder of the ground then ceases; it is sold again after a limited period of disuse, no remains of the former tenants, save a few bones, being found; but it must be said this takes place in a very dry soil. I regret I am not fully informed what kind of coffins are used under these circumstances.

I also think it would be right to urge by every means in our power, due regard being given to the special requirements of the several districts in which we practise, the providing of small hospitals for the treatment of infectious diseases. I am perfectly satisfied of the necessity of a

rigid system of isolation, which may require legislative aid, empowering medical men, under urgent conditions, and where, at the same time, there may be great overcrowding in the house or room where the malady exists, to order the removal of the patient to a hospital; which would, indeed, be but returning to the prudent customs of our ancestors, who kept up in many places what they termed pest-houses, but which might require from modern feeling some more elegant name, such as sanatorium.

I will next draw your attention to the fact that a Bill will be brought forward for the better regulation of the election of coroners, and also for providing retiring pensions for them; in which it will be proposed that the power of electing coroners be vested in the magistracy; no provision, as far as I know, being made (but, doubtless, it will be) for smaller districts, such as our boroughs. On this subject, I do not agree with those who think that the election for coroner had better remain, as heretofore, in the hands of the county freeholders, doing away with voting for graves and other most trifling claims, which have hitherto been admitted as valid in votes recorded for coroners; giving as the reason for such an opinion that, if the appointment were vested in the magistrates, it would most possibly be filled by a legal, not a medical candidate, the lawyers having, in the editor's view of the question, the most influence, and being most accustomed to organise and carry out elections. I do not agree with this opinion, fearing that but little good will be effected by the proposed bill, if left to the county freeholders, as sufficient interest will not be excited by a contested election for coroners, differing as it does in public interest from an election for a county member, to induce the freeholders to travel far or put themselves to any expense to vote, unless the candidates, be they either legal or medical, be put to large and not altogether legitimate outlay to secure their election. I do not know if the election would be by ballot; but, not many years since, I saw electors at the railway station in this town, and in large numbers, very unfit to carry out any function requiring the exercise of intelligence or sober judgment. For my part, I would rather trust to the knowledge that the extended education of medical men in those subjects in which a coroner requires to be well informed, jurisprudence, sanitary legislation, etc., may become so generally known as to make its own legitimate impression on public opinion; so that the medical candidate may possess as strong or stronger claim on the support of the county magistrates as his legal brother; but, to secure this much to be desired end, the medical men of the contested county must be prepared to use all the interest they possess. My experience as a coroner is but limited; but I am very strongly of opinion that the office of coroner is carried out with more benefit to the community by a medical than by a legal authority.

I must take up your time for a few minutes on the subject of abuse of hospitals, of which there has been frequent mention in our JOURNAL during the past year. On this matter, we must feel it our duty, let it affect us personally or not, to do our best to diminish and check a misappropriation of charity, which should be looked on as degrading to those receiving it, who are capable of paying for medical attendance. I have been astonished to hear the plea urged in defence, that at hospitals the patient gets the most skilled opinion. This argument, however, is readily met by the reply, that the same opinion may be had by making the ordinary payment for it.

The President of the Royal College of Physicians, in his recent annual address to the Fellows of the College, deemed it needful, owing to the greatly increased expenditure of members of the medical profession, commencing with their early professional education, extending over a much longer time before they are prepared for the start in medical life, to bring before his colleagues this subject, that they might consider by what means the physician's fee of a guinea should be sufficiently increased to make it a fair equivalent to the guinea as paid one hundred and twenty years since; adding that the physician practising in London at the present day, unless in large consultation or home practice, cannot maintain himself. For this reason, I think the time has fully come that other branches of the profession should also consider how far the great increase of house-rent, stable requirements, price of horses, servants' wages, should justify us to increase our professional charges to such an extent as to place us under such conditions as might compare not unfavourably with our position in the past. At the meeting held two years since in London, I was present at a sectional meeting, when this subject of great increase of price, or rather, lessened value of money, was discussed in rather an irregular manner; and I joined with those who held the opinion that it was more dignified to wait until the occasion for determined action on the part of the profession was more decidedly forced on them by the continuance of increased and necessary expenditure.

I would here allude to the Contagious Diseases Acts, and express my

warm wish that, in voting on this most important subject, as regards any alteration of Act, the members of the House would consult their medical men, and duly weigh the advice received. I am not so much influenced by the greater or less amount of disease in protected stations, but think far more of the mass of disease from which people will be saved, especially as regards the transmission of syphilis to virtuous and healthy women, who pass it on to their children. We all of us can bear sad witness to this fact in what is frequently brought before us.

It is worthy of consideration how far a just and evident claim for increased remuneration may be advanced by medical men holding appointments under the Poor-Law Board, taking into consideration the basis on which payment was calculated in the past.

The great question of temperance, now happily prominent, is one in which we must be deeply interested, and the importance of which we cannot too highly estimate, although I must enter my protest at the manner in which, from time to time, our total abstinence friends gibbet those maintaining temperance views, and medical men especially, before an abstaining and sympathising audience, as being by our, in their view, loose method in ordering stimulants, giving a helping hand in the formation of the future drunkard. This charge cannot, however, be maintained, as I feel confident we are all precise in the quantity of wine or other stimulant directed; doubtless, we are often quoted as directing stimulants when we are not doing so.

I should have wished to call your attention to other subjects of interest: the education of midwives, the addition of female practitioners—all subjects on which I should with great pleasure hear the opinions of the members of the Branch; but time forbids me to dilate on them.

CLINICAL MEMORANDA.

RAPID PULSE.

I WAS much interested in reading Dr. Farquharson's paper on Excessive Rapidity of the Pulse, in the JOURNAL of June 12th, as I myself saw a patient similarly affected a few days later. The patient, a lady 66 years of age, has habitually enjoyed very good health, with the exception of occasional stomach derangement. Recently, however, during a visit to Buxton, she almost fainted in church after an indigestible meal. For the next few days, she did not feel well, and overtaxed her strength, in addition, by too much walking. She then returned home, and I saw her a week later. During this week, she had been suffering from palpitation, giddiness, weakness, and sleeplessness. On placing my finger on the pulse, I was surprised to find that I could not satisfactorily count it, by reason of its frequency, smallness, and irregularity. On examining with the stethoscope, however, I found the heart beating 150 per minute, with no *bruit* of any kind. There were no other symptoms of any moment. I prescribed tincture of digitalis and the perchloride of iron, of each fifteen minims. After five doses of this had been taken, I was pleased to find a wonderful improvement; the pulse had fallen to 74, perfectly regular, and of fair volume, the other unpleasant symptoms being also removed. In this case, I cannot help regarding the dyspeptic symptoms, combined with overexertion, as giving rise to a partial suspension of the inhibitory action of the vagus upon the heart, as Dr. Handfield Jones explains. At any rate, the action of digitalis is wonderfully prompt and decided in such cases.

WILLIAM S. PAGET, M.B.Lond., Great Crosby, Liverpool.

SURGICAL MEMORANDA.

ON THE USE OF ARNICA IN ORCHITIS.

I SHOULD be glad if I could have a corner in the JOURNAL to say a few words respecting a method of treating orchitis which I have for many years found very effective. It consists in the more or less constant application (of course, while the patient is resting) of a lotion of tincture of arnica and water (one part of the former to six of the latter) to the affected organ; secondly, in rubbing in an embrocation composed of one-third or even one-half tincture of arnica and soap-liniment two or three times a day along the course of the spermatic cord; and thirdly, in the internal administration of seven-drop doses of tincture of arnica, combined (when there is febrile disturbance) with two-and-a-half-drop doses of Fleming's tincture of aconite and acetate of ammonia. This simple treatment, so far as my experience goes, generally cures the patient in a fortnight or less. In using our remedial agents of the above-named strength, there is little danger of causing cutaneous irritation; but it must be admitted that, while some skins

will bear the constant application of even pure tincture of arnica for a considerable time, there are others which are inconceivably sensitive to the action of the drug. We must, therefore, be on the watch for any show of erysipelatoid inflammation, in case such should occur.

I cannot well, for obvious reasons, give cases; but I dare say I have said sufficient to induce some of the readers of the JOURNAL to try the arnica treatment of orchitis. Should they do so, I feel confident that they will not be disappointed in the results. H. G. KNAGGS.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JUNE 2ND, 1875.

W. O. PRIESTLEY, M.D., F.R.C.P., President, in the Chair.

Specimens of Hindoo Placenta and Fetal Heads were shown and presented to the Society by Dr. SHORT of Madras.

Suppurating Tumour of Left Ovary.—Dr. J. W. J. OSWALD related the particulars of a case, where, from the rapidity of its growth, the emaciation of the patient, and lung-complication, tubercular peritonitis was supposed to exist. The patient had been under Dr. Routh's care in the Samaritan Hospital, and died suddenly about a week after her return home.—Dr. ROUTH remarked, that the chief point of interest was the rapidity of the growth of the tumour, which led to the supposition of its being a cancerous growth; there was amphoric breathing over the right chest.—Dr. WILLIAMS asked, if any microscopic examination had been made. He had witnessed a similar case.—Dr. OSWALD replied, that the microscope proved it to be tuberculous.

Specimen of Extrauterine Gestation, in which a Communication existed between the Cyst and the Uterus.—Dr. GALABIN exhibited an interesting specimen of this nature. In February, when the patient—a multipara—considered herself eight months pregnant, severe abdominal pain and hæmorrhage from the vagina occurred; the fetal movements ceasing from this date. The breasts also enlarged. She was admitted into Guy's Hospital in May, and attempts were made to deliver the fœtus, but the patient died collapsed. At the *post mortem* examination, a greenish semisloping membrane was exposed, which formed an entire cyst, enclosing the fœtus. There was a round opening from the cyst into the uterus.—The PRESIDENT referred the specimen to Dr. Playfair and Dr. Williams, in conjunction with Dr. Galabin, for further investigation.

Intramural Calcareous Tumour in situ.—Dr. A. WYNN WILLIAMS exhibited a specimen, and related the history of the case. Dr. Kirby having called him in consultation to a primipara, aged 45, craniotomy was performed; and, delivery being still impossible, cephalotripsy was about to be resorted to, when the hard mass was discovered to be movable within the uterus. The cephalotribe was applied, and a portion of the mass broken off. Delivery of the body of the fœtus was then effected, and subsequently the tumour, which proved to be an intramural calcareous tumour, was extracted. The patient made a good recovery.

Case of Extreme Dropsy: Fatty Degeneration, and Friability of the Placenta.—Dr. JOHN BRUNTON exhibited what had been an enormous placenta, but had unfortunately become much shrivelled up by being kept in spirits of wine. The patient, a primipara, was very stout, labour was premature, about the sixth month. The right hand and left foot presented. The child died immediately after birth. A very large placenta was first expelled, and subsequently three other separate portions. The patient was in an advanced state of dropsy. The urine was slightly albuminous. She recovered perfectly.

Case of Monstrosity.—Dr. FREDERICK WALLACE exhibited a fœtus, attached to the head of which was a large fluid tumour, supposed during labour to be hydrocephalous. One eye was wanting, and the other only rudimentary, and there was no tongue.

Large Uterus.—Dr. WALLACE also exhibited an enormous uterus removed *post mortem* from a patient, aged 55, who had been tapped over a dozen times for supposed ovarian tumour.—Dr. HAYES thought the case worthy of further examination.—The PRESIDENT requested Drs. Aveling, Hayes, and Wallace, to examine and report upon both specimens.

Placental Polyypus.—Dr. T. C. HAYES exhibited a specimen removed from a patient on the eighth day after delivery, whose labour had been natural and easy, though followed by a smart hæmorrhage. Symptoms of septicæmia ensued, and a portion of placenta was extracted; the lochia being horribly offensive, injections of Condy's fluid were employed, and the patient made an excellent recovery.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 17TH, 1875.

THE APPLICATION OF MATHEMATICAL FORMULÆ TO
MEDICAL STATISTICS.

THE "Calculus of Probabilities", developed by Pascal, Fermat and Parisot, Laplace, Lacroix, and other eminent mathematicians, has, within the present century, been applied to popular and medical statistics. The original papers of Sir John Herschel do not appear to have attracted much attention in this country; and, although recently reprinted by Quetelet in French, are ignored by Professor Radicke of Bonn, and his critics—at least, in the papers translated by Dr. Bond in the *Selected Monographs* of the New Sydenham Society (1861). It is now some years since these latter were published, and it may therefore not be uninteresting to quote Professor Rosenthal's review of J. Hirschberg's recent work, *Die Mathematischen Grundlagen der Medicinischen Statistik elementär dargestellt*, 8vo, pp. 95, Leipzig, Veit and Co. 1874. This review appears in No. 6 of the *Centralblatt für die Medicinischen Wissenschaften* for 1875.

The article begins by saying that medical statistics differ from ordinary statistics (demology), because the latter draws conclusions from observations or numbers the series of which are terminated or fully ended; whilst the former, or the medical, series can only be carried out partially. For example, we cannot absolutely say what is the percentage of mortality from pneumonia at the present moment. This distinction is, we think, somewhat artificial; since no census-returns can give the absolute numbers alive at a given age in any given moment. The real distinction would rather seem to be in the magnitude of the numbers [of observations], and in the machinery employed for their collection; those for a census, for instance, being far more simultaneous than any series of medical observations can be. From such difficulties, the reviewer remarks, the calculus of probabilities will do much to extricate us. 1. It will show how far, in medical matters, we need extend our observations or experiments so that the general results may be fairly accurate. 2. It will show us what degree of accuracy belongs to the observations and reports of medical cases which are published from time to time. The theory, of course, presupposes the accuracy of each separate observation or experiment in the series. On this account, it is only applicable in cases where there is no doubt about the diagnosis—such as cataract and cataract-operations, for instance—when we wish to determine, on physical principles, the laws regulating the occurrence of a disease, and the mode in which it is affected by various therapeutic agencies. Gavarret, who used Poisson's formulæ, and even A. Fick, have treated the subject dogmatically, *i. e.*, without proofs, whilst our author endeavours to furnish a complete, systematic, and progressive elementary treatise on these topics.

The first part of his pamphlet gives an abstract of the calculus of probabilities adapted for medical readers. The mathematical probability of any event is the relation borne by cases favourable to it to all possible cases. Thus, in a die or cube with six faces, marked with dots progressing from one to six, the probability of the face with six dots being uppermost in a given throw may be regarded as one in six, and expressed thus: $P = \frac{1}{6}$; or the formula may be made more general, thus: $P = \frac{n}{N}$, where $n < N$. It is

very often not possible to determine the absolute probability of any disease occurring at a given age, for example, for the several decades of life; but we may very often discover the relation borne by the different probabilities to each other. Thus, the probabilities of cataract occurring in the first seven decades of human life are to one another as 1:1.5:2:2.5:8.3:24.5:66.3. Suppose the probability of an event $A = \frac{n}{m}$, that of a second event $B = \frac{p}{q}$; then the probability of A and B occurring together, or concurring, where both events are independent of each other; in other words, the chance $c = \frac{n \cdot p}{m \cdot q}$. [The chance of throwing double sixes, in other words, of both dice exhibiting six dots on the uppermost faces, will therefore be (in a single throw) $\frac{1}{6} \cdot \frac{1}{6} = \frac{1}{36}$]. If the number obtained by observation, C of the relative frequency of the concurrence of A and B , approximates closely to c , we have no ground for the opinion that there is any etiological connection between them, etc. The probabilities (P_1, P_2, P_3, \dots) of different primary causes (*ursachen*) to which an event may be ascribed are exactly similar to the probabilities or chances (C_1, C_2, C_3, \dots) according to which any one of the primary causes, if in action, might have brought about the event in question. From $P_1, P_2, P_3, \dots = C_1, C_2, C_3, \dots$ it follows, if all the possible primary causes (hypotheses) be investigated, that if $P_1, P_2, P_3 + \dots = 1$, then

$$C_1 = \frac{P_1}{P_1 + P_2 + P_3 + \dots}, \text{ and so on.}$$

The ordinary way of "making a diagnosis" is based upon this. A single symptom (such as the rash in scarlatina) is taken, and the primary cause assumed with more or less of probability. [It is, however, very rash to do so in the majority of cases.] It must be admitted, however, that we have yet to discover correct numbers expressing the frequency of given symptoms; and, on this account, instead of definite numbers, the indefinite expressions "frequent", "rare", and the like, are obliged to be used. The mathematical expectation [*lit.* "hope"] is the sum or product of the desired gain or advantage in the probability of obtaining it; that is, the sum of all those possible products in which losses are estimated as negative gains. Medical men have to practise their profession in such a manner that the sum of the benefits their patients may expect to derive from their practice may be greater than the sum of the possible injuries, or negative gains. If two kinds or degrees of cure or success be possible (as, for example, in syphilis and in cataract operations), we must strive to discover for which of these the mathematical expectation is the greater. In certain cases, the moral probability must be substituted. [As in ovariectomy?]

The second part of the work is devoted to the elements of medical statistics.

1. Bernoulli's "law of large numbers" (one of the most remarkable and most comprehensive truths which have ever been recognised by human reason) asserts that if only two events, A and *not-A*, be possible (as life and death, for instance), the actual chance of A may be discovered within certain limits (if we repeat our observations or experiments sufficiently often) with a probability closely approaching to certainty. The proof is simple, and rests on the binomial theorem.

2. If we have determined, by statistics in large numbers or long series of comparable cases, how often a definite event occurs (as, for example, a fatal termination in a given disease) once (1) in q cases, we can obtain from these same numbers the possible error (v) of the results of the observations $\frac{p}{q}$; with the probability $P = 0.9953$, we get

$$v = \pm \sqrt{\frac{8P(q-P)}{q}}$$

Thus the range or boundary of the true value of the chance of the event lies between $\frac{p}{q} + v$ and $\frac{p}{q} - v$. (The proofs of this proposition, and the tables founded upon it, which spare the practitioner the trouble of calculating v in concrete cases, may be seen in the original.) No importance is to be attributed to slight fluctuations in the relative proportions of statistics. The possible error v is not

merely theoretical, but actually occurs. Mooren had 3 per cent. of failures at first in 102 operations on cataract by Von Gräfe's method. Taking the probability as 0.916, the error v amounts to 0.03; so that the true value of his "number of failures" might amount to 6 per cent. He has lately found in 1,500 such operations, that the average percentage of failures actually amounted to between 6 and 6½ per cent. Small numbers or short series only tell us what we *may* do in analogous cases; large numbers or long series tell us what one *ought* to do or obtain. In order to be able properly to fix the mortality of a disease at 20 per cent. from the results of statistics, the number of cases observed ought to be about 10,000.

3. If we have two long series of numbers $\left(\frac{p}{q}$ and $\frac{p_1}{q_1}\right)$ for the fatal termination of a disease (say pneumonia), and two different methods of cure, and we want to reckon the probabilities of each, the result, if the maximal or higher limits of the chance in the second method of cure are less than the minimal or lower limits of the chance in the first method of cure, is incontestably in favour of the former. But most of our remedies are less successful: the range or excursus of the chances in the first method of cure $\frac{p}{q} \pm v$ interferes with that of the second method of cure $\frac{p_1}{q_1} \pm v_1$. If the actual chance in both series be the same, *i. e.*, if the sum of the acting causes (*Ursachen*) be constant, then the differences between the two sets of "numbers of frequency" observed cannot exceed a certain limit, which may be estimated by means of the numbers themselves.

$$\pm \left(\frac{p}{q} - \frac{p_1}{q_1}\right) \leq v; v = \pm \sqrt{\frac{8p^2(q-p)}{q^3} + \frac{8p_1^2(q_1-p_1)}{q_1^3}}$$

The probability $P=0.9953$. If we thus discover the difference $\Delta < v$, we must admit a strong probability that the real or true chance of the events was the same in both series; as, for example, that it was immaterial in the given disease to which of two methods of treatment we might resort. If we find that $\Delta > v$, the chance of the event in the two series must have been different. If the outward circumstances and the treatment were alike in both series, *i. e.*, expectant, we have reason to believe that the character of the disease in the two series of observations was not identical. If the variation in the determining cause of the event *A* be of our own introduction, *e.g.*, by a change in the medication, we have fair ground to attribute the altered chances of *A* to the altered medication or treatment, provided we can demonstrate that, apart from the treatment, the sum of the determining causes of *A* in the two series was actually identical.

The remainder of the pamphlet is devoted to a comparison, on these principles, of Von Gräfe's method of extracting grey cataracts with the old flap operation.

We believe that the advantages of *statistics*, in other words, of long tables of cases, or their results crystallised into a formula, have been greatly overrated in medicine. At the same time, the advantages of the statistical method, and the clearness and definition given to our diagnosis and practice, and to its records, by the habit of mind engendered by mathematical studies can scarcely be overvalued. In a future paper, we hope to give a practical turn to some of these theoretical remarks. One thing is quite evident, that such methods would give the death-blow to most of our modern systems of quackery.

HOSPITAL REFORM.

THE Queen's Hospital, Birmingham, deserves great credit for the manner in which it has persevered in its efforts to stem the current of abuse, and to introduce a sounder system into hospital administration. It is now several years since it instituted an inquiry into the social condition and circumstances of its out-patients, which resulted in the unsatisfactory discovery that considerably more than one-fourth of the applicants were unsuitable upon one ground or another. No doubt, this has led the committee to give their attentive consideration to the whole subject of hospital admissions; and we are not surprised to hear

that they have now laid before the governors a scheme of reform. The main features are as follows: The abolition of subscribers' letters, the establishment of a registration-fee of one shilling, and the institution of an inquiry into the circumstances of the applicant. It is only to be expected that such sweeping alterations as these should excite considerable opposition. Accordingly, we find that a public meeting has been held, presided over by Mr. Sampson Gamgee, in order to protest against their adoption. The opposition seems to have originated principally with the promoters of the "Hospital Saturday", and they claim that the contributors to that fund, as well as all the subscribers of small sums, should be consulted, no less than the two guinea governors, before such changes are introduced. Mr. Gamgee is so well known as a reformer, that the fact of his presiding at the meeting shows that the opposition does not arise from a dislike to all change, but from a belief that the proposed alterations are ill-advised. And, indeed, it does seem that they are of rather too sweeping a character. The abolition of governors' letters, and the institution of a regular system of inquiry, appear to us admirable measures. They lie at the very root of all sound reform. The one is the complement of the other. First let the indiscriminate nominations be abolished, and then substitute, in their place, a system of admission according to the real necessity or urgency of the case. It was objected that an inquiry was degrading, and that the working classes had an aversion to "prying officialism". But surely such inquiry as is proposed is less degrading than the present system of begging for letters of recommendation. As regards the registration fee, however, we think the scheme requires amendment. The majority of hospital patients could, no doubt, easily afford the proposed payment of one shilling for a month's attendance. But surely there are others, whom even a stringent inquiry would adjudge to be suitable applicants, upon whom the registration fee would fall very heavily. We are most desirous that plans should be adopted which would require the working classes to contribute according to their means; but, on the other hand, we should much regret if our hospitals lost their philanthropic character, and ceased to be the means of offering charitable assistance to the really needy and deserving poor. The opposition to these reforms at the Queen's Hospital springs, as we have said, chiefly from the promoters of "Hospital Saturday". But we have never looked with much favour upon "Hospital Saturday" either in the metropolis or elsewhere. It appears to us a very questionable means of bringing the working classes into relation with the hospitals. As at present arranged, it gives to a large and very ill-defined class a kind of right to hospital treatment, though, perhaps, while abundantly well able to pay their own medical man, they may individually have contributed little or nothing to the fund. As a system, it lacks individuality. What is needed at our hospitals is, that working people should be required to contribute according to their means; that for their contributions they should receive ample relief; while those who cannot reasonably be expected to pay anything for themselves, but who are nevertheless above the pauper class, should continue to receive gratuitous assistance.

A SPECIAL general meeting of the Chester General Infirmary took place on the 9th instant. The meeting was well attended, and an important discussion took place on the duties of physicians in relation to general practice, to which we shall allude in a future number.

A NEW convalescent home for metropolitan children was opened on Monday by the Prince of Wales, at Kingston Hill. The home is built to accommodate 180 children, at a cost of £10,000, of which £6,400 is still owing.

MR. HAMILTON A. ROBERTS has been granted a pension of £300 *per annum* upon resigning as medical officer to the Penrhyn Quarry Benefit Club and Infirmary, Bangor, after upwards of forty years' service; *viz.*, £150 from the men, and £150 from Lord Penrhyn, the proprietor.

ON Tuesday last, Dr. Clement Godson was elected Assistant Obstetric Physician to St. Bartholomew's Hospital. There were four other candidates in the field.

A RELATIVE of the late Mr. Thomas Turner of Manchester has just published a memoir of that distinguished surgeon. The book is inscribed to the principal and professors of Owens College.

DR. GILBERT SMITH and Dr. Greenfield have been elected physicians to the Royal Hospital for Diseases of the Chest, City Road, vice Dr. Dobell, elected consulting-physician, and Dr. Donkin, resigned.

A CASE of hydrophobia occurred at Wigan recently. A woman was bitten on the nose by a dog while she was beating it. The wound healed gradually; but symptoms of hydrophobia appeared, and rapidly proved fatal.

UP to the present time, the amount handed over from the various congregations to the Hospital Sunday Fund amounts to £27,300. This sum is about £800 less than that of last year, and exceeds by £1,200 the sum realised by the first year's collection.

A BUTCHER named Lerch, residing at Linden, near Hanover, has been condemned to two years' imprisonment for gross negligence. His offence was the selling of a quantity of trichinised meat, which caused the illness of about four hundred persons, and the deaths of more than fifty.

MR. LE GROS CLARK'S Annual Report on the affairs of the Royal College of Surgeons is a clear summary of the progress of events in Lincoln's Inn Fields, which has, however, been pretty completely anticipated by the notices which have appeared in our columns from time to time. A copy of it will be sent to every Fellow, and Members will be furnished with it on application.

A VERY awkward excuse is made for the very tardy discovery of "a misapprehension in relation to the appointment of examiners", on which the shipwreck of the conjoint examination scheme is threatened. If the College of Surgeons intended from the first to maintain an exclusive right to the nomination of the surgical examiners, as is here stated, we should very much like to see the passage in the reports and scheme, which they approved, in which that right is expressed.

THE Managers of the Metropolitan Asylums Board made their annual inspection of the Caterham Asylum on the 10th instant. The asylum contains nearly 2,000 patients, of whom 1,900 are imbeciles. The plan adopted there of reclaiming and cultivating what at one time was almost waste ground has been productive of great benefit to the patients by curing many who were looked upon as chronic cases, and also in an economical point of view by greatly reducing the cost of each inmate.

WE publish in another column a communication from Mr. Hamilton Cartwright, with reference to a brief note which we published lately on the subject of the two classes in the dental profession. The letter expresses, apparently, the opinions of some others besides the writer. Mr. Hamilton Cartwright bears worthily the honourable name which he inherits, and he probably speaks accurately the sentiments of the higher class of dentists with whom he is socially familiar. We are well acquainted with his sentiments, and we respect and to some extent share them; but we do not see that he shakes the main propositions which we suggested rather than urged. Briefly, our proposition is, that dentistry is a "mixed" occupation, partly a profession and partly a business. The professional part of dentistry consists in the surgical care of the diseases of the teeth. The business or trade part of dentistry consists in the manufacture of sets or portions of teeth. The dentist who is a Member of the College of Surgeons partakes of the double character, first, of the surgeon, and second, of the surgical instrument-maker; and the larger part of his business commonly con-

sists of the latter. If the surgeon-dentist aspire to be purely professional, he might, perhaps, entrust to other hands the second part of the avocations which are at present combined. We do not know how far this would really ultimately be desirable or possible, but the suggestion serves to explain more fully our meaning. We are, of course, well aware of the claims to social and professional respect of many of the best known members of the dental profession; but that does not touch the argument. The practical bearing of the matter is, that the attempt to force a professional character upon trade proceedings only varnishes and gilds the facts. Beneath the veneer, as beneath all veneer, there is apt to be a good deal of unsoundness. The professional part of dentistry would possibly be more wholly and generally conducted with the required professional safeguards, and more easily regulated on a purely professional basis, if it were separated from the trade element; and the trade part of the business would possibly be more soundly, cheaply, and efficiently done, if it were released from its quasi-professional fetters, done on a large scale, superintended and conducted with a view to rigid economy and soundness, and made more universally accessible in a reliable form. Good and cheap mechanical is as much a desideratum as highly professionally skilled dental surgery. We should be glad to have the views of Mr. Cartwright and his colleagues on that aspect of the question. We trust that it may not be thought that there is here anything which can be offensive to the many highly cultivated gentlemen to whom the professional aspect of dentistry is that for which they most highly value it, and that to which they would always cling.

THE ROYAL COMMISSION ON VIVISECTION.

OUR attention is called to the fact that the "Royal Commission to inquire into the Practice of Subjecting Live Animals to Experiments for Scientific Purposes" is proceeding very rapidly with its inquiry, and has held four or five meetings, at which a great many witnesses have been examined, but at none of which has Professor Huxley been present. As Mr. Huxley was placed on the Commission to supply the element of high physiological scientific acquirement essential in such a Commission, but otherwise wanting (except collaterally to some extent through Mr. Erichsen), Mr. Huxley's absence, and the continued meetings of the Commission thus imperfectly constituted, are the subject of dissatisfied comment. No one objected to the constitution of a highly informed and competent tribunal to investigate this question; but, in the absence of the only physiologist appointed to assist the Commission in its appreciation of the full bearings of the evidence, such a tribunal can hardly be considered competent. The only one member of this Commission who is known to have devoted much previous energy and interest to the subject is publicly committed to the statement that it were better that mankind should suffer for generations from curable disease and removable pain, than that animals should suffer in order that the means of curing disease and relieving pain should be discovered. These are, at least, the convictions of an enthusiast; and it is unfortunate that the counterbalancing knowledge and judgment of Mr. Huxley fail the Commission at the time when, in the great public interests of the healing art, they are most needed.

THE CHOLERA IN SYRIA: QUARANTINE.

A CORRESPONDENT writes:—You have by this time probably received advices relative to the recent outbreak of cholera in Syria. It seems to have first shown itself in Hama, a town of considerable size, five days distant from Damascus. The Turkish officials appear to have acted with unusual promptitude, immediately taking steps to localise and stamp out the epidemic, drawing a *cordon sanitaire* round the infected town; but as it was found, from a variety of adverse circumstances, to be impossible to maintain the same efficiently, it was withdrawn. On June 21st, seven deaths were returned. It seems that the disease is unfortunately spreading itself to the neighbouring and outlying villages. A few isolated cases, it is reported, have occurred in Antioch, Aleppo, and Damascus. Quarantine has been rigidly enforced upon all vessels

from Syria entering the ports of Syria and Trieste, their bills of health being endorsed "Cholera exists at Hama". A medical commission is to be at once despatched from Constantinople to the cholera districts, the principal members being Drs. Millingen and Littour. We have to deplore the loss of a very able physician, Dr. Willon, late resident sanitary medical officer at Mussul, who died at Hama from the effects of cholera.

HOSPITAL OUT-PATIENTS.

WE lately mentioned that an excellent plan had been adopted at the Children's Hospital, Great Ormond Street, and that no patient would be prescribed for a second time unless his hospital letter had been stamped at the Charity Organisation Society's office of the district in which he lives. The following case, extracted from the *Reporter* of June 30th, shows how impossible it is to accept the off-hand statements of the patients themselves.

"The Islington Committee has had to inquire into the circumstances of an applicant for the Children's Hospital, Great Ormond Street. She stated at the hospital that her husband's earnings were 20s. weekly. On inquiry, it was found that his wages were 36s. weekly. They have nine children; the eldest (19) was earning 12s.; the four next younger were apprentices, receiving a few shillings, say 10s., between them; their several ages 17, 15, 14, and 11. They rent a six-roomed house, where they have lived fourteen years, the rent being £28. They let off two rooms at 6s. 6d. per week, and the husband is a member of two clubs."

From the same source we learn that a person, about whom the Kensington Committee had been requested to make inquiries, declined to allow the Committee to verify her statements, and added that she preferred subscribing to a provident dispensary.

A GOOD LESSON.

THE governors of the Cheltenham General Hospital and Dispensary have been advertising for an honorary medical officer to the Branch Dispensary for the last three months; but, not having succeeded, they have at length advertised for a paid officer, to receive a salary of £50 *per annum*, for attending four days a week. We rejoice at this; for, although the amount is not large, an useful principle is vindicated.

ABORTIONISTS.

THE sentence of death which was recently carried out does not appear to have been the means of causing a discontinuance of the crime. The sentence of twenty years' penal servitude which was awarded to Mary Ann Billington by Mr. Justice Field, on Tuesday, may perhaps have a wholesome effect. It was stated that the prisoner had been in the habit of carrying on the trade for many years. It is, however, satisfactory to know that she will not be able to do so again for many years hence.

EXPERIMENTAL PHYSIOLOGY: ITS RECENT SERVICES TO THE STUDY OF NERVOUS DISEASE.

WHEN the works of Charles Bell, Magendie, Longet, Bernard, etc., had taught the knowledge of the functions of the nervous system, when the normal anatomy of the brain, medulla, and nerves was known in a more precise way, it was possible to study with profit the changes in these portions of the nervous system. Thus the labours of the physiologists opened the way to the discoveries of the clinical teachers; but at the present time, by a curious exchange, clinical research, basing itself on pathological facts which are veritable experiments, has been able to determine the properties of some parts of the nervous system of which the physiologists had not been able to ascertain the function. It is to clinical observation that we owe the knowledge of the function of several parts of the encephalon, regarding which our physiological information is not yet sufficiently precise nor extensive to enable us to found on them a classification of the diseases of the nervous system. Thus M. Dieulafoy has not felt himself capable, in his new work *On the Progress realised by Experimental Physiology in the Knowledge of the Nervous System*, of considering the part played by physiology in the knowledge

of the diseases of the nervous system from a general point of view; but he has studied it successively with regard to each part of the nervous system: medulla, mesocephalon, encephalon, cerebellum, and nerves. Physiology, by establishing the fact of the influence of the medulla on sensibility and motility, the reflex actions, respiration, circulation, calorification, the modifications of the pupil, has indicated the phenomena which should be sought for by the clinical teacher in the diseases of the medulla, and has given facilities for the more precise definition of the affections of the nerve-axis, and even for the determination of the precise situation of the lesions in the medulla, whether in the grey or white substance, the anterior or posterior funiculi. Physiology has indicated that glycosuria, albuminuria, and polyuria, may be accidents of bulbar origin: it has also explained the production of sudden death as a consequence of lesions of the medulla oblongata. The trophic troubles, eschars, arthropathies, pulmonary or renal lesions observed after experimental lesions of the encephalon, have been found again in clinical practice. The conjugate deviation of the eyes, and the rotation of the head, produced by softening of the brain, have been explained. Finally, attention has been latterly called to the existence of excito-motor centres on the surface of the brain. M. Vulpian has shown that disturbances of motion observed after lesions of the cerebellum were due either to excitement or compression of the neighbouring parts. The trophic disturbances supervening on section of the nerves, the degeneration and regeneration of the nerve-fibres, have been studied by the physiologists. It is, indeed, to them that we owe the knowledge of the real action of the facial and trigeminal nerves, the influence of the changes of the great sympathetic and the pneumogastric on the movements of the heart, the laryngeal troubles consecutive on lesions of the recurrent nerve, and the production of glaucoma after lesions of the trigeminal nerve.

THE CANVASSING SYSTEM.

IT is stated that not fewer than 2,101 subscribers to the Royal Medical Benevolent College have signed a memorial with the object of abolishing the canvassing system; whilst, as nearly as can be ascertained at present, 255 only are in favour of continuing the present system. A memorial with a similar object has been sent to the Board of Management of the Governesses' Benevolent Institution, and supported with the same relative number of subscribers.

SOCIAL SCIENCE ASSOCIATION.

THE following are the special questions, in addition to other voluntary subjects, for discussion in the Health Department of the Social Science Association during the forthcoming meeting at Brighton:—
1. To what causes are to be attributed the ill-construction and want of sanitary provisions which exist in the dwellings of the upper and middle classes; and what is the best method which should be adopted to remedy and rectify the same? 2. What are the advantages or disadvantages of water-supply being lodged in the hands of local authorities? 3. What are the advantages of English, as compared with foreign, watering-places and health-resorts? What are the best means for rendering the English watering-places more efficient, for obviating the dangers arising from the occasional introduction of infectious diseases, and for determining the annual rate of mortality in each district?

DEATH FROM CHLOROFORM.

AN account of another of these lamentable occurrences reaches us from the Antipodes, where the first death due to chloroform at the Adelaide Hospital occurred on the 25th February last. According to the report published in the *Australian Medical Journal*, a healthy muscular-looking man, suffering from necrosis of the last two phalanges of the little finger, was placed on the operating table for the purpose of having the finger removed. He had been kept without his dinner, and exhibited no fear or nervousness whatever, either while on the table or previously; his clothes were loosened; the heart was examined, and considered typically healthy. The administration of chloroform was then proceeded with

n the following manner. A towel, folded twice, on which was poured about a drachm, as nearly as could be guessed, was held over the face at about two inches from the nose and mouth. The respiration was regular, neither too quick nor slow; the pulse good; and the patient quiet. The administrator, finding, on smelling the towel, that the chloroform had all evaporated, renewed it. The patient from the commencement had inhaled the vapour for about two minutes, perhaps a little more, when suddenly great muscular excitement took place; every muscle was rigid; the man struggled violently, and nearly got off the table; the face and body were deeply congested, and of a dark purple colour. The use of the chloroform was immediately desisted from; the man was pulled further on to the table, and, as this was done, it was found that respiration had ceased, and that he was pulseless. All this took place in a few seconds; death seemed to have been instantaneous. The pulse, up to the time of the struggling, was firm, strong, and full. Immediately every door and window was opened; the tongue was pulled forward; cold water dashed on the face and abdomen; and artificial respiration resorted to systematically and regularly; galvanism, too, was used along the course of the phrenic nerves, and over the heart. Nélaton's method, based on the supposed anæmia of the brain in chloroform-poisoning, was followed, viz.: the head and body were inverted, the legs thrown over the shoulders of one of the house-surgeons, while the other continued the artificial respiration. This was persevered with for three-quarters of an hour, all to no purpose, and without once getting a symptom of returning animation. At the necropsy, held twenty-one hours after death, rigor mortis was not well marked; there was hypostatic congestion; on opening the thorax, both lungs were found fairly expanded, and quite healthy, but congested; the pericardium was healthy; the heart and blood-vessels contained a quantity of black fluid blood, which escaped as the heart was being removed. The right side of the heart contained black fluid blood, and in the left auricle was a clot of black blood; the left ventricle was contracted and empty; all the valves were perfect, but were stained of a dark blue colour, as was also the heart itself. The liver was rather enlarged, and weighed 6 lbs. 5 oz.; in this, in both kidneys, and in the spleen, congestion was very marked; but other than this, nothing could be found not compatible with perfect health. The brain was firm and of normal appearance, but it was very anæmic; the right and left cerebral ventricles contained but a small quantity of fluid.

FINANCES OF THE ROYAL COLLEGE OF SURGEONS.

FROM the annual report of the receipts and expenditure of the Royal College of Surgeons of England, which was submitted to the Council on the 8th instant, it appears that the former amounted to £16,057 12s. 4d., and the latter to £14,052 8s. 2d., showing the good balance of £2,005 4s. 2d. The income is derived principally from fees paid on examinations for the diplomas of fellow and member, and of dental and obstetric licentiate, which produced £11,156 7s. The rents from chambers adjoining the College, and dividends on stock, amounted to £2,587 2s. 2d. There appears a great falling off in the amount received for elections into the Fellowship against former years, and, doubtless, this will continue to be the case, seeing that only those gentlemen who were members of the College prior to 1843 are eligible for election. On the present occasion, the receipts for elections to the Fellowship, Council, and Court of Examiners amounted to £136 10s. The trust funds yielded £251 9s., the largest sum accruing from the Erasmus Wilson Endowment of £5,000, which is put down at £148 15s. Of the expenditure, amounting to £14,052 8s. 2d., the largest sum is in fees paid to members of the Courts and Boards of Examiners, including the College of Preceptors; to Council, auditors, etc., amounting to £5,312 12s. 10d. Salaries and wages for the three departments of college, library, and museum are put down at £3,915 6s. 7d.; taxes, rates, insurance, diploma stamps, £1,217 8s. 7d., exclusive of postage; alterations, repairs, and painting, £904 11s. 10d. Pensions are gradually decreasing, owing to the coming of age of the Tuckett family, and now amount to £316 2s.

THE OUTBREAK OF SCARLATINA IN KENNINGTON.

THE suggestion of a contemporary that the outbreak of scarlatina amongst the guests at a fashionable party might have been caused either from the table linen, or by new dresses, has been satisfactorily disposed of. The table linen had not been in use since November last, and no new clothing had been made for the occasion. These facts, of course, neutralise the theory that the outbreak was due either to an infected laundry or dressmaking establishment. A searching inquiry is being instituted with a view to trace the cause of the outbreak.

THE EAST LONDON HOSPITAL FOR CHILDREN.

THERE are few institutions of more real value in crowded town populations than hospitals for children; their importance, whether regarded from a charitable or sanitary point of view, can scarcely be overrated. On the last day of June, the Duke of Westminster laid the foundation stone of a new and enlarged building for the East London Hospital for Children and Dispensary for Women. The site, which adjoins the well-known Peabody dwellings in Shadwell, has been purchased for £1,900; the building and furnishing of the new hospital will entail a further expenditure of £15,000, of which it is said that £7,000 has got to be raised. This charitable institution was founded on a small scale in January 1868, but the demands upon the resources of the hospital have rapidly increased of late, and the new building is designed to provide accommodation for a hundred and thirty-six in-patients. The new East London Hospital for Children, when completed, will be one of the largest hospitals of the kind in the metropolis, and in no part of London is such an institution so certain to be fully appreciated as in the crowded and poor population of the East-end.

PIG-KEEPING IN TOWNS.

THERE are few questions connected with the health of towns that appear more difficult to deal with in some places than that of keeping pigs. At a recent meeting of the Dudley Town Council, during a discussion following the reading of a report of the Sanitary Committee, a member rose and stated that he had promised his constituents to ask the Mayor officially whether a *poor man could keep a pig*. The natural answer of the Mayor was, that pigs might be kept unless they became a nuisance. He added, however, that no particular distance from a dwelling was sufficient for the maintenance of a pigstye, if, in the inspector's judgment, or in consequence of the complaints of neighbours, the pig or pigs constituted a nuisance. A reference to Dr. Ballard's suggestion, that no pigs should be allowed to be kept within the borough, was received with laughter. There is evidently a good deal of strong feeling about pig-keeping in Dudley, which is likely to give the Town Council some trouble, unless they face the matter boldly.

A PHILADELPHIA DOCTOR IN A GERMAN COURT OF LAW.

A PERSON named Carl Christoph Müller has lately come under the notice of the Bavarian law-courts for infringement of the laws relative to the practice of medicine. In February last, he was found guilty by the court at Bamberg in Upper Franconia, as having announced himself in five newspapers as a "Doctor of Medicine, specialist for Hernia, Prolapsus Uteri, and Chronic Diseases"; thereby declaring himself to be a qualified person, although he had not been approved as such by any recognised authority. Against this judgment he appealed to the supreme court at Munich, stating that he was entitled to call himself "Doctor", in consequence of having received a diploma from the University of Philadelphia, and that he had never announced himself to the public as a physician or by any similar title. The appeal was rejected by the court at Munich on the following grounds. Apart from the question whether Müller had really obtained the academical degree of Doctor of Medicine from the University of Philadelphia, after such an examination as to his scientific competency as might serve as the foundation of a claim for the recognition of the degree according to the academic requirements in Germany, the use of the title in conjunction with the announcement that he undertook the

treatment of certain diseases implied the assumption of the title of physician (Arzt); for which a degree is not necessary, but as to which he had not received the necessary authorisation.

IRELAND.

SCARLATINA still continues its ravages in Belfast, nine deaths being registered during the past week from this disease, and a similar number the week preceding.

FEVER-CABS.

TWO cabs are supposed to be supplied by the Corporation of Dublin for the conveyance of fever-patients to hospital from their homes; but, at a late meeting of the Dublin Sanitary Association, it was stated that an application had been made at the Corporation dépôt, Marrowbone Lane, for a cab to carry a patient to the Meath Hospital, but no cab being there, the Cork Street fever-cab had to be used instead. On inquiry at Bass Place, no cab was available, the horse being kept there and the cab elsewhere, so that for all available purposes it was as if it did not exist. The executive committee of the Dublin Sanitary Association have requested the Public Health Committee of the corporation, who have the management of these vehicles, to inform them how many conveyances are at present available for removing fever cases to hospital, where situated, and how they are to be obtained. The plan of placing a vehicle in one place, and the horse to draw it at a distance from it, is so absurd that it would be laughable if it were not dangerous to health.

BELFAST HOSPITAL FOR DISEASES OF THE SKIN.

THE tenth annual meeting of the friends of this institution was held in Belfast on the 8th instant; the occasion being taken advantage of for the formal opening of the new hospital and baths, which have been erected, at a cost of nearly £4,000, by the generosity of the late Mr. Benn. The hospital is fitted up with all kinds of baths requisite for the cure of cutaneous diseases, and will provide internal accommodation for thirty patients. The number of patients attended to during the past year was 1,090, being 247 in excess of the previous twelve-months, of which 150 were received for intern treatment; and the number of visits paid by patients at the hospital has been 17,531. The committee sincerely hope that the efficiency of the institution may be maintained by increased subscriptions from the public, the hospital not only providing medical treatment, medicine, and relief for the poor individually, but also providing a valuable and sure means of checking the spread of contagious cutaneous diseases in Belfast and its neighbourhood. Several resolutions having been passed, including a vote of condolence with the family of the late Mr. Benn, and thanks to the medical officers, Drs. H. S. Purdon and Scott, who gave their services gratuitously, the meeting separated.

THE LORD MAYORALTY OF DUBLIN FOR 1876.

DR. G. B. OWENS, Licentiate of the Apothecaries' Hall of Ireland, and member of the governing body of the latter institution, has been nominated as Lord Mayor of Dublin for 1876. In proposing Dr. Owens as Lord Mayor, a Dublin town-councillor stated that "Dr. Owens had for twenty years been Chairman of the South City Dispensary Committee, and he had great experience in seeing the sanitary laws of the city carried out". Now, we have no doubt that Dr. Owens is much more enlightened and liberal-minded than the boards on which he has sat; but this would be rather detrimental than otherwise to his qualifications to fill the post of Lord Mayor. Dr. Owens is member of the Public Health Committee of the Dublin Corporation, which offers the inadequate salary of £10 a year each to members of our profession for discharging the important duties confided to them under the Public Health Act. Dr. Owens is a member of the governing body of the Apothecaries' Hall of Ireland, a body which has so performed its public duties that a Government Bill is now passing

through Parliament to constitute a new corporation to discharge those duties. He is a member of the South Dublin Board of Guardians, which has also insulted our profession by offering nominal salaries for important sanitary services. He is Chairman of the South City Dispensary Committee, a body recently frustrated in the attempt to browbeat a member of our profession. If Dr. Owens have much zeal or love for his profession, he has now an opportunity of showing in a practical manner his disapproval of the sanitary and medical doings of the various local boards of which he is a member.

SCOTLAND.

A CASE of triplets occurred in Edinburgh last week. The three children, all girls, were born alive.

THE French Government has made a valuable present of books to the library of the Scottish Museum of Science and Art. They consist of ninety-one octavo volumes of the patent specifications of France since 1850, with thirty-seven volumes of indices. Besides, there are twelve most valuable works in twenty-two volumes relating to the art and archæology of Paris. It is expected that they will shortly be opened to the public.

ON Tuesday, July 6th, a man named Martin, a pilot, died suddenly in a police-cell at Alloa. He was taken up the previous night for disorderly conduct and resisting the police. In the scuffle, he fell on the pavement, and was much cut about the head and face. He was sixty-five years of age.

AT a meeting of the Edinburgh University court, last week, it was resolved that a sum not exceeding £200 should be expended by the University in entertaining the British Medical Association at their meeting in Edinburgh, in August.

THE Simpson memorial statue has been restored by the sculptor, and again sent to the establishment in Chelsea to be cast. This time it has reached its destination without any mishap.

A CLEAN BILL OF HEALTH.

THE annual report of Dr. Archibald Mott for St. Andrew's shows that during 1874 there had not been a single death either from scarlatina or measles, and only one from whooping-cough. The proportion of deaths per 1,000 was only 13.96. The average death-rate in Scotland is 23.6 per 1,000.

THE CHAIR OF MEDICINE AT ST. ANDREW'S.

TWO candidates are already in the field for the chair of Medicine in St. Andrew's, vacant by the death of the late lamented Dr. Oswald Bell. They are Dr. Bell Pettigrew, whose eminent attainments are well known; and Dr. James Russell, at present the senior demonstrator of anatomy in the University of Edinburgh. The chair, though called that of medicine, is chiefly devoted to the teaching of anatomy and physiology.

EDINBURGH BOTANICAL SOCIETY.

AT the last meeting of the Edinburgh Botanical Society, Dr. T. A. G. Balfour contributed a further note on *Dionœa Muscipula*, and detailed some experiments upon this digesting plant. He put some black pepper upon one of the sensitive leaves, and it closed up and had remained closed for nearly a fortnight, secreting what is called its gastric juice. A second leaf behaved in a similar manner, but others, after closing on the pepper, soon opened again. A number of experiments were also given, in which the six hairs, where the sensitiveness is supposed to reside, were cut off with varying effects upon the closure of the leaf. Mr. Etheridge read some statistics regarding the trees of Australia, one of which, an eucalyptus, had reached the astonishing height of four hundred and eighty feet, as measured.

WANT OF WATER IN EDINBURGH.

EDINBURGH has been threatened for some time past with a want of water, and has, in some districts already suffered considerably from this cause. The fortnightly return of the state of the reservoirs shows that, since June 22nd, the total quantity of water in store has fallen from 64,510,000 cubic feet to 58,671,000 cubic feet, being a decrease during the fortnight of little less than six million cubic feet. The quantity in store at corresponding period last year was 65,500,000 cubic feet. The delivery has been continued at the usual rate, namely, 27.84 gallons per head daily to a population of 275,000. The rainfall during the past six months has been, at the Glencorse reservoir, rather higher than that of either last year or 1873, during the same periods.

SANITARY STATISTICS OF GLASGOW.

A PAMPHLET has just been issued by Dr. Russell, medical officer of health for Glasgow, together with the mortality tables of the first quarter of the present year. During the quarter, the average death-rate was 35½ per 1,000, and the birth-rate, 39 per 1,000. This high rate may be due in some way to the very large mortality among children, for it is shown that the deaths under five years of age amounted to 42 per cent. of the total deaths, and that nearly one-half of these, 45 per cent., were under one year. Of the births, 8 per cent. were illegitimate. The report from these shows that the cold weather of the last month of 1874, had not exhausted its influence on the death-rate when the unusually warm weather of January made its appearance, the mortality of the two months being at the rate of 49 and 40 per 1,000 respectively. The deaths from scarlet fever had declined from 809 in the last quarter of 1874, to 189 in the first quarter of the present year.

FORFARSHIRE MEDICAL ASSOCIATION.

THE seventeenth annual meeting of the Forfarshire Medical Association was held at Arbroath on July 8th; Dr. Dewar, President, in the chair. The minutes of last annual meeting and subsequent meetings of Council were read and approved of, as were also the Treasurer's accounts. It was resolved to take no action in the matter of the proposed Scottish Medical Association. On the motion of Dr. S. Lawrence, it was agreed that the Association petition the Home Secretary for the release of Mrs. Marsden, at present undergoing imprisonment on the charge of homicide by infection. The petition alleges "that the indictment was based solely upon the fact of the two women, Ellen Goodier and Ann Mills, having died of so-called puerperal fever while attended by the said Elizabeth Marsden; that throughout the medical profession, as abundantly testified by recent discussions, there exists the greatest discrepancy of opinion in regard to numerous questions connected with so-called puerperal fever—especially as to whether any given case or series of cases has been produced by contagion, or has originated in other causes; that, while we consider that the said Elizabeth Marsden acted at variance with ordinary prudence in not abstaining from further midwifery practice when advised to do so, yet, in the prevailing uncertainty of medical opinion above referred to, the charge of homicide by contagion in regard to one or more fatal puerperal cases occurring in the practice of any medical man or midwife, is a charge not only without precedent in the annals of criminal jurisprudence, but which cannot by any possibility be scientifically proven, inasmuch as the evidence and argument by which it is sought to establish it are notoriously full of doubt and fallacy." Montrose was fixed on as the place of meeting for next year, and the following gentlemen were elected office-bearers: *President*—Dr. S. Lawrence, Montrose; *Vice-Presidents*, Drs. Howden and Nimmo; *Honorary Secretary*—Dr. Duncan; *Honorary Treasurer*—Dr. Campbell; *Council*—Drs. Arrott, Christie, Miller, Maclagan, M'Ewan, and Small, Dundee. The President, Dr. Dewar, then read a paper on Recent Changes in Therapeutics, in which he touched on many of the most important advances in the practice of medicine and surgery introduced within the last fifteen or twenty years. A short discussion ensued; and, on the motion of Dr. Christie, the thanks of the meeting were accorded to Dr. Dewar for his paper. The members afterwards dined together.

THE COLLEGE TEST.

THE following report from the Court of Examiners of the College of Surgeons of England, showing the number of candidates who have passed and have been rejected from each medical school during the collegiate year 1874-75, was presented to the Council on the 8th inst.

Primary Examinations.

Medical School.	Totals.	Number passed.	Number rejected.	Percentage of rejections.
University College	87	61.50	25.50	29.3
St. Bartholomew's ...	80.53	61.3	19.50	24.1
Guy's	78	66	12	15.3
St. Thomas's.....	64.3	27.83	36.50	56.7
King's College	47	33	14	29.7
London	41.83	26	15.83	37.8
St. George's	31.50	22.50	9	28.5
Middlesex	26.50	16.50	10	37.7
St. Mary's.....	25.50	20.50	5	19.6
Charing Cross	13.50	11	2.50	18.5
Westminster	10	2	8	80.
Manchester	33.50	28	5.50	16.4
Birmingham	28.83	20	8.83	30.6
Liverpool	25	17	8	32
Leeds	23.3	17.50	5.83	25
Bristol	10	11	5	31.25
Cambridge.....	15	11.50	3.50	23.3
Newcastle	8	5.50	2.50	31.25
Sheffield.....	3.3	1	2.3	70
Dublin	13.50	6.50	7.	51.851
Belfast	1.50	1.50	0	0
Cork	1	1	0	0
Galway .....	.50	.50	0	0
Edinburgh.....	28.3	23.50	4.83	17.05
Glasgow.....	9	3.50	5.50	61.1
Aberdeen	2.82	1.50	1.3	47.05
Calcutta	1	1	0	0
Montreal	3.83	3.83	0	0
Toronto	3	1	2	66.6
Kingston	1	0	1	100
Halifax.....	.50	.50	0	0
Heidelberg.....	.50	.50	0	0
Vienna .....	.50	.50	0	0
Totals	727	504	223	30.5

Pass Examinations.

Guy's	96.83	73.83	23	23.7
University College ...	69.16	61.6	7.50	10.8
St. Bartholomew's ...	61.3	50.3	11	17.9
St. Thomas's.....	49.50	40	9.50	19.19
King's College	29.50	16.50	13	44.06
London	28	22	6	21.4
St. George's	27.50	19	8.50	30.909
St. Mary's.....	14.3	11.50	2.83	19.7
Middlesex	10.16	7.16	3	29.5
Charing Cross	4.50	2	2.50	55.5
Westminster	3.50	2.50	1	28.5
Leeds	15.83	10.83	5	31.5
Manchester	14	12.50	1.50	10.7
Birmingham	12	5	7	58.3
Liverpool	11.50	7.50	4	34.7
Bristol	10	6	4	40
Cambridge.....	6.83	5.3	1.50	21.9
Newcastle	6	4	2	33.3
Sheffield.....	5.3	3	2.3	43.75
Hull	1	1	0	0
Dublin	9.83	5	4.83	49.1
Belfast	1	1	0	0
Galway .....	.50	.50	0	0
Edinburgh.....	10.50	8	2.50	23.8
Aberdeen	1.50	1.50	0	0
Glasgow.....	9.3	6.83	2.50	26.7
Montreal	2	2	0	0
Toronto	2	1.50	50	25
New York.....	2	2	0	0
Philadelphia	1	1	0	0
Paris50	0	.50	100
Vienna50	.50	0	0
Heidelberg.....	.50	.50	0	0
Totals	518	302	120	20.4

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- Zanzibar, Scyvid of, visit to St. Thomas's Hospital, 863
- Zygomatæ fossa, fibro-fatty tumour of, 396
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These figures, in which we take a parental interest, will no doubt prove very instructive to the schools. They must, however, be read subject to many qualifications, as must all figures which represent only relatively small numbers and single members of a series. They show some singular disparities, if the two tables be compared. Thus University College, which has a moderate average of rejections at the primary examination, shows most favourably in respect to the pass-examination. St. Thomas's, which suffered great slaughter at the primary, stands very well in the pass-list. Westminster is exceptionally unfortunate; but, in a small number of pupils, a few unfortunates and incapables soon spoil the percentages. We do not quite understand how it is that Westminster and Charing Cross respectively are made to appear only to have passed four men and a half and three men and a half during the year. In fact, the decimals in the "number passed" and "number rejected" puzzle us mightily; but no doubt the College arithmetic is only symbolical, else how is it possible that half a man should seem to have passed from Vienna, half a man from Galway, and half a man from Heidelberg? Where are the odd halves? Manchester men will delight to see that the highest and best average attained throughout is from Manchester. This may be taken as an excellent vindication of provincial schools generally. Birmingham, we are sorry to see, brings up the rear. That is not the right or usual place for Birmingham men; and, whatever may be the temporary reason, we may be sure that it will not endure. This list may be, as we have hinted, misleading, if too rigid inferences be drawn from it; but beyond doubt it is an excellent and most useful spur; and, though the mirror may be a little distorted, it is an excellent thing sometimes to see one's own features at the worst, if even they be shown a little awry.

SIR THOMAS WATSON ON THE TREATMENT OF HABITUAL DRUNKARDS.

THE reports which have appeared of the short address of Sir Thos. Watson on the occasion of the recent deputation to Mr. Cross, give an imperfect idea of his words and meaning. Short as was his statement, as under the circumstances was needful, it was so pregnant with meaning and will have so much permanent value, that we take an opportunity of presenting the actual words.

Sir,—My humble advocacy of this petition may be expressed in a very few sentences. I must preface them by saying that, although for much the greater part of my long professional life I was profoundly incredulous of the permanent reformation of habitual drunkards, facts have more recently come to my knowledge which have made me an almost sanguine convert to a better hope and belief.

Among habitual drunkards, there are many in whom what was begun as a vice passes into a frightful bodily and mental disease. The frequent use of intoxicating liquors in excess, and especially of alcoholic drinks, leads at length to an accumulation of the specific poison of alcohol within the system, so that the bodily tissues, and chiefly, I suppose, the nervous tissues, which include the brain, become so impregnated, so charged with the poison, or so affected somehow, as to produce a degree of craving which the unhappy dipsomaniac (for so he is rightly called) is utterly unable to resist or control. So imperative is this morbid craving, that in some instances, by his own confession, he could not refrain from swallowing the customary stimulus even if he were certain that death would be the instant result.

Now, of such persons, it is found that, if they can be strictly debarred from all access to alcoholic drinks, they will surely, though slowly, recover from this form of mania; that the incorporated poison will be gradually dislodged and eliminated from the system by the silent and sole efficacy of that beneficent force which we medical men acknowledge so thankfully, the *vis medicatrix nature*; and the wretched man or woman will become once more able, and in no small percentage of cases willing, and even anxious, to abandon the *vice*, which had been the first step towards the induction of the maniacal disease.

Now, if this be so—and from all that I have seen, and heard, and read on the subject, from experience gathered on a large scale in America, from the teachings of some of our own lunatic asylums, and from the testimony of private observers, I am fully persuaded that it is so; I might even appeal on this point to some members of the deputation now present—then I conceive that the sanctioning, by some legislative measure, of retreats or reformatories, wherein, at the instance of his relations or friends, or by his own wish, or by the sentence of a magistrate, such a sufferer could be legally detained for a time (which has been estimated to be between three and twelve months, though in my judgment three months would be far too little; and, of course, ample provision should be made against any possible abuse of such detention), such legislative action, I say, could scarcely be regarded as anything less than a national blessing.

ASSOCIATION INTELLIGENCE.

PROCEEDINGS OF THE MEETING OF COUNCIL.*

At a Meeting of the Committee of Council, held at the Queen's Hotel, Birmingham, July 13th, it was resolved:

"That the By-Laws as amended be approved and placed before the Annual Meeting in August next for adoption, in accordance with the instructions of the last Annual Meeting held at Norwich, August 1874."

PROPOSED BY-LAWS OF THE BRITISH MEDICAL ASSOCIATION.

ELECTION OF MEMBERS.

1. ANY qualified medical practitioner not disqualified by any by-law of the Association who shall be recommended as eligible by any three members may (subject as hereinafter mentioned) be elected a member by the Committee of Council, or by any recognised Branch Council.

2. No person shall be elected a member unless he has the votes of not less than three-fourths of the members present at the meeting of the Committee of Council or Branch Council at which he is proposed for election, and has agreed in writing to become a member, and to pay his subscription for the current year.

3. Any member may be expelled from the Association by a resolution of the Committee of Council, subject to confirmation by the Annual Meeting, provided that he shall have one month's notice of such resolution, and he shall thereupon cease to be a member, and shall not be eligible for re-election.

SUBSCRIPTION.

4. The subscription to the Association shall be one guinea *per annum*, which shall entitle each member to the privileges of membership and to receive the publications of the Association for the current year. The subscription shall date, and be considered due in advance on January 1st in each year, except in the case of a member admitted on or after July 1st, when the subscription for such part of a year shall be half a guinea in advance.

5. Any member whose subscription shall not have been paid on or before December 31st of the current year, shall be suspended from all privileges of membership; and at the end of the succeeding year, if the arrears be still unpaid, he shall cease to be a member, and shall be ineligible for readmission until he shall have paid all arrears due at the period of his suspension. Any member wishing to withdraw from the Association, shall give written notice of his intention to the General Secretary on or before December 1st of the current year.

HONORARY MEMBERS.

6. Any person of professional or scientific eminence, and recommended by the Committee of Council, may be elected an honorary member at the Annual Meeting of the Association.

ANNUAL MEETING.

7. The Annual Meeting shall be held at a period to be fixed by the Committee of Council; the place of meeting being determined prospectively in each year by the vote of the Association.

OFFICERS.

8. The President of the Association shall be elected annually, at the Annual Meeting, and shall enter upon the duties of his office at the next Annual Meeting, and until then shall bear the title of President-elect. Each retiring President shall be eligible for election as a Vice-President for life, provided that he continue to be a member of the Association.

9. The President of the Council shall be elected by the Council. He shall hold office for three years; and, at the first meeting of the Council after the determination of such office, a new President of Council shall be elected for the then ensuing three years; and every member who has served the office of President of the Council shall be eligible for election as a Vice-President of the Association, provided that he continue to be a member of the Association.

10. The Treasurer shall be elected at the Annual Meeting. He shall hold office for three years, and shall be *ex officio* a member of the Council and the Committee of Council; and every member who has served the office of Treasurer shall be eligible for election as a Vice-President of the Association for life, provided that he continue to be a member of the Association.

11. The Treasurer of the Association shall receive all the subscriptions and other moneys payable to, or receivable by, the Association,

* The remainder of the proceedings of the Committee of Council of the 13th inst will appear in next week's JOURNAL.

and shall discharge all accounts which have been ordered by the Committee of Council to be paid.

12. The Editor of the JOURNAL shall be elected by the Committee of Council, and shall be remunerated in such manner as the Committee of Council shall think fit.

13. The Secretary of the Association shall be elected by the Committee of Council. He shall reside in London, and devote his whole time to the business and affairs of the Association and the office of the JOURNAL.

14. The duties of the Secretary shall include being present at the meetings of the Association, Council, and Committee of Council; the recording their respective minutes; the conducting of the correspondence of the Association; the superintending the collection of subscriptions; the enforcement of the regulations as regards those in arrear, and acting in general obedience to the directions of the Council and Committee of Council.

15. The Secretary shall be remunerated in such manner as the Committee of Council think fit; he shall hold his office during the pleasure of the Committee of Council, subject to receiving or giving (as the case may be) three months' notice to determine his appointment.

16. The offices of Secretary and Editor of the JOURNAL shall not be held by the same person.

COUNCIL.

17. The Council shall consist of the President, the President-elect, the Vice-Presidents, the President of the Council, the Treasurer, and the Readers of addresses and Presidents of Sections at the Annual General Meetings of the Association for the current and last preceding year, together with such other members of the Association as are to be elected annually by the Branches in accordance with the by-law in that behalf.

18. The Council shall hold its meetings at the time and place of the Annual or General Meetings of the Association, and at such other times and places if summoned by the President of the Council, or by the Committee of Council, or by a requisition signed by not less than twenty members of the Council. Twenty-five members shall be a quorum.

19. Each recognised Branch, as hereinafter defined, shall, before each Annual General Meeting, elect members who shall represent that Branch in the Council for the ensuing year, according to the following scheme. For every twenty members of a Branch, one member shall be elected a representative, together with one other member of such Branch, to be called the Honorary Secretary of that Branch, and who shall together represent such Branch in the Council.

20. The members so elected as representatives, or as Honorary Secretaries of Branches (and of whom a complete list shall be sent to the Secretary of the Association at least five weeks before the Annual Meeting), shall continue to be members of the Council until the Annual Meeting of the ensuing year.

21. Notice shall be given forthwith to the Secretary of the Association by a Branch, of a Representative or Honorary Secretary having ceased to belong thereto; but, unless such notice shall have been received by the Council, no resolution or vote shall be, or be deemed, invalid by reason of any member of the same being disqualified.

22. The Council shall annually prepare a report of the general state and proceedings of the Association for the past year, to be presented by them at each Annual Meeting of the Association.

23. The Council shall also, at each Annual Meeting, propose the place of meeting for the next Annual Meeting, and nominate the President-elect.

24. The Council shall also, at or before the time of each Annual Meeting, elect, by voting-papers, twenty members of its own body (as hereinafter described) as members of the Committee of Council for the ensuing year.

THE COMMITTEE OF COUNCIL.

25. The Committee of Council shall consist of the President, the President-elect, the President of Council, the Vice-Presidents of the Association, the Treasurer, and of the Honorary Secretary for the time being of each Branch (who shall all be *ex-officio* members of the Committee of Council); and also of twenty members of the Council to be elected by the Council, as hereafter described.

26. The Committee of Council shall meet not less than four times a year, and shall be presided over by the President of the Council, or in his absence by a chairman to be appointed by the meeting. Its meetings shall be held at such time and place as the Committee of Council shall appoint. Seven members shall be a quorum.

27. The President of Council shall, upon receiving a requisition, signed by not less than ten members of the Committee, and specifying the business for which a special meeting is required, call together a

special meeting thereof; but at such meeting no business shall be transacted other than that for which such special meeting was called.

28. The five members who have attended the fewest meetings of the Committee of Council during the preceding twelve months shall retire at each Annual Meeting of the Association, and shall be ineligible for re-election for the ensuing year. In the event of an equality of attendances, the retiring members or member shall be determined by lot. The mode of election of the twenty elected members of the Committee of Council shall be as follows. The Committee of Council shall, three weeks before each Annual Meeting of the Association, nominate twenty members of the Council other than the five retiring members of the Committee.

29. A list of the members of Council so nominated, together with a list of the new Council, shall be sent to each member of the new Council at least two weeks before each Annual Meeting. Any two members of the Council shall be entitled to nominate any one or more members as members of the Committee of Council on giving notice of such nomination to the Secretary of the Association at least one week before each Annual Meeting.

30. A list of members so nominated shall be sent to each member of the new Council before the Annual Meeting; and the election of the twenty members of the Committee of Council out of all the members so nominated shall take place at the first meeting of the new Council, and by means of voting-papers.

31. The Committee of Council shall manage the general affairs and business of the Association, except as otherwise provided by the Articles or By-laws. They shall also regulate the order of business, and shall nominate the readers of addresses at each Annual Meeting. They shall decide what shall constitute a section, and who shall preside over the same; and shall also arrange the division into sections of the matters to be discussed and considered at such meeting.

32. The Committee of Council shall direct the publications of the Association, and shall take cognisance of any matter which may require immediate decision.

33. The Committee of Council shall, at each meeting next after the Annual Meeting of the Association, appoint a public accountant to audit the accounts of the Association, and prepare a balance-sheet, financial statement, and report, up to the 31st day of December in each year. Such balance-sheet, financial statement, and report, shall be published in the JOURNAL within the first four months of each year.

34. In the event of the incapacity of any officer of the Association during his term of office, the Committee of Council may appoint any member to act for him. In the event of the death or resignation of any officer, the Committee of Council may appoint a successor during the period for which he would have continued in office if he had not died or resigned.

JOURNAL AND FINANCE COMMITTEE.

35. At the Meeting of the Committee of Council held next after the Annual Meeting, a Subcommittee of twelve members shall be elected, who, together with the President of Council and Treasurer, shall constitute the Journal and Finance Committee for the ensuing twelve months. Three members shall be a quorum.

36. The Journal and Finance Committee shall meet not less than four times a year, twice at least at the office of the Association, and shall enter a report of its proceedings in a book which shall be read to the Committee of Council for adoption.

37. The Journal and Finance Committee shall examine the general working of the office and JOURNAL, and certify the quarterly accounts, prior to their being presented to the Committee of Council.

TRUSTEES.

38. The property of the Association shall, when necessary, be vested in three Trustees chosen by the Committee of Council. The Trustees shall be eligible for any other office of the Association.

COMMUNICATIONS.

39. All communications to the Association are the property of the Association, unless the Committee of Council allow the right of property therein to be specially reserved to the contributors.

BRANCHES.

40. Any number of members, not being less than twenty, may form themselves into a Branch of the Association, subject to such Branch being recognised by the Committee of Council.

41. Each Branch shall be free to govern itself as its members shall think fit; but no Branch law shall be valid which, in the opinion of the Committee of Council, shall contravene any fundamental law of the Association.

42. Each Branch shall pay its own expenses; and no Branch shall be deemed for any purpose the agent of the Association, or have power to incur any obligation in its behalf.

ALTERATION OF BY-LAWS.

43. No By-Law shall be made, altered, or repealed, except at an Annual Meeting, and unless a written notice, specifying the nature and object of the proposed amendment, shall have been given to the Committee of Council at least two months previously. Such notice shall be forthwith published in the JOURNAL.

APPENDIX TO BY-LAWS.

I.—Application for Admission and Agreement as to Terms of Membership.

I, _____, residing at _____, am desirous of being elected a member of the British Medical Association; and I agree, if elected, to pay the subscription, and to conform in all respects to the articles of Association, and to the by-laws now existing, or which hereafter may be made under or by virtue of the same.

Name _____ Professional title _____ Address _____

II.—Form of Certificate.

We, the undersigned, hereby certify that _____ of _____ is a fit and proper person to be elected a member of the British Medical Association.

From personal knowledge or otherwise.

Signed { _____ }
 { _____ }
 { _____ }

BRITISH MEDICAL ASSOCIATION:
 FORTY-THIRD ANNUAL MEETING.

THE Forty-third Annual Meeting of the British Medical Association will be held at Edinburgh, on Tuesday, Wednesday, Thursday, and Friday, August 3rd, 4th, 5th, and 6th, 1875.

President.—E. COPEMAN, M.D., Senior Physician to the Norfolk and Norwich Hospital.

President-elect.—Sir ROBERT CHRISTISON, Bart., M.D., D.C.L., LL.D., F.R.S.Ed.

An Address in Medicine will be given by JAMES WARBURTON BEGIE, M.D., F.R.C.P.Ed.

An Address in Surgery will be given by JAMES SPENCE, F.R.C.S.Ed., F.R.S.E., Professor of Surgery in the University of Edinburgh.

An Address in Physiology will be given by WILLIAM RUTHERFORD, M.D., F.R.S.E., Professor of the Institutes of Medicine in the University of Edinburgh.

The business of the Association will be transacted in Six Sections, viz.:

SECTION A. MEDICINE.—*President:* Dr. Quain, F.R.S., London. *Vice-Presidents:* Professor W. T. Gairdner, Glasgow; Dr. Grainger Stewart, Edinburgh. *Secretaries:* Dr. Claud Muirhead, 7, Heriot Row, Edinburgh; Dr. Stephenson, 33, Buccleuch Street, Edinburgh.

SECTION B. SURGERY.—*President:* Professor Lister, F.R.S. Edinburgh. *Vice-Presidents:* Professor Pirrie, Aberdeen; Professor Macleod, Glasgow. *Secretaries:* Thomas Annandale, Esq., Charlotte Square, Edinburgh; Dr. John Duncan, 8, Ainslie Place, Edinburgh.

SECTION C. OBSTETRIC MEDICINE.—*President:* Dr. Matthews Duncan. *Vice-Presidents:* Dr. Keiller; Professor Simpson. *Secretaries:* Dr. Peel Ritchie, 16, Hill Street, Edinburgh; C. J. Cullingworth, Esq., 260, Oxford Street, Manchester.

SECTION D. PUBLIC MEDICINE.—*President:* Right Hon. Lyon Playfair, M.P., C.B., F.R.S. *Vice-Presidents:* Inspector-General Smart, M.D., C.B.; Dr. Arthur Mitchell. *Secretaries:* Dr. Andrew Smart, 24, Melville Street, Edinburgh; Dr. Fraser, Knutsford.

SECTION E. PSYCHOLOGY.—*President:* Dr. Lowe, F.R.S., Edinburgh; *Vice-Presidents:* Dr. Sibbald; Dr. Clouston. *Secretaries:* Dr. Brown, Royal Asylum, Edinburgh; Dr. Saundby, Saughton Hall, Edinburgh.

SECTION F. PHYSIOLOGY.—*President:* Professor Burdon Sanderson, F.R.S., London. *Vice-Presidents:* Dr. McKendrick; Professor J. Dewar. *Secretaries:* Dr. Lauder Brunton, F.R.S., 23, Somerset Street, Portman Square, London. Dr. Caton, 18, Abercrombie Square, Liverpool.

Honorary Local Secretaries.

- Dr. John Batty Tuke, Edinburgh.
- John Chiene, Esq., Edinburgh.
- Dr. J. G. McKendrick, Edinburgh.
- Dr. J. Bishop, Edinburgh.

Tuesday, August 3rd.

11 A.M.—SERVICE IN ST. GILES'S CHURCH. Sermon by Rev. Dr. Alexander.

- 1 P.M.—MEETING OF COMMITTEE OF COUNCIL.
- 3 P.M.—MEETING OF THE COUNCIL, 1874-75.
- 3.30 P.M.—GENERAL MEETING.—President's Address; Annual Report of Council; and other business.
- 9 P.M.—PRESIDENT'S RECEPTION IN ASSEMBLY ROOMS, MUSIC HALL.

Wednesday, August 4th.

- 9.30 A.M.—MEETING OF COUNCIL, 1875-76.
- 11.30 A.M.—SECOND GENERAL MEETING.
- 11.30 A.M.—ADDRESS IN MEDICINE.
- 2 P.M.—SECTIONAL MEETINGS.
- 9 P.M.—CONVERSAZIONE GIVEN BY THE ROYAL COLLEGE OF PHYSICIANS IN THE INDUSTRIAL MUSEUM.

Thursday, August 5th.

- 9 A.M.—MEETING OF THE COMMITTEE OF COUNCIL.
- 10 A.M.—THIRD GENERAL MEETING.—Reports of Committees.
- 11 A.M.—ADDRESS IN SURGERY.
- 2 P.M.—SECTIONAL MEETINGS.
- 6.30 P.M.—PUBLIC DINNER IN MUSIC HALL.

Friday, August 6th.

- 10 A.M.—ADDRESS IN PHYSIOLOGY.
- 11 A.M.—SECTIONAL MEETINGS.
- 1.30 P.M.—CONCLUDING GENERAL MEETING.
- 4 P.M.—PARTY IN THE ROYAL BOTANIC GARDENS, GIVEN BY THE UNIVERSITY OF EDINBURGH.

Saturday, August 7th.

EXCURSIONS.—Bass Rock, Melrose, Trossachs, Roslin.

Papers.—The following papers are offered.

- Adams, William, Esq. On a New Subcutaneous Operation for the Obliteration of Depressed Cicatrices.
- Aitken, Lauchlan, M.D. On the Sanitary State of Rome.
- Althaus, Julius, M.D. Further Observations on the Electrolytic Treatment of Tumours.
- Anderson, Mrs. E. Garrett, M.D. On Dysmenorrhoea.
- Annandale, Thomas, Esq. 1. Excision of the Head of the Femur in Hip-joint Disease; 2. Successful Case of Distal Ligature for Aortic Aneurism.
- Bartlett, H. C., Esq. On Drinking and Table Waters.
- Bell, Joseph, Esq. Notes on some Minor Improvements in Operative Surgery.
- Bennett, J. Hughes, M.D. On the Necessity of Vivisection both for Advancing and Teaching the Science of Physiology.
- Boyd, Robert, M.D. Effect of Various Diseases on the weight of 2050 sane and insane Adults of both sexes.
- Bradley, S. M., Esq. The Surgical Treatment of Lymphatic and Glandular Tumours of the Neck.
- Braidwood, P. Murray, M.D., and Vacher, Francis, Esq. First Contribution to the Life History of Contagion.
- Braithwaite, James, M.D. The Use of Nitric Acid as a Caustic in Uterine Practice, and its superiority as such to Nitrate of Silver.
- Brotherston, Peter, Esq. Provincial Surgery in Scotland, illustrated by Cases treated in the Alloa Hospital.
- Brown, James, Esq. Typhoid Fever in the Isle of Skye.
- Browne, J. Crichton, M.D., F.R.S.E. Rhythmical Neuroses.
- Brunton, T. Lauder, M.D., F.R.S. On the Means of preventing Death from the Extraction of Teeth under Chloroform.
- Buchanan, George, M.D. (Glasgow). Tracheotomy in Croup and Diphtheria.
- Cassells, James P., M.D. On Conservative Aural Surgery.
- Caton, R., M.D. Report on the Electric Currents of the Brain.
- Chiene, John, Esq. 1. Dislocation of the Astragalus; 2. Value of an Antiseptic Catheter.
- Clouston, T. S., M.D. On Disorders of Speech in Insanity.
- Coghill, J. G. S., M.D. On Uterine Flexions and Displacements; and their Mechanical Treatment.
- Craig, William, M.D. 1. Note on Jaborandi. 2. On the External Uses of the Hydrate of Chloral.
- Croom, J. Halliday, M.B. On Melæna in the New-born Child.
- Daldy, Thomas M., M.D. On Functional Cardiac Murmurs.
- Davenport, John A., Esq. On the Drainage and other Sanitary Conditions of Rural Districts.
- Dickson, Walter, M.D. The Numerical Ratio of Disease in the Adult Male Middle-class Population, as deduced from the Sanitary Statistics of Her Majesty's Customs, London, 1857-74.
- Dix, John, Esq. Two Cases of Aneurism, one of the Carotid and one of the Femoral Artery, treated by the Wire Compress.
- Donovan, W., L.R.C.P.Ed. On Placenta Prævia.

- Dowse, Thomas S., M.D. On Bulbar Paralysis.
- Duncan, John, M.D. 1. On the Modes of Administering Mercury in Syphilis; 2. On the Treatment of Nævus.
- Duncanson, J. J. Kirk, M.D. On Fibrous Tumours of the Auricle: with Specimens and Microscopical Sections.
- Eassie, W., Esq. On the Sanitation of Houses.
- Edis, Arthur W., M.D. On the Prevention and Management of Miscarriages.
- Ewart, J. H., Esq. Case of Inversion of the Uterus of Three Months' standing.
- Fergus, Andrew, M.D. Some Sanitary Remarks on Traps and Soil-Pipes.
- Ferrier, David, M.D. The Localisation of Centres of Special Sense.
- Fothergill, J. Milner, M.D. The Action of Drugs upon the Intracranial Circulation.
- Fox, Cornelius, M.D. Is Enteric Fever ever spontaneously Generated?
- Fox, J. M., Esq. Scarlet Fever: its Prevention.
- Haddon, John, M.D., M.A. On Intemperance in Woman, with special reference to its Effects on the Reproductive Organs.
- Haining, William, M.D. On Death of the Child from Shock from Injury caused by Rupture of the Umbilical Cord.
- Hardie, James, M.D. 1. On a Case in which a New Nose was formed by Transplanting a portion of one of the Fingers; 2. On the Treatment of some forms of Ulcer by Incision of the Edges.
- Hill, Charles, M.D. On Placenta Prævia.
- Hill, Matthew, Esq. A New Operation for Ununited Fractures.
- Hime, T. Whiteside, M.D. On the Management of the Lying-in Woman.
- Hirschfeld, John C., M.B. On Extirpation of the Tongue.
- Hoggan, George, M.D. On a Case of Transfusion by Aveling's Apparatus.
- Hoggan, Mrs. Frances E., M.D. On a New Histological Process for Staining Tissues.
- Hovell, D. De Berdt, F.R.C.S.Eng. On Emotional Aphasia.
- Jagielski, V. A., M.D. Some Further Remarks on the Use of Spirometry in Medicine, demonstrated by a new Double Spirometer.
- Johnston, James, M.B. On Rheumatic Fever and its Treatment.
- Jordan, Furneaux, Esq. Note on a Peculiar Variety of Encysted Hydrocele of the Cord.
- Keiller, A., M.D. Embryotomy: its various Modes of Procedure, with Illustrative Cases.
- Kenyon, G. A., M.B. On the Comparative Merits of the Water-carriage and Dry Systems of Sewage-disposal from a Sanitary and Economical Point of View.
- King, Kelburne, M.D. Two Cases of Punctured Fracture of the Frontal Bone, treated by Trephining; and resulting, one in total, the other in partial Loss of Vision.
- Lucas, T. P., L.R.C.P.Ed. On the Action of Stimulants.
- Lund, Edward, Esq. 1. Case in which Adams's Operation for Subcutaneous Division of the Neck of the Thigh-bone was performed on both sides in the same patient for Straight Ankylosis; 2. On the Use of Steel Screws in the Treatment of Ununited Fractures, Resections of Joints, etc.
- McClintock, A. H., M.D. Life of William Smellie, M.D.
- McDiarmid, John, M.B. On the Hypodermic Injection of Morphia in Insanity.
- McDonald, William, L.R.C.P.Ed. The Nature, Cause, Cure, and Prevention of Puerperal Fever.
- Mackenzie, Morell, M.D. On the Treatment of Enlarged Strumous Glands by Hypodermic Injection.
- Mackintosh, Angus, M.D. On the Outbreak of Enteric Fever at Killamarsh, Derbyshire.
- Maclagan, T. J., M.D. On the Nature of Contagion.
- Maclaren, R., M.D. On some Cases of Subperiosteal Excision.
- M'Rae, Alexander E., M.D. Case of Perforation of the Abdomen (*per Vaginam*): with Remarks.
- Madden, T. More, M.D. Turning *versus* the Forceps in cases of Difficult Labour.
- Mapother, E. D., M.D. Treatment of Lupus, Sycosis, and Acne, by early Incisions.
- Maunder, C. F., Esq. A Subcutaneous Operation for the Relief of Fibrous Ankylosis of the Knee-joint.
- Mitchell, Arthur, M.D., and Buchan, Alexander, Esq. Some of the Relations of Weather to Death-rate.
- Morton, James, M.D. The Treatment of Spina Bifida.
- Nairne, John S., Esq. On the Psychology of Muscle.
- Ogston, Francis, jun., M.D. The Nourishment of the Head of the Femur after Intracapsular Fracture.
- Page, David, M.D. On a Village Outbreak of Enteric Fever traceable to a specifically polluted Water-supply.
- Peddie, A., M.D. The Necessity of Legislation for the Control and Treatment of Insane Drinkers.
- Power, Henry, Esq. On the Action of Certain Drugs on Muscular Contraction.
- Rickards, E., M.B. Epitome of Notes of Four Cases of Thoracic Aneurism.
- Roberts, D. Lloyd, M.D. Two Cases of Occlusion of the Os Uteri after Labour.
- Robertson, Alexander, M.D. Observations on the Unilateral Phenomena of Mental and Nervous Disorders.
- Ross, George, M.D. The Relation of Mortality and Dwellings.
- Ross, James, M.D. Comparative Pharmacology.
- Rutherford, William, M.D., F.R.S.E. On the Biliary Secretion.
- Shettle, R. C., M.D. The Magnetic Conditions of Arterial and Venous Blood, considered in relation to the Influence which Arterial Blood exercises in promoting the Functions of Life; and the consequent value of Magnetism as a Therapeutic Agent.
- Shuttleworth, G. E., M.D. 1. Two Cases of Microcephalic Idiocy. 2. Notes of a Series of Cases of Rubeola Notha.
- Sibbald, John, M.D. 1. The Relative Amount of Pauper Lunacy in Town and Country. 2. The Extent to which Medical Knowledge can contribute to the Determination of Criminal Responsibility.
- Smart, William R. E., M.D., C.B. On the Ratios of Deaths by Violence in the Army and Navy relatively to each Service and to Civil Life.
- Smith, H. Fly, M.D. Vomiting connected with Pregnancy.
- Swayne, J. G., M.D. On Obstetrical Statistics.
- Taylor, C. Bell, M.D. On the Modern Methods of Extracting Lenticular Cataract: with Illustrative Cases.
- Thin, George, M.D. Some of the Changes which take place in Connective Tissue in Inflammation.
- Tilt, Edward J., M.D. On Internal Metritis.
- Tripe, John W., M.D. On the Death-rate at Different Ages from Epidemic Diseases.
- Watson, Eben, M.D. A Case of Femoral Aneurism, with Ligature of the External Iliac.
- Watson, P. Heron, M.D. Excision of the Thyroid Gland.
- Wilson, George, M.D. On the Sanitary Improvements of Country Villages.
- Wolfe, J. R., M.D. 1. On Conjunctival Transplantations from the Rabbit to the Human Subject.—2. On Egyptian Ophthalmia and Cataract Complications: with Cases.
- Yeld, H. J., M.D. State Medicine in Relation to Education.

Gentlemen desirous of reading papers, cases, or other communications, are requested to forward the titles to the General Secretary, or to one of the Secretaries of the Section in which the paper is to be read. All papers should be forwarded to one of the above named officers at as early a date as possible.

No paper must exceed twenty minutes in reading, and no subsequent speech must exceed ten minutes; all speeches at the General Meeting must not exceed ten minutes each.

ANNUAL MUSEUM.

The Eighth Annual Museum of the British Medical Association will be held in the Practical Chemistry Class-room in the University on the 3rd, 4th, 5th, and 6th of August, 1875, and will be open from 10 A.M. to 6 P.M. The Committee appointed to take charge of the arrangements for this museum will be glad to receive for exhibition:

1. Latest Inventions in Medical, Surgical, and Obstetrical Instruments and appliances of all kinds.
2. New Drugs and their Preparations, and New Articles of Diet for Invalids.
3. General Pathological Specimens, with photographs, models, casts, drawings, etc., illustrating Disease.
4. Specimens and Preparations in connection with Injuries and Diseases of Bones and Joints. [It is desired to make this a special feature in the Exhibition.]
5. New Physiological Apparatus.
6. Microscopes and Microscopic Specimens, Pathological and General; New Chemicals and other Appliances used in Histological Research.

The following is a list of the Museum Committee. All communications to be addressed to the Hon. Secretaries:—Professor Turner, Dr. Angus Macdonald, Dr. Argyll Robertson, Dr. John Wyllie, Dr. W. Gordon, Mr. Thomas Annandale, and Mr. A. B. Stirling. Dr. Charles E. Underhill, 8, Coates Crescent, and Dr. John Playfair, 25, Rutland Street, *Hon. Secretaries*.

NOTICE TO EXHIBITORS.—Application for space should be made as soon as possible, and the amount required mentioned. A written or printed description of all objects intended for exhibition must be forwarded for insertion in the Catalogue; and the Committee earnestly request all intending Exhibitors to bear in mind that it is impossible for their descriptions to be inserted unless sent in early—viz., not later than July 17th. All objects intended for exhibition must be delivered on or before July 27th. They must be addressed “Curator of Museum of British Medical Association, the University, Edinburgh.”

N.B.—The Name of the Exhibitor should be written on the outside of each parcel, and a card bearing his name and address should be enclosed, to facilitate the return of the articles.

FRANCIS FOWKE, *General Secretary.*

36, Great Queen Street, June 26th, 1875.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

THE annual meeting of the above Branch will be held at Aberdeen, on Saturday, July 17th, at 1.30 o'clock P.M.

Further particulars will be intimated by circular.

ALEXANDER OGSTON, *Honorary Secretary.*

Aberdeen, June 1875.

WEST SOMERSET BRANCH.

THE annual meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, July 22nd, at 2.30 P.M.

The President-elect, Dr. Cordwent, will read a short paper on “Vital Conservancy in Disease”.

Members wishing to communicate papers or cases are requested to send notice to the Secretary.

The dinner will take place at 5 o'clock.

W. M. KELLY, M.D., *Honorary Secretary.*

Taunton, June 29th, 1875.

BORDER COUNTIES BRANCH.

THE annual meeting of the Border Counties Branch will be held at Dumfries, on Friday, July 23rd, 1875: *President*, Dr. GREEN, Kendal; *President-elect*, Dr. W. A. F. BROWNE, Dumfries.

Gentlemen intending to be present are requested to communicate their intention to the undersigned.

Carlisle, June 28th, 1875.

HENRY BARNES, M.D. } *Hon.*
J. SMITH, M.D. } *Secs.*

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ANNUAL MEETING.

THE annual meeting of the Branch was held on June 29th, at the Midland Hotel, Birmingham, when there were present W. C. GARMAN, Esq., *President* in the chair, and fifty-two members.

The President-elect.—The CHAIRMAN said that his first business was to introduce his successor to the chair. It was, however, his painful duty to announce that the president for the ensuing year was unable to be present, and they would still more regret his absence when they knew that it was caused by his incomplete convalescence from an attack of fever. This attack had been contracted, he believed, whilst Dr. Wade was pursuing his professional duties. The first part of the business would, therefore, have to be struck out.

Mr. WEST said they all very much regretted that Dr. Wade was unable to attend, and more especially as his absence was due to illness. He would move: “That the Birmingham and Midland Counties Branch of the British Medical Association, hereby expresses its great regret that Dr. Wade’s convalescence from his recent severe illness is not sufficiently advanced to permit his being present at the annual meeting of this Association, and its earnest hope that he may be enabled to deliver his inaugural address at the opening meeting of the ensuing session in October next.”

Mr. MANBY (Wolverhampton) seconded the motion, which was unanimously carried.

New Members.—The following gentlemen, having been elected members of the Association, were duly elected members of the Branch: Mr. G. A. Phillips, Walsall; Mr. James Arthur, Henley-in-Arden; and Mr. Thomas C. Lawson, Lichfield Road.

Vote of Thanks to the Retiring President.—Mr. O. PEMBERTON proposed a vote of thanks to Mr. Garman, the retiring president. He felt sure that the motion would meet with their approbation, because it was impossible for any one to have discharged the duties of president of the Branch with more punctuality, ability, and courtesy, than Mr. Garman

had done. They knew that Mr. Garman filled a chair which had been occupied by many illustrious predecessors, and therefore the task was all the more difficult to fulfil. Therefore, they had abundant reason for thanking Mr. Garman for having on all occasions maintained the repute of that, the greatest association of medical men in the Midland district.

Mr. MANBY seconded the motion, which was carried with acclamation.

Mr. GARMAN appropriately responded, thanking the members of the Branch for the support, and kindness, and consideration, and forbearance they had always accorded him.

Report of Council.—Dr. B. FOSTER read the annual report, which was as follows. “The Council have much pleasure in announcing to the twenty-first annual meeting the steady prosperity of the Birmingham and Midland Counties Branch. This year the Branch has attained a greater numerical strength than at any former period of its history, and now numbers three hundred and thirty-one members. During the year, thirty-two new members have been elected, while thirteen members have been lost—ten by removal to a distance and resignation, and three by death, viz., Mr. F. Turton of Wolverhampton; Dr. Cotterill of West Bromwich; and Mr. W. H. Clarke of Stratford-on-Avon. Mr. Turton’s death was especially felt as a loss by the Branch, as he had for some years been a very active member, and had on several occasions served on the Council. He was a typical specimen of an able and highly esteemed practitioner, untiring in his devotion to his patients, and ever anxious to maintain a high ethical standard among his professional brethren. The early termination of Mr. Turton’s useful life was in no small degree due to his unsparing attention to his professional work. The session 1874-75 has been an unusually active one, seven ordinary and three special meetings of the Branch having been held. The attendance of members has been large, and the papers read have produced debates of more than ordinary interest.” [A list of the papers and communications was here given.] “At the first meeting after the reading of Dr. Russell’s paper, which was a valuable study of chronic alcoholism, and therefore formed an appropriate continuation of the subject of dipsomania, ably treated in the President’s address of last year, the Branch resolved, in accordance with the wish expressed at the last annual meeting, to appoint a committee ‘to consider the best means of furthering legislation for the care and restraint of habitual drunkards.’ The committee, with Mr. W. C. Garman as chairman, and Dr. Fowler Bodington as honorary secretary, have held several meetings, and have issued a circular to all the Branches of the Association, calling their attention to the need for legislative action, and asking for their co-operation in obtaining it. The committee have recently drawn up petitions to both Houses of Parliament, praying for early legislation. The petitions are now in course of signature, and will shortly be presented. By the energetic efforts of the committee, other Branches have been induced to consider the subject, and the prospects of Parliamentary action have been materially improved. The committee still continue their work. The Committee on Medical Education, after presenting a report last year, continued their labours during the session which has just closed. After holding several special meetings of the Branch, at which the report was discussed clause by clause, an amended report was presented to the Branch. After a long and careful discussion, it was resolved, ‘That the amended report of the Education Committee be received and entered on the minutes, and that the warmest thanks of the Branch be, and are hereby, tendered to Dr. Fowler Bodington, the chairman, Mr. Arthur Oakes, the secretary, and the other members of the Education Committee, for the deep interest and unsparing exertions with which they have promoted and conducted the discussion of the important question of medical education.’ The Council are glad to state that the arrangements referred to in their last annual report for connecting the two sections of the Branch more intimately in their work have been completed. Somewhat fewer meetings of the sections will be held, and these meetings will be so arranged that special subjects can be conveniently sent for examination from the pathological to the microscopical section. The working expenses of the sections being reduced by the alterations, it has been determined to have a single subscription for both sections. The subscription to the Branch alone will remain as hitherto, two shillings and sixpence *per annum*, while a subscription of five shillings *per annum* will confer the membership of both sections as well as that of the Branch. The Council hope that many members of the Branch who have not as yet joined the sections will now avail themselves of the opportunity of aiding this important department of the work of the Branch. The Council need hardly remind the members that since the last annual meeting the Branch has lost the services of its zealous and able secretary, Mr. T. H. Bartleet. The occasion of Mr. Bartleet’s resignation seemed to many members a fitting opportunity to present him with some slight recogni-

tion of the great services he rendered the Branch during his ten years of office. It was, therefore, resolved, at a general meeting of the Branch, to present him with a testimonial, and a committee was appointed for the purpose. The testimonial was valued at £100 guinea, and a hundred and thirty-five members having responded, Mr. Bartleet was presented, on May 4th, by the president of the Branch, acting on behalf of the subscribers, with a silver salver, suitably inscribed. The Council refer to this with much satisfaction, inasmuch as they feel that, however widely members may be scattered, the propriety of giving testimonials to the officials of the Branch, all members must be gratified by any voluntary expression of appreciation given to such exceptionally valuable work as that rendered to this Branch by its late honorary secretary, Mr. Bartleet. To fill the vacancy caused by Mr. Bartleet's resignation, Dr. Sawyer was elected co-secretary with Dr. Foster. The Council would particularly direct the attention of the members to the very important fact that at the last meeting of the Association, at Norwich, a fundamental change was made in the Association by its incorporation under the provisions of the Joint-Stock Companies' Acts of 1862 and 1867. By this incorporation, the financial position of the Association will be greatly improved. The annual meeting passed a resolution recommending all members of the unincorporated body to become members of the corporate body. The Council of this Branch repeat the recommendation, and beg all present to sign the necessary forms which are laid upon the table to-day. The Council are happy to call attention to the increasing prosperity of the British Medical Association, which now consists of nearly 7,000 members, and is the most powerful organisation which any profession has ever possessed. The high objects to which the influence of the Association has been always directed have given it a position and power even greater than its numerical strength. Each year the profession at large acts through the Association in promoting legislation calculated to improve the health and well-being of the people, and to further the best interests of the profession. While developing and using its strength as an organisation for political and social purposes connected with the profession, the Association has not lost sight of its scientific functions, and, now that its resources permit, will make yearly grants in aid of scientific research. The results of the first grants may be expected at the annual meeting at Edinburgh in August next, and there is every prospect that at that meeting a still larger sum may be devoted to encourage researches bearing on physiology, and on the nature, origin, and treatment of disease."

Mr. ALFRED BAKER, in moving the adoption of the report, said it was evident that, while the parent Association was pursuing its course smoothly and unchecked, the Branches were also doing a large amount of valuable work. The President would have rendered the Branch good service if he had done no more than introduce the subject of dipomania to the attention of the members, and he was glad that the question was being dealt with in such a vigorous manner. The wisdom of the founders of the British Medical Association had been proved by the fact that it now embraced about half of the members of the profession.

Mr. BUCK (Worcester) seconded, and Dr. BODINGTON and the CHAIRMAN supported the motion, which was agreed to.

Financial Statement.—Mr. WATKIN WILLIAMS (treasurer) read the financial statement, which showed that during the year the receipts had been £33 5s., and the expenses £29 1s., the balance in hand being £62 1s. 9d. The report was adopted.

Dr. HINDS read the report of the Microscopical Section, which was received.

Minutes of Council were acceded to by the chairman and secretaries, the chairman and officers of the Pathological and Clinical and Microscopical Sections, the retiring Council and local members of the General Council.

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The voting papers having been examined by the scrutineers appointed by the meeting (Mr. B. May and Dr. Warner) the following officers and Council were declared to be elected: **President-elect:** G. Fowler Bodington, M.D. **Honorary Secretaries:** Balthazar Foster, M.D.; James Sawyer, M.D. **Treasurer:** T. Watkin Williams, Esq. **Council:** Country Members.—J. C. Garman, Esq., Wednesbury; A. J. B. Harrison, M.B., Walsall; F. Manby, Esq., Wolverhampton; J. Manley, Esq., West Bromwich; C. A. Newnham, Esq., Wolverhampton; James Thompson, M.B., Leamington; E. J. Tibbits, M.D., Warwick; Thomas Underhill, M.D.; West Bromwich. **Town Members.**—Alfred Baker, Esq.; T. H. Bartleet, Esq.; J. S. Gangee, Esq.; J. Johnston, M.B.; E. Malins, M.D.; A. Oakes, Esq.; E. Rickards, M.B.; J. Russell, M.D. **Representatives in the Council of the Association:** T. H. Bartleet, Esq.; G. Fowler Bodington, M.D.; B. W. Foster, M.D.; W. C. Garman, Esq.; A. J. B. Harrison, M.B.; Furneaux Jordan, Esq.; F. Manby, Esq.;

J. Manley, Esq.; C. A. Newnham, Esq.; O. Pemberton, Esq.; V. J. Salmon, Esq.; James Thompson, M.D.; Thomas Underhill, M.D.; W. F. Williams, M.B.; J. E. Warner, Esq.; L. W. Williams, Esq.; John J. Keen, M.D.; Arthur Oakes, Esq.; James Gangee, Esq.; J. S. Gangee, Esq.; Thomas Johnston, Esq.; **Honorary Secretaries:** E. Rickards, M.B.; Lloyd Owen, Esq.

Dinner: The members afterwards dined together, Dr. F. Bodington, President-elect, occupying the chair, and Dr. B. Foster the vice-chair.

MIDLAND BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at the Derby General Infirmary on Thursday, June 17th, at 2 P.M.; A. H. LUDMAN, Esq., President, in the Chair.

President's Address.—Mr. LUDMAN, on taking the chair, delivered an address. He observed that, as a body numbering six thousand and daily increasing, the organisation of the Association afforded them considerable power of doing good to the public and the profession. Fortunately, they were not divided by political opinions; for, though they held their own, and did not shrink from expressing them when necessary, the reticence and quiet dignity that as a profession they practised rendered them the most peaceable and loyal of subjects; and thus the profession was honoured by all nations, both in peace and in war. They were, it was true, non-combatants; but they faced death in all forms just as fearlessly as the most courageous of warriors, and without the excitement they felt. Looking down their obituary list, he saw name after name of those who had sacrificed their lives in the blood-poisoning after accidental inoculation; and he looked on these victims to their duty as true heroes. The public little knew the great mortality in the profession from fever. There was scarcely one amongst them who did not personally know some one who had only escaped death with a maimed limb or an impaired constitution. Referring to the refusal of the clubs in the town to raise the pay of the medical men, the President spoke of the establishment of the Associated Medical Society, which several of the friendly societies had organised, and observed that they were quite justified in trying the experiment; but he felt sorry for the attendant who had so many to please. He quite approved of one portion of their system, their finding their own medicines; but thought they ought to pay much more for medical advice. There was a great deal of large hospital work, which was self-supporting to a great extent. One could not help feeling that it must be a great relief both to the suffering and also to the medical men. With regard to the Infirmary, there was no question as to its very great utility, more particularly to in-patients; but, when one saw the vast number of out-patients, it was a question whether many who attended should not pay a small quota either to the institution or in some other way, so that they should not be quite paupers as to medical relief. Within the last few years there had been great improvements in the arrangements for affording relief to the very poor. Speaking of dispensing, he said that it might not be out of place to bring before the meeting the practicability of general practitioners ceasing to make up their own medicines. He had conversed with some leading practitioners, and they agreed with him as to the difficulty of doing away with it, and all stated that it would entail considerable loss. One instance of loss had occurred to his late partner. A patient of his had been in the habit of taking a particular medicine for some period, and of requesting a visit occasionally. This patient went away for a time, and asked for the prescription. After returning, the patient sent to the chemist, and never troubled his medical attendant again. Moreover, several of his clients had expressed to him their dislike to having their medicines prepared and sent out by a chemist's apprentice. Referring to the way in which students were brought up to the medical profession, he advocated a return to the apprenticeship system. A good training in a well-conducted surgery rendered a youth an adept in dispensing, and gave him a better and more practical knowledge of the action and appearance of drugs than being sent straight from a school to a London hospital. In many cases, the modern pupil passed his examination and returned from London fit only to take an assistant's place to learn the practical part of his profession, which he could easily have mastered as a pupil. The address concluded by alluding to improvements in surgical practice and medical treatment during the last twenty years. Some operations which were regarded as of recent adoption were really old. For instance, the injection of laudanum under the skin was described in his quaint language by Samuel Pepys, as having been performed in his presence on two dogs, one of which died, and the other was stupefied. Again, many supposed modern instruments were engraved in an old book by Dr. William Salmon published in 1681. Mr. Dolman urged the desirability of establishing a medical library in

Derby, and said he would make a start by presenting a couple of hundred volumes. He also impressed on the members in and near Derby the importance of keeping up the quarterly meetings.

New Members.—The following gentlemen, twenty-one in number, were elected members of the Branch: G. O. Siddall, Esq., Alfreton; R. R. Allen, Esq., Belper; John Carnegie, M.D., Chesterfield; R. Wood, Esq., Ilkeston; F. K. Dickson, F.R.C.P.Ed., Buxton; George Lorimer, M.D., Buxton; W. Livesay, M.B., Sudbury; W. Andrews, Esq., Breaston; T. Johnston, Esq., Belper; Charles Cade, Esq., Spondon; C. F. Bryan, Esq., Leicester; — Franklin, Esq., Leicester; J. I. Mackintosh, M.D., Caistor; F. Sutton, Esq., Willingham; W. Millegan, Esq., Wirksworth; Richard Jeffreys, Esq., Chesterfield; James Craig, Esq., Eastwood; J. C. Eaton, Esq., Loughborough; R. Lett, M.B., Waddingham; J. Wright, Esq., Wynberg, Cape Town; J. Willford Marsh, Esq., Lincoln.

The Secretary's Report was read and adopted.

Officers and Council.—The following officers for the ensuing year were elected. *President-elect:* Joseph White, Esq., Nottingham. *Secretaries:* Lincoln—C. Harrison, M.D.; Nottingham—L. W. Marshall, M.D.; Leicester—W. E. Buck, Esq.; Derby—F. W. Wright, Esq. *Representatives in the General Council:* E. Morris, M.D., Spalding; Thomas Sympson, Esq., Lincoln; Joseph White, Esq., Willingham; W. H. Ransom, M.D., F.R.S., Nottingham; J. W. Benfield, Esq., Leicester; H. Lankester, Esq., Leicester; J. W. Baker, Esq., Derby; W. Webb, M.D., Wirksworth.

Election of Members of the Association.—It was proposed by W. E. BUCK, M.B., and seconded by H. LANKESTER, Esq., "That it would be conducive to the interests of the British Medical Association if the election of its members rested primarily with the Branch Association in whose districts the applicants reside, subject to final approval and confirmation by the General Council of the British Medical Association."

Advertisements of Medical Books.—Dr. BEVERLEY MORRIS of Nottingham brought forward the subject of advertising medical books in the ordinary daily non-medical papers, and proposed the following resolution, which was carried: "That this meeting expresses its opinion that the advertising of medical works in the general papers is undesirable."

Papers were then read on various subjects.

Dinner.—An excellent dinner was provided at the St. James's Hotel, to which upwards of fifty members and friends sat down.

BATH AND BRISTOL BRANCH: ANNUAL MEETING.

THE annual meeting of the above Branch was held on Thursday, June 24th, at the Royal Hotel, College Green, Bristol. There were present about thirty-five members; FREDERICK MASON, Esq., President, took the chair.

New Members.—The following gentlemen were proposed as new members of the Association and of this Branch: Reginald Eager, M.D., Northwoods; James Logan, M.D.; and J. J. Mitchell, Esq.

President's Address.—Mr. MASON, after a few remarks, resigned the chair to W. M. CLARKE, Esq., President-elect, who read an address on some of the most remarkable changes in the practice of medicine and surgery during the last thirty years. An abstract is published at p. 67.

Dr. FALCONER proposed, and Dr. SPENDER seconded, "That the thanks of this meeting be offered to W. M. Clarke, Esq., for his very able and interesting address." The motion was carried unanimously.

Report of Council.—Mr. BOARD read the following report of Council. It is with much pleasure that your Council is able to lay before you a most satisfactory report for the past year. Although we have lost several members from various causes, our numbers continue to increase, and we have a fair cash balance after all expenses have been paid. Our losses amount to eleven; of these, six have resigned membership and three have left the neighbourhood, while we have to deplore the deaths of two members, Dr. Maule, and Mr. Pepler of Market Lavington. On the other hand, seventeen gentlemen have joined the Branch, and our numbers now amount to two hundred and five members. Our annual meeting is held some weeks earlier this year, in order that the names of those gentlemen elected to represent the Branch in the Council of the Association, may be sent to the General Secretary before the first week in July. The papers read before the Branch have included some of the most interesting topics of the day, and the attendance has been uniformly good. It is especially satisfactory that many of our country members have been able to be present and to join in the discussions. Your secretaries have, as far as has been possible, alternately attended the meetings of the Committee of Council during the past year; and they are able to report to you that the Association

has been incorporated and registered under the Companies' Acts of 1862 and 1867, with all the privileges allowed to scientific societies. It has now, therefore, a legal standing. The financial report is most encouraging, showing a balance in hand of £22 7s. 10d.; and your Council recommends that the sum of three guineas be given to the Medical Benevolent Fund. The scrutineers appointed to examine the voting papers report that the following gentlemen are elected to fill the vacancies in the local councils: For Bath, Mr. Bartrum, Mr. Bleack, Dr. Hensley, and Dr. Davies; for Bristol, Dr. Davey, Dr. Brittan, Mr. Coë, Dr. Marshall, Mr. Green, and Dr. E. L. Fox.—The report was adopted.

President-elect.—Dr. DAVEY proposed, Mr. STONE seconded, and it was unanimously resolved: "That Dr. Goodridge be President-elect."

Vote of Thanks to the Retiring President.—Dr. MARSHALL proposed, and Mr. F. P. LANSDOWN seconded, "That the best thanks of the Branch are due to Frederick Mason, Esq., for the able manner in which he has discharged the duties of president during the past year." The motion was carried unanimously.

Proposal regarding Discussions.—Dr. BRABAZON proposed, and Dr. E. L. FOX seconded, "That during the ensuing session, two separate evenings be set apart for the discussion of special subjects in medicine and surgery or obstetrics, one subject being allotted to each evening. That such special subjects be selected by the president and secretaries at some meeting antecedent to the commencement of the session, such being selected as shall appear to them to possess most professional interest and most material for scientific and practical inquiry, and that early intimation be given by the Branch secretaries to members of the subjects selected, and of the evenings set apart for special discussion. Also, that the president and secretaries be requested to appoint some one gentleman who, on such special evenings, shall open the discussion by pointing out what, in his opinion, appear to be the salient points for scientific and practical investigation; exponent to be limited to fifteen minutes, and each speaker following to ten minutes, in expressing their views. The discussion on each subject to be limited to the evening appointed."

After several members had spoken on the matter, Dr. MARSHALL proposed, and Dr. FALCONER seconded, "That the resolution proposed by Dr. Brabazon be referred for consideration to the local councils." This was carried.

The Secretaries.—Mr. LEONARD proposed, and Mr. STOCKWELL seconded, "That the thanks of the Branch be offered to Messrs. Fowler and Board for their valuable services as secretaries during the past year, and that they be asked to continue in office." This was carried unanimously.

Representatives in the General Council.—The following were elected by ballot to serve on the general Council of the Association:—W. M. Clarke, Esq.; C. H. Collins, Esq.; C. H. Fox, M.D.; E. L. Fox, M.D.; H. Hensley, M.D.; H. Marshall, M.D.; F. Mason, Esq.; A. Prichard, Esq.; C. Steele, Esq.; J. G. Swayne, M.D.

SOUTHERN BRANCH: ANNUAL MEETING.

THE second annual meeting of the Southern Branch was held at the South-Western Hotel, Southampton, on Tuesday, June 29th. The members assembled at a quarter past two; Inspector-General W. R. E. SMART, M.D., C.B., President, in the chair.

Report of Council.—Dr. J. W. COUSINS, Honorary Secretary, read the Council's report and financial statement, which congratulated the members on the progress the Branch had made during the past year. Their last annual meeting was held at Southsea, when an excellent address was delivered by Inspector-General Smart. Many meetings had been held during the year; and in Dorset and South-east Hants, the Branch had been especially successful, the total number of members elected exceeding those of last year by 30. The number of those who had joined up to June 1st, 1875, was 142, and the finances were in a satisfactory condition.

Dr. AITKEN, of Netley, moved the adoption of the report, which was seconded by Dr. DYER of Ringwood, who expressed himself highly gratified at the increase in the numbers. The proposal was unanimously agreed to.

President-elect.—Dr. T. W. TREND (Southampton) proposed that Dr. J. P. Aldridge, President of the Dorchester district, should be the President-elect of the Southern Branch for the ensuing year. At a meeting of the Council a short time ago, it was decided that the next annual meeting should be held at Weymouth, and it was considered desirable that the President-elect should be a member of that district.

Dr. D. NICOLSON (Portsmouth) seconded the motion, which was carried with acclamation.

Vice-Presidents.—Mr. MANNING (Salisbury) proposed, and Dr. MANLEY (Knowle, Fareham) seconded, that Dr. Orsborn of Bittern, and Dr. Garrington of Portsmouth, be the Vice-Presidents for the ensuing year. The proposition was unanimously carried.

Inspector-General SMART returned thanks for the honour they had done him in electing him to occupy the chair during the past year of their newly formed Association. He had been present at all the meetings that had been held at Southsea and Fareham, and the papers there read had been treated in a manner which he, as a member of other associations, and accustomed to meetings of a kindred character in different parts of the country, had never seen surpassed in ability. He complimented their honorary secretary and treasurer (Dr. Cousins) for the able and energetic manner in which he had laboured to promote the interests of the Association, for which he believed there was a good future in store. It now became his duty to quit that chair; and he could not but express his regret, in common with them all, that Surgeon-General Maclean, the president-elect, was unable to take his place, on account of the death, he believed, of his only brother; but he was sure they would all unite with him in expressions of condolence on his bereavement. It had been proposed that Dr. Orsborn should be vice-president for the ensuing year; and, in the absence of Dr. Maclean, it would be his duty to request Dr. Orsborn to take the seat which he (the speaker) had now to vacate.

Election of Secretary.—Inspector-General SMART then left the chair, which was occupied by Dr. ORSBORN, who said the next business was to elect a Secretary to the Branch. It was a most important office, and therefore desirable that they should have an able man to fill it. He spoke in terms of high commendation of Dr. Cousins's services, and said he had no doubt that gentleman would be unanimously re-elected. The proposition was seconded, and Dr. Cousins was re-elected amidst applause.

Vote of Thanks to the retiring President.—Dr. GARRINGTON moved a vote of thanks to the late president, Inspector-General Smart, for his services during the past year.

Surgeon-General J. MOUTAT, C.B., V.C., seconded the proposition, and it was carried with acclamation.

Inspector-General SMART acknowledged the compliment, and spoke in high terms of Dr. Garrington, who, he said, had at all times shown himself most desirous of promoting the welfare of the Society, which was so calculated to engender and preserve a good feeling among the medical profession, and he felt proud the vote of thanks should have emanated from Dr. Garrington. In forming this Society, he felt they had done that which would be of great benefit here as in every part of the country; for wherever a Branch of the Medical Association had been established, there good had resulted, and this would always be the case. He trusted that, through the influence of such associations, the aphorism that doctors disagree would soon become obsolete, and that their Branch would continue to flourish.

Election of a District Secretary.—Dr. COUSINS (Southsea) returned thanks for his re-election, and said he did not think that the success of the Branch depended upon himself. In every district they had an efficient officer as secretary; and the cordial way in which they had co-operated with him, had made his task a very agreeable one indeed. He need hardly mention Dr. Trend, who had undertaken the meeting of that day, and had done much to enhance its success; Mr. Parkinson of Wimborne, Mr. Langdon of Winchester, Mr. Manning of Salisbury, and Dr. Lush of Weymouth. As to the Branch Council, there would be no general election that day; and the only alteration required was to fill up the vacancy created by Dr. Garrington being elected a vice-president; and he proposed that Dr. Axford (Southsea) should be appointed.

The election was carried *nem. dis.*, and Dr. AXFORD returned thanks.

Progress of the Branch.—Dr. COUSINS enumerated the number of districts in the Branch, with their respective members, from which it appeared that, on the 1st instant, there were sixty-five members in South-East Hants, twenty-three in Southampton, twenty-one in Dorset, twelve in Winchester, eight in the Isle of Wight, five in South Wiltshire, and five in Bournemouth. He mentioned the receipt of a communication in respect to the propriety of advertising medical works in newspapers, in which the opinion of the Branch was invited, but time did not permit of this being done. After this, he touched upon the Rumsey Memorial Fund, inviting subscriptions from all who might be disposed to contribute.

President's Address.—Dr. ORSBORN delivered an address, which was printed at page 37 of last week's JOURNAL.

Dr. PARKES (Netley), in proposing a vote of thanks to Dr. Orsborn for his suggestive and philosophical address, said he thought they must all agree with him that the proper work of a great Association like this

must in part be connected with the investigations which had been indicated, and that the great subject of climatic influences and cognate matters could never be properly investigated until it was undertaken by a great number of men acting together, conscious of the difficulty of the problem, but actuated by a determination to overcome it. He thought, also, Dr. Orsborn had done wisely in directing their attention to the great importance of tracing out the beginnings of disease. They could none of them have listened to the address without feeling how much there was for them to do, and being stimulated by the strong points which Dr. Orsborn had brought forward with so much power.

Dr. DYER (Ringwood) seconded the proposition, observing that, when he entered the room, it was with regret he heard that they were not going to be favoured with an address from Professor Maclean; but this regret was much lessened when he understood Dr. Orsborn was going to deliver one in his place, because he knew they would hear from him something of great eloquence, that was very interesting, and well worth listening to.

The motion was carried unanimously.

Dr. ORSBORN thanked the members for their kind reception of his address, which had been written, he said, under some difficulties; but the emergency was such that he felt it to be a duty to assist Dr. Maclean under the melancholy circumstances of his bereavement. He had been amply repaid for any labour he might have expended on it by the manner in which it had been received.

Excursion to Netley Abbey and Netley Hospital.—After the conclusion of Dr. Orsborn's address, most of the members present joined in an excursion to Netley Abbey and the Royal Victoria Hospital. On reaching the abbey, Dr. Parkes, president of the Southampton Medical Society, which had amalgamated for the occasion with the Southern Branch of the British Medical Association, conducted the party through the ruins, and gave some interesting explanations. The abbey was founded in the reign of Henry III, and was suppressed with the other monasteries in the reign of Henry VIII. It is a splendid specimen of ecclesiastical architecture, though there are not any very special historical events connected with it. Time only admitted of a short stay; and the party proceeded to the Royal Victoria Hospital, where Surgeon-General Fraser, the principal medical officer, Surgeon-General Maclean, C.B., Surgeon-General Longmore, C.B., Surgeon-Major Porter, and Surgeon-Major De Chaumont, F.S.B., were waiting to receive them, and conduct them through the building. The visitors first entered the museum, whither valuable specimens are sent from all parts of the world. The salt water bath-room was next inspected, where is a bath of very large dimensions, into which salt water is brought by a pumping process; and the chapel was next visited. It is neatly fitted up and arranged, and will seat eight hundred or nine hundred persons, and is used by Episcopalians, Presbyterians, and Roman Catholics. The professor of hygiene's private laboratory, hygiene laboratory, the microscope room, and some of the wards, were also visited. After inspecting a portion of the surgical division, including the ophthalmic ward, the party repaired to the lecture-room, wherein is a splendid map of India, constructed of *papier maché* and plaster of Paris, and giving an excellent idea of the configuration of the country—its rivers, boundaries, etc., being most accurately depicted. All the military stations are shown, and a capital idea is given of the Himalaya range of mountains. It was presented to this school by the Secretary of State for India at Dr. Maclean's own request, and many of the Rajahs in India have been furnished with copies of this map. In the pathological museum were shown a number of drawings made by Sir Charles Bell, after the battle of Waterloo, illustrating some of the terrible injuries of war. The drawings were presented by Lady Bell. The model room contains a number of models of appliances for carrying the wounded, etc.; and it was shown how ordinary third-class carriages could be utilised for the conveyance of wounded men. Among the appliances for the removal of sick and wounded, the *dhooley* was mentioned as possibly the best contrivance invented in the world. A model of what may be termed a substitute for the knapsack was shown; and Dr. Maclean stated that for nearly six years the committee with which Dr. Parkes was connected were engaged in contriving something which should please the military eye and satisfy the physiological part of the problem. A number of weapons were exhibited which have a greater or less historical interest attached to them. Before quitting the building, the kitchen was inspected, and it was pointed out that the apparatus therein contained is capable of cooking for 1,200 men. The officers' quarters were finally visited, and here refreshments were supplied in the commodious mess-room.

Dinner.—At half-past six, the members and visitors dined together at the South-Western Hotel; Dr. Orsborn, in the absence of Dr. Maclean, in the chair.

SOUTH-EASTERN BRANCH: ANNUAL MEETING.

THE thirty-first annual meeting of this Branch was held at Guildford, on Thursday, July 1st, in the Board Room of the Royal Surrey County Hospital. The retiring President, Mr. HODGSON of Brighton, having thanked the members for the courtesy and indulgence which he had experienced at their hands during his year of office, introduced his successor, Dr. STEDMAN of Guildford.

Vote of Thanks.—On the motion of Mr. DIXON, seconded by Mr. PURVIS, a vote of thanks was unanimously passed to the President and Vice-Presidents for their services during the past year.

President's Address.—The President delivered an address, which is published at page 70.

The Report of Council was read by the Honorary Secretary, Dr. PARSONS.

In presenting their report for the past year, the Council cannot refrain from congratulating the members of the South-Eastern Branch upon reaching their thirty-first anniversary of the Branch in a state of flourishing vigour. The retrospect of this period from the first establishment of the Branch to the present time affords nothing but un-mixed satisfaction; whether regard be had to the steadily increasing numbers which swell our ranks, or to the measures which this Branch has had the honour either to inaugurate or to support and solidify, for the welfare of the profession generally, and for the benefit of our brethren in the army and navy in particular. Some years have afforded room for greater activity than others; and, on the other hand, some years have been unusually wanting in incident, to the verge even of monotonous dullness. It is to be feared that the year just passed must be referred to the latter category. But still the evidences of steady vitality are not wanting; and the Council would ask attention to the following facts.

At the last annual meeting the number of members was 370, as compared with 338 in 1873. Since July 1st, 1874, 15 have withdrawn from the Branch for various reasons, but chiefly from change of residence, advancing age, or retirement from the ranks of the profession; death has removed 7. And this year the Council have been spared the pain of striking off the name of any defaulter from the books, for the defalcations have been *nil*. On the other hand, 38 new members have been enrolled, so that the total number of members at the present time stands at 386.

Many of these new members belong to the army and navy, and have, doubtless, been attracted by the disinterested efforts in their behalf which have been so persistently made by our Association, both in the JOURNAL and by its Parliamentary Committee.

The Council are not unmindful of the valuable services of the District Secretaries in bringing recruits to the Branch, as well as in the organisation of the various meetings in their respective districts. Much of the success which attends these gatherings depends upon the Secretaries, and the Council have much satisfaction in conveying their cordial thanks to them for their zealous co-operation and assistance.

The efforts of the Association through its Parliamentary Bills Committee to advance the interests of the public services have been continued during the year. Some very important concessions have been made by the Lords of the Admiralty to the naval medical service, and the thanks of a number of the most distinguished medical officers of the navy have since been formally tendered to the Association for the assistance rendered in bringing about this gratifying result. The Secretary of State at War is still considering the representations made on behalf of the army medical officers, and has expressed his intention to make some propositions for meeting the views laid before him at a deputation last season by Mr. Ernest Hart on behalf of the Parliamentary Committee of the Association. Meantime, great dissatisfaction prevails in the army at the present position of the medical officers, which combines all the disadvantages of the staff and regimental systems without the full advantages of either.

The Artisans' Dwellings Bill and the Public Health Bill have both undergone modifications through the influence of our Association, and they will probably be yet further amended before becoming law.

The lamented illness of Dr. Rumsey, F.R.S., of Cheltenham, has to some extent arrested a career of singular public usefulness. Dr. Rumsey had devoted the best energies of a great intellect and a long life to the service of his profession and his country. The Poor-law medical service and the sanitary medical officers owe to him a great debt of gratitude; and to the noble and enduring services which our Association has rendered to the Poor-law administration, and the cause of public health—and these are among its chief titles to honour—Dr. Rumsey has been a guide and a leader. Your Council heartily recommend to you the fund which is being raised, with a view of relieving from anxiety his later years, and doing honour to his services.

The next annual meeting of the Association will take place in August, at Edinburgh, under the presidency of Sir Robert Christison; a brilliant gathering is anticipated. The total numbers of the Association now considerably exceed 6,000; and it affords a gratifying evidence of the hold which, through the popularity of its JOURNAL, it now retains in members who have once joined it, that more than 90 per cent. of the members who joined on the occasion of the London meeting, remain permanently attached to it, and that the percentage of resignations was never so small as it is at present.

The mode of organisation of this Branch and its division into districts, is habitually referred to in the JOURNAL as a model of success and usefulness. It is gratifying to observe, that some of the more recent Branches have been framed upon this type, and are flourishing. The strength of the Association is rooted in its Branches, and the Council trust the members will lose no opportunity of recruiting the strength of the district meetings, and in making each district an animated and united centre of scientific and social activity. So much for the prosperity of the Branch.

Before closing the report, however, the Council desire to say a few words on a subject which has not escaped their observation. For some years past, a feeling has been gaining ground in the Branch, that the time had arrived for the organisation of some machinery within the Branch for the protection, guidance, and support of the members when placed in circumstances of difficulty or anxiety. From time to time this feeling finds expression, notably at the last annual meeting at Brighton; and, at the present moment, the matter is being fully discussed in the East Kent District, with a view to definite action at some future annual meeting.

When the Association was in its infancy, it was felt that subjects of an imperial and public character, in which there was little room for disagreement, and every ground for unanimity, should first receive attention. But now that our Branch is consolidated, and mutual confidence has been established amongst its members for so many years, other matters of more immediate, and, so to speak, domestic concern, might very properly receive attention, without endangering that feeling of good fellowship which is characteristic of us all as members of the British Medical Association.

The Council desire to point out that their functions are purely *executive*, and it is not within their province, as some have imagined, to initiate any new line of policy. It appears to them, that matters of this kind should be brought forward for discussion at the district meetings, in order to ascertain the feeling of the members generally upon them, and to pass such resolutions as may be deemed necessary. These resolutions would be forwarded to the Council, and, after mature consideration, they would take such action as seemed to them most fit; then, at the annual meeting, the whole would be discussed with a wisdom, clearness, and intelligence, which would not otherwise be possible. The Council, therefore, earnestly commend these brief observations to your careful consideration.

On the motion of Mr. CHALDECOTT, seconded by Mr. THURSTON, the report was received and adopted.

The Financial Report showed the year to commence with a balance of £79:13:8; Branch subscriptions, £71:8:3; total, £151:1:8. Expenditure, £76:15:7; leaving a balance in hand of £74:6:1.

It was moved by Mr. BOXALL, and seconded by Mr. GREENWOOD, that the very satisfactory report just read be received and adopted. This was carried unanimously.

Representatives in the General Council.—The following were elected: J. Armstrong, M.D.; J. H. Aveling, M.D.; R. L. Bowles, M.D.; R. Branwell, Esq.; Sir J. Cordy Burrows; J. M. Burton, Esq.; A. Carpenter, M.D.; W. Carr, M.D.; E. Clapton, M.D.; E. Garraway, Esq.; A. Hall, M.D.; J. B. Hicks, M.D., F.R.S.; G. F. Hodgson, Esq.; C. Holman, M.D.; W. W. Moore, M.D.; A. Napper, Esq.; T. Heckstall Smith, Esq.; N. Tyacke, M.D.; J. R. Wardell, M.D.

Council of the Branch.—The following were elected: C. O. Baylis, M.D.; J. S. Bostock, Esq.; T. M. Butler, Esq.; T. S. Byass, M.D.; J. N. Cunningham, M.D.; E. F. Fussell, M.B.; G. W. Grabham, M.D.; R. Gravely, Esq.; H. M. Holman, M.D.; J. L. Jardine, Esq.; H. Lanchester, M.D.; B. Marsack, Esq.; S. Monckton, M.D.; M. K. Robinson, Esq.; S. G. Sloman, Esq.; J. R. Stedman, M.D.; S. Woodman, Esq.; S. Turner, Esq.; W. Wallis, Esq.

Secretary.—Dr. HOLMAN supposed that they would all be unanimous in requesting the Honorary Secretary to continue to hold his office, and he would not, therefore, trespass on their time further than to convey their cordial thanks to the Secretary for his past services. This was carried unanimously.

Dr. PARSONS expressed his satisfaction at finding that he was of any service to his professional brethren, and the pleasure it afforded him to place himself at the disposal of the meeting.

Place of Meeting in 1876.—On the motion of Dr. ARMSTRONG, seconded by Mr. NAPPER, it was resolved that the next annual meeting should be held at Maidstone; that Dr. Stephen Monckton of Maidstone be the President-elect; and Mr. W. Hoar of Maidstone, and Dr. W. Sankey of Sutton Valence, be the Vice-Presidents elect.

Alteration of Law 8.—In the absence of Mr. BURTON, Dr. HOLMAN moved, and Mr. HODGSON seconded, the following alteration in Law 8, after the words "district meetings", insert, "or any other meetings of the Branch". This was carried unanimously.

The Title of Doctor.—Dr. F. J. BROWN had given notice of his intention to move—"That, in the opinion of this meeting, the title of Doctor ought to be accorded to all registered members of the profession, as an act of courtesy, and in agreement with general usage on the part of the public."

Mr. HODGSON said that, in the unavoidable absence of Dr. Brown, he had undertaken to bring forward this motion, not that he approved of it, but solely from a feeling of respect and esteem for Dr. Brown.

Dr. ARMSTRONG, whilst condemning the motion, nevertheless rose to second it, not only from personal regard to Dr. Brown, but also from admiration of his graceful generosity in proposing to concede freely to others what he had himself attained by much labour.

The following amendment, moved by Mr. SLOMAN, jun., and seconded by Mr. CHALDECOTT, was carried unanimously:

"That this Branch of the Association strongly disapproves of any member assuming a title that is not sanctioned by the legally constituted examining bodies."

Midwives.—The following resolution was proposed by Dr. HOLMAN, seconded by Mr. SLOMAN, jun., and carried unanimously:

"That this meeting desires to call the attention of the General Council of the Association to the present unsatisfactory condition of midwives in this country; and to urge the necessity of the British Medical Association petitioning Parliament for a Bill which should ensure the instruction and provide for the examination, registration, and licensing of this large class of women."

New Members.—Twelve new members were elected.

Visit to Brookwood Asylum.—The members having done justice to the excellent luncheon kindly provided by Dr. Stedman, proceeded in carriages to Brookwood Asylum, where Dr. Brushfield, one of the Vice-Presidents, received them, and showed the various means of treating the patients confided to his care, and the arrangements for their comfort and convenience.

Dinner.—A very pleasant day was brought to a close by a dinner at the White Hart Hotel, the Vicar and the Mayor being amongst the guests of the President.

STAFFORDSHIRE BRANCH: ORDINARY MEETING.

The third ordinary meeting of the Session was held in the Board Room of the Mines Drainage Offices, 22, Darlington Street, Wolverhampton, on Thursday, May 27th. Present: R. GARNER, Esq., President, in the chair, and thirty members and visitors.

New Members.—The following members of the Association were elected members of the Branch: Mr. J. C. Lindop (Newport); Mr. John Green and Mr. B. Moore (Wolverhampton); Mr. G. A. Phillips and Mr. F. W. Willmore (Walsall); Mr. G. H. Hopkins (Stone); Dr. J. Hayes (Trentham); Mr. F. Kendall (Kids Grove); Mr. J. D. Hewson (Coton Hill, Stafford); Dr. H. W. Monckton (Rugeley); Dr. W. Spackman (Penn Fields, Wolverhampton).

Letters.—The SECRETARY read letters from Mrs. F. Turton (Wolverhampton), and from the Secretaries of the Birmingham and Midland Counties Branch.

Communications.—The following papers were read.

Cystic Tumour of the Thyroid Body.—Mr. SPANTON exhibited a cystic tumour of the thyroid body. The specimen was removed from a man, aged 42, who was admitted into the North Staffordshire Infirmary on April 10th, 1875, on account of a large tumour situated on the front part of the neck, and which was clearly a single-cysted bronchocele of rapid growth, and arising without any traceable cause. All kinds of local treatment had been tried before the admission of the patient, and it was deemed advisable (after tapping had failed) to insert a seton, and one was passed superficially to the tumour. Six days afterwards, considerable hæmorrhage of a dark colour occurred from the seton openings; the threads were removed, and efforts made to arrest the bleeding; but, this being ineffectual, Mr. Spanton, ether having been given, ligatured the left common carotid artery. The patient died two days afterwards from septicæmia. The tumour upon removal was found to be a large single cyst of the thyroid gland, with thick walls, and lined

with decolorised fibrinous layers and soft clots, and filled with soft black clots and black fluid blood. The seton did not penetrate the cyst originally, but through ulceration had extended into it.

Cancer of the Breast.—Mr. VINCENT JACKSON showed two cancerous breasts which he had removed that morning from a female whilst anaesthetised by ether. The patient, aged 45, the wife of a blacksmith, living near Welshpool, Montgomeryshire, was sent to the Wolverhampton and Staffordshire General Hospital for operative purposes. One child was living. Menstruation was healthy. Her general health and aspect were good. The family history was negative as regards cancer or tubercle, and no blow or injury had been received. Two years ago, she noticed a hard lump in the right breast, and shortly afterwards (the precise time could not be remembered) another appeared in the left breast. The situation of each scirrhous mass was on the outer side of the mamma, but below the nipple line; the size of each tumour was small. The nipples were prominent. On the right side, the skin was attached to the tumour, and this latter was connected to the underlying pectoral muscle. On both sides, the axillary and clavicular glands were unaffected. The soft parts between the breasts were healthy.

Dr. TOTHERICK read a paper upon Puerperal Fever. A discussion took place, in which the President, Dr. Millington, Dr. Weaver, Mr. J. T. Hartill, Mr. Lycett, Dr. Arlidge, Dr. H. Day, and Mr. Vincent Jackson took part.

Mr. W. E. CLENDINEN read a paper upon the Provident Dispensary System considered as a Remedy for Hospital Abuses. The discussion was postponed.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.

A MEETING of the above district was held at the White Hart Hotel, Lewes, on Friday, May 28th; J. G. BRADEN, Esq., in the chair. Eighteen members and one visitor were present.

Communications.—1. *Malaria.*—Mr. T. F. SANGER of Alfriston read a short paper on malaria, in which he enumerated the following propositions. The malaria of ague is caused by vegetable decomposition, as typhoid and diphtheria are caused by animal decomposition or putrefaction. The poison arising from the former is slower in producing its effects than the latter; often remaining dormant in the system for months before setting up its action. The reason why the vicinity of tidal rivers is aguish, arises from the salt and fresh water mingling, which hastens putrefaction. In malarious districts, whole families are often affected by the ague, even to the child under a year old, which proves that the chill theory is a fallacy.—A discussion followed, which was shared in by Messrs. Wallis, Rix, W. J. Harris, Drs. A. Hall and W. Moore; Messrs. Wallis and Rix particularly noticing the fact of the malarious poison remaining dormant through the winter months, and ague showing itself in the spring in the case of labourers who had been harvesting in malarious districts during the previous autumn.—Dr. W. MOORE drew an analogy between typhoid fever and ague, instancing the treatment of both by quinine in large doses, which, according to the German views, arrests putrefactive processes, and lowers the temperature.

2. *Meningeal Apoplexy.*—Mr. G. F. HODGSON, President of the South-Eastern Branch, read particulars of a case of meningeal apoplexy occurring in a widow, aged 42, a cook in a private family, to whom he was summoned on March 19th. The case began with intense pain in the back of the head and neck, at first supposed to be rheumatic, and treated as such. She gradually became "stupid", reluctant in manner, and intractable as regards taking food and medicine. A systolic aortic bruit was developed. On the fourth day, the temperature rose to 104 deg., and the tongue became dry; "stupidity" continued, but no distinct coma, as she got out of bed of herself to procure a clean night-dress, previously to being removed to the Sussex County Hospital, on the fifth day of her illness, when she passed out of Mr. Hodgson's care. Violent symptoms then ensued, necessitating a resort to a strait-waistcoat. Subsequently, left hemiplegia occurred, the cranial nerves not being involved. She died on March 27th, the eighth day since her seizure. At the *post mortem* examination, the brain was reported to be remarkably congested throughout, the subarachnoid space round the medulla oblongata (especially on the right side) being filled with a recent clot of bright coloured blood, amounting to about an ounce and a half in bulk. The arteries were extensively atheromatous. The heart was much hypertrophied; the valves were healthy; the commencement of the aorta was much dilated and roughened by atheroma.—In the discussion which followed, the question of venesection in such cases was mooted by Dr. A. Hall, but combated by Dr. W. Moore, who argued that death in apoplexy always resulted from depression of the vital powers.

Dr. W. MORRIS's paper on the Pathology of Chorea was deferred for want of time.

Mr. MILLIKIN of St. Thomas's Hospital exhibited a choice collection of Surgical Instruments.

New Members.—Mr. Robert M. Ingle of Brighton, a member of the Lancashire and Cheshire Branch, was nominated for membership of the South-Eastern Branch; and Messrs. Frank Hall, John P. Grover, Walter F. Crosskey, and William L. Hunter, all of Lewes, were nominated for membership of the Association and of this Branch.

Dinner took place at the White Hart, under the Chairmanship of Mr. J. G. Braden, twenty-four being present, including the High Bailiff of Lewes and the Vicar of Newick as visitors.

The Next Meeting will be held at Eastbourne in September, T. F. Sanger, Esq., of Alfriston, in the chair.

CORRESPONDENCE.

MEDICAL ADVERTISING.

SIR,—At the annual meeting of the Midland Branch, held at Derby on the 17th ult., the prevalent system of advertising medical works in the daily general papers was adverted to, and a significant expression of disapproval was then and there recorded. There are many very excellent works on the science and art of healing in all its branches frequently given to the world by the industry of members of our profession, the desirableness of whose publicity cannot be questioned; but the manner in which that publicity is, in the present day, gained for them is, in its bearing on the *morale* of the profession, a question on which, to say the least of it, there is a diversity of opinion. I suppose there can be no doubt in the medical world that technical treatises on medical subjects are written for medical men, and for medical men only.

If this be so, I ask, are there not medical journals in abundance, many of whose pages are always set apart for the purpose of making known the merits of the many books which are, from time to time, being issued? And further, with the great privilege of the British Medical Association within the reach of every respectable member of the profession for the small annual subscription of one guinea, is it not more reasonable to suppose that medical news, of whatever character, will be more likely to meet the medical eye in a medical journal than in the *Times*, *Daily Telegraph*, and *Daily News*? If this be so, I desire to know to what end our daily general papers are daily inundated *ad nauseam* with advertisements of medical works?

If such advertisements are not inserted for the benefit and convenience of medical men—and I think I have shown that such is not the case—then to what end and for what purpose, I ask again, is this perpetual flooding of drawing-room papers with them? Nobody will question the importance it is to many unhappy folk, on personal grounds, to know who is the best authority on the "Urine in Health and Disease", on the "Disorders of the Reproductive Organs", or to be well certified of the man who has the most abiding name and reputation in connection with the "Rectum"; but the public daily journals do not appear to be the place where such information should be found: and I venture to record a doubt, in which I do not stand alone, whether professional morality would not be better served, and public taste less vitiated, if eminent doctors and surgeons would cease to puff their wares, and private drawing-rooms were relieved of a literature which, in some sense, is certainly unclean. I remain, etc.,

Derby, July 7th, 1875.

FREDERICK WILLIAM WRIGHT.

SURGEON-DENTISTS.

SIR,—As a member of the medical profession practising a specialty, which, in its highest bearings, apart from its more purely mechanical point of view, should not acknowledge any inferior position when undertaken by fully qualified practitioners, I feel bound to refer to an article, which has only just come under my notice, which appeared in your *JOURNAL* of the 26th ultimo. It is one calculated to give much pain to those who have really worked for the good name of their profession, though the men of the highest education would be the last to deny the elements of truth which exist in the article in question, inas-

much as they have reference to a class with whom they could not consider themselves connected in any way.

Firstly, as a member of the Royal College of Surgeons and a teacher in one of our best known general hospitals, I would ask whether, if your interpretation of the social status of dental surgery be correct, I have any right to retain my name upon the College roll, or to remain on the staff of a hospital, all the members of which consider themselves professional, not business men.

Secondly, your remarks only seem to apply to men of such an inferior type, that it would be found that, whilst none of them are fully qualified, few of them even hold the special degree of Licentiate in Dental Surgery, which also, by the bye-laws of the College, would prevent them from acting in that way which you seem to think to be inseparable from the practice of dentistry. If you will only recall the names, past and present, of the more worthy members of this specialty, you may find men who, in general and scientific acquirement, can rightly claim a position professionally and socially equal to that of the most respected in any branch of surgery.

No one feels more acutely than myself any blot upon the escutcheon of my calling; but, in the name of all qualified and high-minded men in my profession, I disclaim all connection with such a class as you describe, and shall ever hold that, with equal degrees and equal education, a surgeon, whatever may be the branch to which he devotes his attention, holds the same status as any other member of the profession.

As a lecturer also in a special hospital, I have ever impressed upon my students how inseparable is the subject of their studies from general medicine and surgery; for the teeth are organs no more isolated from the body than is the eye, the stomach, or the ear; whilst I have explained to them that they must not expect to be conceded like privileges with, unless they meet upon a common platform as regards all that which makes, the surgeon.

At the same time I cannot but think that some attention to abnormal conditions of the teeth would repay every practitioner; for very many surgical diseases are intimately connected with such conditions, whilst some of the most persistent cases of neuralgia may be dependent upon morbid conditions of the dental tissues, quite irrespective of caries: the pressure of an osseous excrescence upon the pulp, its ossification or hypertrophied cementum, often being the *fons et origo* of sufferings which have marred the happiness of a lifetime, and baffled the utmost skill exerted in behalf of their alleviation; for in such cases no drugs, but only a correct appreciation of the cause, can effect a cure. In this malady alone, I am confident that there is a vast field of investigation open in its connection with occult abnormalities of the dental tissues, whilst I firmly believe, and my opinion is based upon facts observed by myself, that the day is at hand when the necessity of stopping or extracting a tooth will be looked upon, to a certain extent, as a confession of failure in treatment; for, under favourable circumstances, much may be done to arrest the ravages of decay by suitable constitutional means.

The last paragraph of the article which I am criticising is hardly worthy of comment. The poor, if there be a demand for it, can find aid in this specialty, even as the denizen of the lowest purlieu can, if he so desire it, obtain medical aid at his own price, and be independent of gratuitous assistance. Had not this paragraph appeared in your *JOURNAL*, to which I have long been a subscriber and a thankful recipient of the valuable information to be obtained from it, I should have thought that it was written by an unqualified specialist who, with no true social or professional feeling, fancied that he saw a greater chance of aggrandising himself by rendering a branch of the noblest of professions a mere "business".—Believe me, sir, yours faithfully,

S. HAMILTON CARTWRIGHT,

Professor of Dental Surgery at King's College.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, July 8th.

Medical Acts Amendment (College of Surgeons) Bill.—On the motion of Lord SELBORNE, this Bill was read a second time.

Pollution of Rivers Bill.—The report of amendments on this Bill was considered and agreed to, some additional amendments being made by the Duke of Buccleuch.

Friday, July 9th.

Vivisection.—Earl BEAUCHAMP, on the part of the Earl of Harrowby, moved that an humble address be presented to Her Majesty for copy of the Royal Commission on Vivisection, which was agreed to.

Medical Acts Amendment (College of Surgeons) Bill.—This Bill passed through Committee.

Monday, July 12th.

Pollution of Rivers.—This Bill was read a third time, and passed.
The Medical Acts Amendment (College of Surgeons) Bill was read a third time, and passed.

HOUSE OF COMMONS.—Thursday, July 8th.

Lunatic Asylums in Ireland.—Sir M. H. BAYLY, in reply to Mr. O'Shaughnessy, said he proposed to proceed with his Bill with regard to Lunatic Asylums in Ireland at an early day; but he must call on Irish members not to stop the discussion on the measure at a late hour at this end of the Session.

Tuesday, July 13th.

Adulterated Milk.—Dr. CAMERON asked the Home Secretary whether his attention had been called to a report in the *Times* of July 3rd, from which it appeared that Mr. Balguy, the presiding magistrate at Greenwich Police-court, had publicly announced that, after consultation with his brother magistrates, he had resolved not to impose fines in cases of the adulteration of milk with water when such adulteration was not over 10 per cent.; and whether the Adulteration Acts now in force warrant magistrates in allowing the adulteration of milk with water if not practised to a greater extent than 10 per cent. to pass unpunished.—Mr. CROSS: Yes; it is substantially true that the magistrate did say so, after having consulted with some of his brother magistrates; but I cannot think that is a view of the law which will be acquiesced in by my right honourable friend the President of the Local Government Board, either under the Act now in force or under the Bill now passing through the House.

Open Spaces (Metropolitan).—Leave was given to Mr. WHALFAY to bring in a Bill for affording facilities to vest in the Metropolitan Board of Works open spaces for exercise and recreation.—The Bill was read a first time.

Militia Medical Officers.—Mr. HARDY, in reply to Dr. L. Playfair, said he hoped to be able to publish at no distant day the new regulations in regard to militia medical officers.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At the meeting of the Council, on July 8th, the following gentleman was admitted a Fellow of the College.

Atherstone, Wm. Guybon, Cape of Good Hope: diploma of memberhip dated May 11th, 1858.

The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Court of Examiners, on July 12th; and, when eligible, will be admitted to the pass-examination.

Messrs. J. B. Nolle and J. H. Callender (of the Newcastle School); L. R. Wilkin and W. F. Jones (of the Dublin School); A. R. McDougall and F. Le M. Grasset (of the Edinburgh School); W. E. Margetson (of the Leeds School); R. F. Owen (of the Liverpool School); and William Rhodes (of the Birmingham School).

The following gentlemen passed on July 13th.

Messrs. J. W. Bond, Kánobá Ranchoddás Kirtikar, J. E. Continho, F. B. Green, and William Gristock (of the University College); J. S. Lambert, F. W. Fagg, Richard Edmunds, W. T. Jackman, and C. S. Bontein (of St. Bartholomew's Hospital); William Huey, E. L. McArthur, and Robert Jones (of the Liverpool School); J. E. Pilkington, James Newton, and F. H. Fikes (of the Manchester School); H. C. Jee, H. J. Liebstein, and L. M. B. Jones (of Guy's Hospital); F. J. Spranger and G. F. A. Harris (of St. George's Hospital); Joseph Peake (of the Glasgow School); C. E. Shelly, B.A. Cantab. (of the Cambridge School); J. A. Irwin (of the Dublin School); G. S. Robertson (of the Westminster School); and William Pratt, M.D. Liege of the Aberdeen School.

Amongst the visitors who attended these examinations were Messrs. Couper, F. Mason, H. T. Butler, W. J. Walsham, W. H. Clapps, B. T. Lowne, George Lawson, etc.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 8th, 1875.

Batterbury, Richard Legg, Haverstock Hill
Blake, Andrew Henry, Castle Street, Bowers Street, W.
Blake, Henry, Bedford
Burton, Harry, Greenhays, Manchester
Cooper, John Neild, Hyde, near Manchester
Jones, Cyril Lloyd, 174, Blackfriars Road

The following gentleman also on the same day passed his primary professional examination.

Inman, Robert Edward, London Hospital

At the recent examination for prizes in Botany, the successful candi-

dates were:—1. Neville Scott Whitney (University College), a Gold Medal; 2. Neville Rushton Parker (University College), a Silver Medal and a Book.

MEDICAL VACANCIES.

THE following vacancies are announced:—

ADDERBURY, Oxon.—Medical Officer for the Districts of Adderbury East, Adderbury West, and Milton. Salary, £50 per annum. Applications on or before the 20th instant.

AMERSHAM UNION.—Medical Officer and Public Vaccinator for the Workhouse and the Amersham District. Salary, £50 and £63 respectively. Applications on or before 15th instant.

ARMY MEDICAL DEPARTMENT.—Surgeons. Examination on August 5th and following days.

BURY UNION.—Medical Officer for the Radcliffe District.

CARNARVONSHIRE and ANGLESEY INFIRMARY.—House Surgeon. Salary, £50 per annum, with board and lodging. Applications on or before the 20th instant.

CHERTSEY UNION.—Medical Officer for the Chobham District.

GREAT NORTHERN HOSPITAL.—House Surgeon. Salary, 60 guineas per annum, with board and lodging. Applications on or before the 20th instant.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Frinton.—Resident Clinical Assistant. Application on or before August 1st.

INDIAN MEDICAL SERVICE.—Ten Surgeons. Examination on August 5th and following days.

LEEK UNION.—Medical Officer for the Norton District.

LINCOLN UNITED FRIENDLY SOCIETIES' DISPENSARY.—Medical Officer. Salary, £15 per annum, with board, gas, coals, etc. Applications on or before the 20th instant.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.—Demonstrator of Anatomy. Salary, £100 per annum, and other emoluments. Applications on or before the 31st instant.

LYMINGTON UNION.—Medical Officer for the Hordle, Lymington, and Milford Parishes.

MARLBOROUGH UNION.—Medical Officer for the Second District. Salary, £80 per annum, and fees. Applications on or before July 31st.

ORMSKIRK UNION.—Medical Officer for the Second District.

ROYAL CORNWALL INFIRMARY.—House-Surgeon, Secretary, and Dispenser. Salary to commence at £120 per annum. Applications on or before the 31st instant.

ROYAL SURREY COUNTY HOSPITAL.—House Surgeon. Salary, £75 per annum, with board, residence, and washing. Applications on or before July 31st.

ST. IVES UNION.—Medical Officer for the Warboys District.

UNIVERSITY COLLEGE and HOSPITAL.—Teacher of Operative Surgery.—An additional Assistant Surgeon and Assistant Physician. Applications on or before the 21st instant.

WESTMINSTER HOSPITAL.—House-Surgeon. Applications on or before the 27th instant.

WORKSOP DISPENSARY.—Resident Surgeon. Salary, £100 per annum, with furnished apartments, coals, gas, and attendance. Applications on or before the 30th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

HICKSON, Albert Thomas, A.B., M.B., appointed Assistant Medical Officer to the Lancaster County Asylum at Kewfield, near T. V. de Leane, L.R.C.P. Ed., resigned.

HUGHES, William L., M.R.C.S. Eng., appointed Junior Resident Medical Officer to the London Hospital.

SMITH, Ronald D., M.R.C.S. Eng., appointed Extra Junior Resident Medical Officer to the London Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the communication.

MARRIAGE.

BRAMWELL—REYNOLDS.—On July 6th, at St. John's, East Dulwich, John Milne Bramwell, M.B., and C.M.F. (Eng.), to Mary Harriet, eldest surviving daughter of the late Captain Charles Sheppard Reynolds, Bengal Native Infantry, and Assistant Commissioner of the Assam Provinces.

VACCINATION.—Mr. E. Stephens of Ilminster has received a bonus from the Local Government Board of £10:12 for the efficient state of the vaccination in this district.

TESTIMONIALS.—Dr. Charles Gowan, Assistant Medical Officer and Deputy Superintendent of the Worcester County and City Lunatic Asylum, Powick, having been appointed Medical Superintendent of the Toronto Lunatic Asylum, Canada, has been presented with a silver goblet bearing his monogram and crest, and a silver salver containing the following inscription: "Presented to Charles Gowan, M.D., by the officers, attendants, and servants of the Worcester County and City Lunatic Asylum, as a mark of their esteem for his professional attainments and integrity of conduct during his service of four years. June 1875." The presentation was made by Dr. Sherlock, the Medical Superintendent, at a special entertainment for the purpose.—Dr. Andrew Armour has been presented with a silver claret jug and revolving tureen at a public meeting at the Mechanics' Institution, Crook—the Rev. J. B. King, Rector, in the Chair—on the occasion of his leaving that town for Stockton.

OPERATION DAYS AT THE HOSPITALS.

MONDAY	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAY	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.
FRIDAY	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.
SATURDAY	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Foster's Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 A.M.—Royal Free, 1 A.M. and 1.1 P.M.

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with Duplicate Copies.

AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor: those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

IMMORAL AND PERNICIOUS ADVICE.

SIR,—I send you the following case, thinking it sufficiently important to bring under your notice. It is so far of interest in that it teaches us how some medical men treat cases of seminal emissions in young, healthy men, and by their actions send them either directly or indirectly to ruin—directly through dangerous advice, indirectly by making light of the matter, and so driving them to a desperate attack.

A young man sent for me. I found him in bed, suffering from a severe attack of orchitis and gonorrhoea, much down-hearted, etc. On questioning him, I elicited that some weeks ago he was made uneasy by frequent seminal emissions. Going to a medical man for advice, medicine was given him, and he was seriously told to go and gratify his desires, as nature must and would have its course. Acting upon this advice, the patient, at his first attempt, contracted gonorrhoea—might I not add, fortunately.

I would not have troubled you with this detail; but several of these cases have lately come under my notice, and I have from reliable sources learned there are others guilty of such a practice. I believe no advice could be so pernicious. In the first place, it is immoral, and on this account alone ought not to be given by men who have such influence over the minds of their clients; in the second place, it is dangerous. Does the patient not run a great risk of syphilis, and of making himself (if he marry) and his family miserable for life. I have not words strong enough to express my indignation and disgust towards those medical men who have so far forgotten their position of confidence and trust as to degrade themselves by such misdeeds.—I am, sir, yours truly,
West Hartlepool, July 1875. W. J. SIMPSON.

DISCLAIMER.—Mr. J. Wrixon of Sarratt Villa, near Watford (the only person of that name in the *Medical Directory*), writes to disclaim all knowledge of the man John Robert Wrixon, as described as "M.D. a surgeon", who was recently charged at Bow Street Police Court with uttering fictitious cheques.

DISEASE OF THE NAILS.

SIR,—Will any of your readers kindly advise me what to do in the following case? A lad aged 12 has been under my care for a peculiar disease of the great toenails (right and left). He and his mother inform me that (as near as possible) every six weeks he suffers a little pain at the roots. Subsequently, the nails become loose, and are in a few days cast off, followed by the growth of a new nail, but which, at the end of the time specified, takes on the same course. There is but very little tenderness around the part, and that only prior to the nail being cast off.—I am, sir, your obedient servant,
Grosmont, July 14th, 1875. D. WILLIAMS MORRIS.

A FELLOW (Manchester).—The list of stewards of the annual festival of the Fellows of the College of Surgeons contained the names of 111 Fellows, of which number 33 were provincial surgeons. The analysis of the result of the combined voting was prepared specially for the BRITISH MEDICAL JOURNAL last week.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

A RAILWAY CASE.

SIR,—I shall feel greatly obliged if you will kindly allow me a space in your valuable JOURNAL for the publication of the following case, which deeply concerns both myself and my patient. I hope I am not trespassing upon your columns without a cause, but I feel it my duty to do all in my power to clear myself of the imputations which have been cast upon me. In order that I may do this, I must request you to permit me to give as short and as clear a statement of the matter as I can. On Monday evening, the 27th April, 1874, Mr. William Evans, aged 57, of 97, Offord Road, Barnsbury, an artist (a photographic portrait painter) was returning home by the North Metropolitan Tramway, and met with the following accident at Barnsbury Street, Upper Street, Islington, where the cars stop for passengers to alight. Mr. Evans had descended from the roof of the car, and had given up his ticket to the collector; and, as he was in the act of descending from the iron step to the ground, the car suddenly moved on, and he was precipitated into the roadway with great violence. The conductor had evidently touched the bell for progress too soon; and hence the accident. Mr. Evans was picked up in an insensible state, and was carried by some kind bystanders to the nearest chemist. Restoratives having been administered to him, and nearly an hour having elapsed, he became somewhat conscious of what was passing around him, and was led home by two men. On reaching his home, he became sick and vomited violently; and after a time, continuing to feel very ill, and being strongly urged by his wife, who feared that he had sustained serious internal injuries, he managed, with her assistance, to walk to my house. On my return home from my daily visits, I found Mr. Evans in my waiting-room, with Mrs. Evans sitting by his side supporting him. I immediately gave the case my attention, and I soon ascertained that he had received a number of injuries—viz., a cut over the left eyebrow, a bruised and swollen nose, upper lip much swollen, a front upper tooth knocked out; and, as he was quite unable to give me any intelligible account of his accident, I came to the very proper conclusion that he was suffering from concussion of the brain. He presented a most deplorable condition, being pale, cold, and trembling, with a weak pulse, disfigured face, and diminished powers of sight and hearing. As soon as possible, I prescribed for my patient, and gave his wife instructions for the management of the case. I may here state that the task of taking Mr. Evans home was accomplished by Mrs. Evans with the greatest difficulty, the distance being about two hundred yards. It was between the hours of seven and eight o'clock P.M. when I saw Mr. Evans, consequently I did not see him again until the following morning, when I called upon him and found his mind still in a clouded state. I learned from Mrs. Evans that her husband had passed a wretched night, and that he could take nothing, owing to the difficulty of swallowing, and to the excessive pain which he experienced in attempting to do so. Towards the afternoon of this day, the insensibility had passed away, and he could give an account of his accident, and towards evening he felt much better. During the Tuesday, a friend, who had heard of the accident, called upon Mr. Evans, and said he would write to the tramway company. This the friend did, demanding, in rather peremptory language, compensation for Mr. Evans's injuries. As soon as Mr. Evans found that this friend had interfered, he thought, on consideration, that it would look better if he took upon himself this duty; and during the Wednesday following he composed at intervals, and then wrote off, a fairly written letter to the secretary of the tramway company. This letter he signed with his usual artistic flourish. I mention this, as the production of this letter in court produced a very damaging effect upon the claim of the plaintiff. I must now state that when Mr. Evans wrote that letter, with its artistic termination, he thought he would soon recover, although he was suffering from pain in the muscles of the neck and back, and he was desirous to settle the matter, if possible, in a speedy and amicable manner. His letter to the secretary of the company will prove this. On Wednesday night, Mr. Evans had a serious relapse and became very ill again, and I must confess that I was anxious about him. The symptoms did not abate, and on May the 4th I met in consultation the surgeon of the Tramway Company, Mr. Buxton Shillitoe, who, after a careful examination of the case, agreed entirely with my opinion—viz., that Mr. Evans was suffering from the effects of concussion of the brain, and that it would take some weeks for his recovery from the shock. (N.B. Mr. Shillitoe did his duty faithfully to the company, for he carefully examined the case, and took notes of it.) The symptoms then present were, severe persistent headache, weak pulse, coated tongue, obstinate constipation, difficulty in passing urine, diminished powers of vision, taste, smell, and hearing, loss of sleep and strength, nausea, and inability to take any amount of nourishment, through the great difficulty in swallowing. These distressing symptoms lasted, with more or less severity, for three weeks, and during this period my patient was so prostrated by the accident as to be quite unable to attend to his duties. I ought not to omit the additional fact, that Mr. Evans has now to wear a truss, through a rupture produced by his accident.

As time passed on, Mr. Evans made a very proper claim upon the company for compensation, and, having exhausted all the means in his power to obtain a settlement of his claim, he was compelled to take action against the company. The trial took place on Monday, November 30th, 1874, in the Court of Common Pleas, Westminster, the Hon. Mr. Justice Brett presiding as judge. The plaintiff, owing to his weakness and nervousness, made several mistakes in giving his evidence—such, for instance, as the time occupied by the state of insensibility, which, through defect of hearing, he misunderstood for sensibility. The opposing counsel, Mr. Day, Q.C., made a great point of the letter, with its artistic flourish, and succeeded in seriously confusing the plaintiff. Next, two very intelligent boys gave their evidence in such a truthful and straightforward manner as to leave no doubt upon the fact—viz., that the accident had been caused by the overhaste of the company's conductor. And next, I had to enter the witness-box, and I shall not easily forget the manner in which I was treated both by the judge and counsel when there. I soon perceived that my statement—viz., that the plaintiff had suffered from concussion of the brain, and had passed through some weeks of severe illness—was regarded by the judge with more than doubt; and his lordship, instead of asking me questions as to the plaintiff's illness and sufferings, interrogated me closely about the amount of my bill and how many visits I had paid and the price of each visit. I told his lordship that my bill might be £14 or so, and that I had charged five shillings per visit. I was then joked by Mr. Day that a dose of Epsom salts would speedily have effected a cure. No doubt Mr. Day did his duty to the company, but how he could find it in his heart to joke

away the suffering of my patient, when the surgeon to the company, Mr. B. Shuttle, who had advised the company to settle the matter, was sitting in front of him, will ever be, to my mind, more than passing strange. (N.B. Mr. Day exercised a very wise discretion, for he never called Mr. Shuttle to contradict my faithful evidence.) Battered and beaten, both by judge and by counsel, I left the box in dismay. But, alas, my troubles and the troubles of my patient did not end here; for on the following morning his lordship, in summing up, ridiculed the idea that anyone falling from so low a position as the rear step of a tram-car could sustain such a serious injury as concussion of the brain, and spoke of the old man's loss of a tooth as neither adding to nor detracting from his beauty, and finished this part of his address by telling the jury that the old man, who did not like to be styled a photographer, had probably received a good shaking up and no more. Passing on to my evidence, his lordship remarked that it was his experience of medical men who acted on the side of plaintiffs that they usually gave exaggerated evidence, and that they did so because of their bill, which they knew was not paid by the plaintiff, but by the company. Having spread this preliminary network of remarks, his lordship caught me in it, and presented me to the jury as a man who would enter the witness-box to swear away my oath for the sake of filling my pockets with the money of the company. It would be impossible for me to give word for word the language of his lordship, but no one being present at that trial would leave the court without coming to the conclusion that I had given exaggerated evidence for the very wicked purpose of committing a most contemptible species of robbery upon the company. Several persons of great respectability from my district were present in court and heard his lordship's address. Those who were acquainted with the facts of the case and who knew how faithfully I had performed my duties, expressed their sympathy for me and for my patient; but there were others present, who, not knowing the merits of the case, will, I fear, continue to look upon me with suspicion until this nasty cloud is dispersed. The result of the verdict, even after a splendid speech by Mr. McIntyre, Q.C., was damages £25; deduct the legal and medical expenses from this small amount, and the plaintiff had far better have put up with his injuries. Every company has it in its power to send skilled surgeons to examine cases of accident, and indeed it is quite right that companies should be protected from imposture. When, however, a company has done so, and their skilled medical officer has coincided, as in my case, with the opinion of the general medical attendant who has charge of the accident, then, surely there is no necessity for a judge or a counsel treating a medical man in the manner in which they have treated me. There is no taking action against judge or counsel for defamation of character, for they are shielded by the strong arm of the law. But what is this? In conclusion, I can only say that I have given this case publication in order that it may be, if possible, inquired into, and those who have known me for many years may have it in their power to free me of the charge; viz., that I entered the witness box to swear away my oath for the sake of filling my pockets with the money of the company. My patient is still far from well, and he informs me that he feels very exhausted during the day. He tells me also that he is not possessed of anything like the same amount of energy as he had prior to his accident. Can nothing be done to remove the medical ignorance which degrades our law courts?—ignorance, which causes the legal ignorance which degrades our law courts?—I am, sir, your obedient servant,

Augustus Brown, M.D., M.R.C.S.E., L.S.A., L.M.,
Formerly Demonstrator of Anatomy to the Grosvenor
School of Medicine.

29, Belitha Villas,
Barnsbury-park, Islington, N.
June 24th, 1875.

P.S. I lost the better part of three days, during a very busy time, in attending upon the court, and I had the misfortune to take a severe cold. For the loss of this valuable time I received three guineas.

* * * This rather long but candid and simple narrative must, we think, carry conviction to all, that Mr. Brown has been the victim—not the first—of forensic license and judicial distrust. To those who know his career and character—and we have had opportunities of appreciating his admirable simplicity, purity, and truthfulness of mind, from his student days—no other testimony would ever be necessary than his own word. If, indeed, in this case it have been assumed by the judge that he has been guilty of falsehood for the sake of gain, we cannot doubt that he was cruelly aspersed, and he is amply entitled to such sympathy and reparation as the outspoken testimony of his friends and brethren can afford him.

FLATULENT DYSPEPSIA.

SIR,—Of the six formulæ of advice for the poor sufferer in to-day's JOURNAL, there is only one that I think comes near the mark. My advice would be as follows. 1. Take a good stock of the usual medicines for stomach-disorders, and go down to Southampton. 2. Go on board the first Peninsular and Oriental steamer for Gibraltar, with return ticket. 3. Throw all the medicines overboard. 4. Live like other people as soon as you have got your sea-legs, and smoke when you can. 5. If not perfectly well on your return, go a second trip.

Supposing there be nothing more than the reported flatulent dyspepsia, I would almost guarantee a cure. No. 3 to be especially attended to.

Your obedient servant,
Leicester, July 10th, 1875. JOHN BARCLAY, M.D.

SIR,—In my letter which appeared in your columns last week, on the subject of flatulent dyspepsia, there was a misprint, to which I beg to call your attention. Instead of "antimonii tartarici," it should have been "acidi tartarici".

I am, sir, your obedient servant,

MR. MALINS (Birmingham), Dr. CHARLES, DE MITCHELL WILSON, LL. M. JONES, will have observed that the pressure on space in the JOURNAL has been such as to preclude earlier issue of papers accepted, but of which the publication has been unavoidably delayed. We have in hand at the present moment a considerable mass of MSS., some of which are of many months' standing, for which we shall do our best to find room.

IODINE VAPOUR AS A PUERPERAL DISINFECTANT.

CAN any of your readers speak with the same amount of confidence as Dr. Wynn Williams, of the efficacy of iodine vapours and ablutions as a disinfectant after attending a case of puerperal fever? and at what time may one safely return to practice?

AN INTERESTED MEMBER.

MR. THOMPSON.—It is a mistake on the part of the journal in question. Professor Flower will be, as we stated, associated with Professor Parker as Hunterian Professor of Comparative Anatomy, and not with Mr. Turner of Edinburgh, as stated by our contemporary.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

PUPERAL FEVER.

SIR,—Like many others, I take a deep interest in the discussion which has been going on in the London Obstetrical Society on the subject of puerperal fever. There was great need for such a discussion, and no doubt much good will arise out of it. In the report which appeared in your issue of the 12th ultimo, we had some very practical remarks from Dr. Wynn Williams and Dr. Tilt. They were specially interesting, in being practical, and as the outcome of, in my humble opinion, a very rational theory; and I think if Dr. Tilt, who spoke most of washing out the uterus, would kindly develop his views on this point in your JOURNAL, and tell us circumstantially how he does it, what instrument he uses, what disinfectant, and of what strength, etc., he would, I have no doubt, confer a very great benefit on the community. I am satisfied many want information and instruction on this point, and he seems well qualified to give both. Most practitioners use vaginal injections only, and I have heard more than one maintain that these find their way into the uterus, but of this I have very great doubt.

In the hope that Dr. Tilt will at an early date comply with this request, I am, sir, your obedient servant,
July 5th, 1875. A LEARNER.

THE CONTAGIOUS DISEASE ACTS.—We shall be compelled to postpone publication of Inspector-General Lawson's letter for some time. The fallacies of Dr. Nevins's selection of figures have been almost sufficiently exposed, we think, by the clear and candid statements of Dr. Parkes. We have given Dr. Nevins very ample space and scope, so as to avoid even the appearance of injustice. His letters have long since condemned themselves to every one who understands the facts and cares to investigate figures. Mr. Lawson, we think, might usefully send his letter to the *Liverpool Inquirer*, which up to the present time has quoted Dr. Nevins's statements only, without ever daring to put Dr. Parkes's refutations before its readers, although professing, in very blatant language, a monopoly of fairness. As friends of the Acts, which we believe to operate beneficially on health and morals, we are content to omit the publication of any further answer to Dr. Nevins for the present at least. Perhaps we may at a future time be called upon to discuss some new set of figures. So far, we think the case on behalf of the Acts completely proved. The *Inquirer* will, no doubt, be glad to place both sets of figures before its readers, and so may now see well to publish Dr. Parkes's and Mr. Lawson's refutation of Dr. Nevins. It has, we believe, already stated that it has not seen any refutation; perhaps it will allow its readers to see it and judge for themselves.

A TUTOR, H. S., AND OTHERS.—The result of the Midsummer Arts examinations for the diplomas of Fellow and Member of the College of Surgeons has been communicated to all the candidates, whether successful or otherwise.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest—The Bristol Daily Post; The Daily Bristol Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Glasgow Herald; The Sunderland Daily Echo; The Carnarvon and Denbigh Herald; The Manchester Guardian; The European Review; The Hackney and Kingsland Gazette; The Worcestershire Chronicle; The Birmingham Daily Post; The Brighton Daily News; The Sussex Daily News; The Glasgow Herald; The Cork Examiner; The Scotsman; The Cork Daily Herald; The Southampton Times and Hampshire Express; The Hampshire Advertiser; The Birmingham Morning News; etc.

COMMUNICATIONS, LETTERS, &c., have been received from:—

Dr. George Johnson, London; Dr. R. Barnes, London; Mr. H. Lee, London; Dr. W. M. Campbell, Liverpool; Mr. J. N. Cooper, Manchester; Dr. F. De Haviland Hall, London; Dr. McKendrick, Edinburgh; Dr. H. Bence, Vienna; Mr. C. Lingen, Hereford; Dr. John Whitmore, London; The Registrar-General of Ireland; Dr. Allen A. Smith, Philadelphia; Dr. J. Batty Tuke, Edinburgh; Dr. C. E. Underhill, Edinburgh; Mr. E. Stephens, Ilminster; Dr. Bradbury, Cambridge; Dr. Cassels, Glasgow; The Secretary of Apothecaries' Hall, The Registrar-General of England; Mr. T. M. Stone, London; Dr. Edis, London; Dr. George Ross, London; Dr. Oxley, Liverpool; Mr. A. E. Carter, Liverpool; Mr. John Stevenson, Edinburgh; Mr. John Ingpen, London; Mr. John Payne, Oldham; Mr. H. A. Brown, London; Dr. William Ketchen, Middlesbrough; Our Dublin Correspondent; Mr. John Job, London; Mr. Campbell Orme, Isleworth; Dr. W. B. Mushet, London; Mr. Robert Glassington, London; An Associate; Mr. E. Garraway, Faversham; Mr. Paul W. Swain, Devonport; Dr. Lawrence, Montrose; Mr. W. M. Baker, London; Dr. Dyce Duckworth, London; Dr. Barclay, Leicester; Mr. A. Shewen, London; Dr. G. E. Shuttleworth, Lancaster; Our Edinburgh Correspondent; Dr. F. J. Brown, Rochester; Mr. J. Greene, Birmingham; Mr. J. W. White, Derby; Dr. Steele, Liverpool; Dr. Shettle, Reading; Mr. W. C. Atkinson, Uckfield; Mr. J. Francis, Southsea; Mr. W. Allard, Faversham; Dr. Ritchie, Peterborough; Mr. R. Ryder, Dalston; Dr. Boggs, Paris; Dr. J. J. Bailey, Stockport; Dr. Batten, Gloucester; Mr. F. W. Wright, Derby; Dr. J. J. Lough, Ballyjamesduff; Mr. Batten, Coleford; Mr. J. Greenslade, Rochester; Mr. S. Kisch, Liverpool; Dr. R. Todd, Dysart; Mr. Maclachlan, Thornhill; Mr. W. Baxter, Kilmarnock; Dr. Batty Tuke, Edinburgh; Mr. J. B. Sanders, Glasgow; Dr. F. R. Dickson, Buxton; Dr. C. H. Groves, Edinburgh; Dr. Finlay, Edinburgh; Mr. W. G. Stevens, Renfrew; Dr. Dow, Dunfermline; Dr. W. Craig, Edinburgh; Dr. Wise, Banbury; Mr. L. Tait, Birmingham; Mr. Rodger, Galston; Dr. W. Frew, Newmills; Mr. W. Adams, London; Dr. Masson, Edinburgh; Dr. Turnbull, Liverpool; Mr. Fawcett, Conway College; Dr. J. H. Thomas, Merthyr Tydfil; Dr. Bradbury, Cambridge; Dr. Johnston, Stirling; Dr. Wolfe, Glasgow; Mr. O. N. Royle, Milnthorpe; Dr. E. Davies, Wrexham; Mr. Kemp, London; Mr. E. Malins, Birmingham; Dr. W. Dobie, Chester; Dr. M. Chatteris, Glasgow; etc.

ABSTRACT OF LECTURES ON SYPHILIS;

AND

ON SOME LOCAL DISEASES AFFECTING PRINCIPALLY
THE ORGANS OF GENERATION.*Delivered at the Royal College of Surgeons of England, 1875.*

By HENRY LEE, F.R.C.S.,

Professor of Surgery and Pathology to the College.

LECTURE III.

Inoculation of Syphilitic Patients.—With common Pus.—With the Secretions of Secondary Manifestations in other Patients.—Inoculation as a means of Diagnosis.—Adapted only to one form of Venereal Disease.—Syphilitic Disease of the Mucous Membrane of the Urethra.—Mistaken for Gonorrhœa.—Test by Inoculation fallacious.—Secondary Syphilitic Urethral Discharges.—Recurring after Marriage.—Medico-legal Questions.—Inoculation of Urethral and Vaginal Discharges.—Modified Results in Syphilitic Patients.—Opinions of Sædiciæur, Hunter, and Ricord.

THE manifestations of secondary syphilitic disease Hunter regarded as produced by the local action of the poison determined to particular parts, after it had circulated with the blood. The action of the poison can be transmitted in a much more direct manner. It may be inoculated with the point of a lancet upon any part of the skin; and the results of such inoculations are often similar to those produced in the natural course of the disease.

A person may be syphilitic and yet have no manifestation of such a disease at a particular time. It is only at certain periods that such manifestations appear. In chronic cases they may appear only in the spring, or at some more or less irregular periods. There must be some action or excitement in the system before they manifest themselves. In the natural course of the disease, this action is the result of what I have termed the syphilitic fever. When a similar action is produced on one or more spots artificially, I will call it local syphilitic irritation.

The syphilitic poison may lie dormant for a long period. Some change will then take place in the patient's constitution, and the syphilitic manifestations will develop themselves. If a patient live too highly, or if, on the other hand, he be depressed by mental anxiety, or by some other illness, or by bad diet, the syphilitic fever will reappear; or if, in a syphilitic subject, a local irritation be produced, some similar form of disease may occur as would naturally have arisen from a recurrence of the syphilitic fever. I inoculated a syphilitic patient with the pus taken from a wound left in a child after an excision of the knee-joint. The pus was apparently perfectly healthy, but, falling upon a syphilitic soil, it produced, after a time, suppuration and ulceration.

In the very great majority of cases of artificial inoculation on syphilitic subjects, a remarkable difference presents itself in respect to the period at which the results of the inoculation show themselves, as compared with the cases previously given. In the former, there was always a period of incubation of some weeks. The results of the inoculation, when they showed themselves, were of the adhesive character. They were accompanied by corresponding adhesive inflammation of the absorbent glands, and by secondary manifestations, characterised by the adhesive form of inflammation. In these, the patients had not previously been infected. But when the patient is already syphilitic, or under the influence of syphilitic fever, the results of inoculation appeared almost immediately. They are of the ulcerative character, are followed by no corresponding enlargement of the inguinal glands, and no secondary manifestations.

The test of inoculation was only a few years ago almost universally received as the one only sure and certain means of recognising real syphilis, as far as its primary manifestations are concerned. Under the teaching of Ricord, Vidal, and many others, the production of the syphilitic pustule upon inoculation was considered as conclusive. M. Ricord, M. Vidal, and many others, collected and published a large number of cases in which the secretion from the urethra was not inoculable upon the patient himself, and they concluded that these cases were, therefore, none of them syphilitic. To these gentlemen must be accorded the merit of having demonstrated by experiment that the secretion of so-called gonorrhœa differed essentially in its nature from some other secretions which were inoculable upon the patient himself. But this does not prove that they were not syphilitic.

That ordinary gonorrhœa is not in itself syphilitic, and does not produce constitutional syphilis, is abundantly proved without inoculation, by simply observing the natural course of the disease; but to conclude that no urethral discharge, unaccompanied by ulceration, and which cannot be inoculated, is syphilitic, is entirely a different question. I have long noticed a peculiar kind of urethral discharge which differs in its nature and symptoms from that of ordinary gonorrhœa. It occurs not very unfrequently in patients suffering from symptoms of constitutional syphilis who have not exposed themselves to any fresh infection, and it also precedes or accompanies well marked primary disease in those who have. It consists of a viscid greyish secretion, often resembling in appearance thin oatmeal gruel. It is generally unaccompanied by any pain when the urine passes, and attracts little of the patient's attention. When accompanied or followed by a Hunterian chancre, it often does not appear until some days after exposure, and will generally cease as soon as the chancre is developed. Upon the occurrence of this discharge, I have predicted the infection of the general system, and this has been followed by a specific induration in one spot on the prepuce, enlargement of the inguinal glands, and syphilitic eruptions over the whole body.

The syphilitic poison, although applied over a large surface, generally produces the specific induration at one spot only. The remaining surface may be irritated, but does not become indurated. The poison is thrown off with the epithelial scales, or by the natural secretion of the part. It is very rarely that an indurated sore exists within the urethra, although the syphilitic poison must often be conveyed there. On the lips of the urethra it not very unfrequently occurs, but I have never known it to originate farther back than a quarter of an inch from the orifice; and, in the great majority of cases, if it affect the urethra at all, it spreads to it from without. Indurated sores on the glans penis are also rare, yet it is exposed to the contact of the poison more than any other part, and generally an irritation, accompanied by abrasion, or increased secretion, is the only local result. The irritation may persist without induration, and may then be one of the signs of constitutional infection. In the same way, the peculiar discharge from the urethra, which I have mentioned, may persist either in primary or secondary cases, and be a sign of the infecting nature of the poison which produced it. This secretion, like the secretion of a primary chancre, may not be inoculable upon a person already under the influence of the syphilitic fever, but it does not follow that it would not be inoculable upon another person. Ricord inoculated the product of what he called gonorrhœa over and over again upon the same subject, and produced no result. I have done the same with the secretion of an unirritated Hunterian chancre.

It happens every day that a young gentleman, who has never had syphilis, will expose himself to contagion with a woman of the town who has long ceased to have any outward manifestations of disease, and after the lapse of some days, will have a discharge such as I have described; or after a still longer period of incubation, some adhesive form of inflammation will appear on the unabraded skin of the penis, or upon the internal prepuce. The glands in the groin will subsequently become enlarged in a peculiar way, which I have called the amygdaloid condition, and in due course the whole train of secondary symptoms will follow. I have seen a number of patients who fancied that they were safe in having intercourse with women who had recently been examined in "protected districts", and who nevertheless have had the train of symptoms which I have described. And if a woman have no objective signs of syphilis except a vaginal or uterine discharge, and will wash herself before being examined, it would be exceedingly difficult, if not impossible, for a surgeon to say whether she be syphilitic or not. The only reliable symptom, under the circumstances, is the persistence of the amygdaloid glands in the groin. But even this may be fallacious.

The urethral discharge which I have described, instead of being one of the first symptoms of syphilitic affection, will sometimes appear as one of its secondary manifestations. A gentleman, who is, as he believes, free from syphilitic symptoms, but who probably has some remaining induration of the inguinal glands, will marry. Shortly after his marriage, some irritation will appear about the penis, accompanied by an increased mucous discharge from the urethra. After the lapse of a short time, the wife will complain of itching and irritation of the mucous membrane, at the orifice of the vagina. There will be an increased mucous discharge of a greyish colour; and after the next menstrual period, and sometimes before, an abrasion or induration will be discovered, and this will be followed by the appearance of amygdaloid glands in the groin and constitutional syphilis. In many cases, a husband, who found his wife diseased after marriage, has asked his medical attendant whether she could have become so without being exposed to the contact of primary syphilis. The answer of those who

held M. Ricord's opinion, and of M. Ricord himself, would be that she could not. If the husband believed this, he would have no alternative but to consider that his wife had been unfaithful. The most cruel injustice has in this way, through an erroneous pathology, been inflicted. The husband has not only communicated disease to his wife, but has accused her of having contracted the disease elsewhere.

It sometimes, although more rarely, happens that the husband is the party who suffers from these mistakes. I have been engaged in more than one trial where the wife or her friends have sought to obtain a divorce on the ground of the husband having contracted disease after his marriage, and communicated it to his wife. It has been given in evidence that, in order to do so, he must have had some primary disease, but the whole class of cases to which I am now referring show that secondary affections, of the existence of which the husband may have been unconscious at the time of his marriage, may recur, and be the means of imparting constitutional syphilitic disease in the wife. This may happen before impregnation, although it is much more common afterwards.

The observations made by authors with regard to inoculations have had almost exclusive reference to the skin. The effect produced upon mucous membranes when subject to the action of the syphilitic poison, as, indeed, to any irritation, is peculiar. The newly formed matter in them, instead of remaining, for a time at least, part of the living being, is at once thrown off in the shape of mucus or pus-cells. Hence it is only in rare and exceptional cases that we get here any well marked and defined induration in consequence of the application of the syphilitic poison.

Mucous membranes that have been long exposed or long irritated will resemble the skin, not only in appearance, but also in their diseased actions. In both primary and secondary syphilitic disease, portions of mucous membrane which have been long exposed, or have been subject to much irritation, will become infiltrated and indurated, very much in the same way as the skin, and there will not be much difference between the actions then produced, and in those portions of skin with which they are naturally in contact. We have thus produced upon exposed mucous membranes, and upon the thinner parts of the skin, the class of symptoms which have gone by the name of mucous tubercles. On the glans penis, also, if it have been long left uncovered by the prepuce, the syphilitic poison will produce infiltration, induration, and a genuine Hunterian chancre may be the result. Such cases, however, are exceptional. Neither within the vagina, nor on the os uteri, nor in the urethra, nor upon a glans penis that has been kept covered, nor, in fact, on any part of the mucous membrane that is not habitually exposed, do we often find primary indurated sores. With regard to women, this fact was noticed particularly by the late Mr. Babington. He says indurated chancres do occasionally occur within the vagina, being situated either on the vagina or on the os uteri itself. Sores on these internal parts are extremely rare, notwithstanding the degree in which they are exposed to the contact of the venereal virus during coition. It is not that the mucous membranes are not affected by the syphilitic poison, but that the manifestations of its action are there different to what they would be on the skin.

Hunter says that, in all the outlets of the body where the adhesive inflammation would be hurtful, irritation first only produces the suppurative inflammation, but, if it be carried farther, the adhesive inflammation will take place. The product of ordinary inflammation in a mucous membrane has an outlet, and not only thickening of the part, but ulceration, is avoided. As in such cases no parts are destroyed, granulations also are excluded.

The secretions from diseased mucous membranes do not, then, generally tend to produce either the adhesive or the ulcerative inflammation in the parts in which they are generated; neither do they, as a rule, tend to produce those actions in parts to which they are accidentally or artificially applied. The corpuscles thrown off are not of the adhesive nature; they tend to generate other corpuscles similar to themselves, but not of a different nature. And this is probably the reason why so few artificial inoculations on the skin from the secretions of mucous membranes have been successful; and when we consider, in addition, the very great number of causes which may produce a vaginal discharge, a further explanation is given of the comparatively few cases in which that discharge has been inoculated, so as to produce any definite result. The comparative little value of such inoculations in proving the real syphilitic nature of a secretion when inoculated upon the same person, we have fully considered. But evidence, as far as it goes, is not wanting with regard to the occasional inoculability of these discharges.

Mr. Morgan of Dublin has published a very remarkable series of cases, in which he has inoculated the vaginal discharge on syphilitic patients with very positive results. He gives twelve series of inoculations, which, he says, he has selected from many other cases under treatment,

and adds this remarkable observation: It seems to be essential that the system shall be under the influence of the constitutional poison, in order that the vaginal discharge may be capable of producing the characteristic pustule and sore. In all Mr. Morgan's experiments, the result was direct and immediate. But if what I have said with regard to the syphilitic diathesis, or fever wearing itself out or being cured, be correct, we might naturally expect the period of incubation which belongs to real syphilis to manifest itself after inoculation in patients where this has happened. Inoculations from mucous membranes, where patients have not before had syphilis, as I have said, is sufficiently common. Some practical illustrations of this have been forwarded to me by Dr. Marston.

Mr. Pearson's opinion with reference to communicability of urethral discharge may not be uninteresting. He says: "We have seen so many cases of gonorrhœa communicating syphilis, as to leave very little doubt in our mind of this being the case. We have seen several instances of venereal symptoms following gonorrhœa, and where persons having gonorrhœa have communicated venereal-symptoms." That the infection in these cases did not depend upon a chancre within the urethra, I think is shown by the extreme rarity with which such chancres exist; and, with regard to the infecting form of chancre, I should say it is almost if not entirely unknown. Hunter opened the urethra in many cases where he supposed persons were suffering from a discharge connected with syphilis, but never found any ulceration.

Swediaur's opinion is also well worth our consideration. He remarks: "That the happiness and tranquillity of many families, not less than the fatal effects arising from the improper treatment of this disease, seem to demand the most careful researches upon the subject." He had convinced himself, from well authenticated experiments, and numerous cases attended with the greatest care, that those who maintained that gonorrhœa and syphilis were always the effect of the same poison, and those who held an opposite opinion, were both wrong in generalising too much, and in speaking so positively and so lightly on a point of so much importance to the physician and the patient. He had, as he believed, proved to demonstration that blennorrhagia of the genitals of the two sexes owed its origin sometimes to the venereal or syphilitic virus properly so called, and sometimes to some other acrimony applied to the urethra or the vagina. Several cases are related which go to prove that a discharge may be syphilitic or produced by the syphilitic virus, and several instances are also given to show that blennorrhagia is very different in its origin and nature from the disease produced by the syphilitic virus. "It will easily be conceived", he says, "of what importance the distinction is in practice, when, on the one hand, we see practitioners treat all gonorrhœas as venereal (syphilitic) with mercurials; and, on the other, when by an ill-founded theory they suffer the syphilitic virus to be communicated, and the disorder propagated through whole families, without giving themselves any trouble as to the unfortunate results."

From what has now been said, I conclude that the product of primary syphilis is inoculable artificially, so as to produce the same effects as when it was naturally acquired; that the results of secondary syphilitic manifestations are inoculable, so as to produce the same results; and that the secretions from mucous membranes in syphilitic patients are very often the means of communicating syphilis, and may sometimes be artificially inoculated.

CASES OF HIGH TEMPERATURE.—Dr. Bacon of Saratoga writes to the editor of the *New York Medical Record* a letter which will be read with interest in connection with Mr. Teale's celebrated case. "Thinking a brief statement of two cases of pneumonia, which I have still under treatment (though now convalescent) might interest your readers, as regards temperature, I submit them. The first case, a girl aged 16 years, strong and full-blooded, had pneumonia of the left lung. Temperature began rising up to fifth day, when it stood, as carefully noted by a self-registering thermometer, 107.5. The sixth day it fell to 104 by evening. The condition of the patient otherwise showed no cause for alarm as far as consultation could decide. She is now about, and free from cough, and gaining her strength fast. The second case was her brother Frank, aged 20 years. He was seen twelve hours after he began to complain. Pulse 165, wiry. Slightly delirious. Examination reveals pneumonia of right lung. Temperature, very carefully taken thirty-four hours after I called, was 110 deg. I could not believe my eyes until I had repeated the experiment several times with the same result. The expectoration was nearly pure blood for forty-eight or fifty-hours; cough harassing. Now here is a strange feature (to me) in this case: the temperature was 110 deg. at 5 P.M. and next morning, at 9.30 A.M., it had fallen to 99, or rather 98.08. Treatment: potas. iodid. and tr. aconiti during the night. An intense diaphoresis occurred which continued for twenty hours."

AN ADDRESS

ON

THE RELATION OF PUERPERAL FEVER TO THE INFECTIVE DISEASES AND PYÆMIA.

Delivered at the Obstetrical Society of London, July 7th, 1875.

By FORDYCE BARKER, M.D., of New York.

I FEEL that I have no right to waste any of your time in personal topics, except briefly to express my grateful appreciation of the honour that I have received at your hands, and to appeal to your courtesy to excuse such deficiencies as may be charitably ascribed to weakness of the vocal organs, or to that embarrassment which a stranger must feel in addressing such a body of obstetrical men on such a topic as puerperal fever. I may be permitted to say that this discussion is now watched with the greatest interest by your brotherhood on the other side of the Atlantic; but, as yet, this discussion does not appear to have led to that happy result spoken of by the Psalmist, that "maketh men to be of one mind in a house".

I shall aim, in the remarks that I am about to make, to confine myself closely to a discussion of the questions proposed to the Society, and to state my opinions, and my reasons for holding such opinions, in the most terse, compact language compatible with clearness. If these opinions seem to be in antagonism with a great majority of those which have been expressed in this discussion, I ask that they may not be regarded as partisan in their tone, but as a presentation of views necessary for a full and comprehensive study of the subject. I ask, for such arguments as may be urged, that candid analytical sifting of evidence which is requisite for sound decision as to what is the true answer to the several questions now before us. I concede to all, and I beg all to concede to me, that it is the truth and not forensic success which is sought for by us all who speak in this discussion.

Of the six questions proposed, the second and third only admit a direct categorical answer of yes or no, and this will be one or the other, depending upon the answer given to the first question. If the first be answered in the affirmative, the second must be answered in the negative, and the third in the affirmative; or the answers may be exactly the reverse.

I suppose the meaning of the first question is clearly defined by the second and third to be, whether there is a disease peculiar to women in childbirth, never met with under any other circumstances, as distinct as typhus or typhoid fever, scarlet fever, measles, or small-pox.

I cannot think that the proposer of these questions regards it as necessary that those who believe that puerperal fever is a *distinct essential* disease must, therefore, accept all the qualifying phrases of the first question. For example, "distinctly caused by a special morbid poison" is one of the qualifying phrases. Is this a necessary characteristic of a distinct disease? Has science yet determined the "special morbid poison which causes typhoid fever"? When a disease is induced by contagion or infection, then it is "distinctly caused by a special morbid poison". If the phrase had been "often caused by a special morbid poison", I should have accepted it as true of puerperal fever, as I believe it to be true of diphtheria and some other diseases. It is just this phrase which seems to have debarred Dr. Farre and Dr. Richardson at the last meeting from answering the first question in the affirmative. And here I wish to remark that it seems to me that the idea involved in this phrase has been a great barrier to a clear conception of the disease, and has greatly contributed to the obscurity and ambiguity of its discussion. It implies that puerperal fever cannot be properly ranked as a distinct disease unless its cause can be proved to be an unit, "*a special morbid poison*". But this test is not demanded for many other affections which the profession universally accept as distinct diseases. There are many such which originate from multiple causes, so far as science has as yet been able to determine, of which I may instance typhoid fever, diphtheria, erysipelas, and rheumatism.

The distinct character of a disease is determined by the evidence derived from three sources: the causes, the clinical phenomena, and the pathological anatomy. Some diseases give us proof of their distinctness by evidence derived from all three of these sources, others from only two, others from one alone.

Directly in connection and associated with the idea implied in the phrase "distinctly caused by a special morbid poison" is another idea,

which fallaciously colours and obscures much of the reasoning on puerperal fever, and that is, that identity of cause must be followed by identity of result. In other words, a given cause—a special morbid poison if you please—known to develop a special distinct disease, must always produce this particular disease. In a wealthy family belonging to my *clientèle*, a year ago, I saw a lady dangerously ill from pyæmia, in consultation with Dr. Sayre, who was attending her for a traumatic injury. By our suggestion, the house was carefully examined by a plumber, but no defect was then discovered which could explain the source of the blood-poisoning. Very soon, three members of the family were severely ill from a typho-malarial fever. As soon as the condition of the patients would permit their removal, I insisted that the walls of the rooms covering the plumbing should be torn down, when it was found that there was a defect in the leaden waste-pipes sufficient to permit the noxious gases to permeate the house, but not sufficient to cause an escape of fluids to stain the walls of the rooms. During the past winter, I attended a gentleman with severe typho-malarial fever. His residence was in a large house, constructed on the plan of the French apartments, which was entirely occupied by families of refinement and abundant means. During the time of convalescence of this gentleman, diphtheria appeared in another family in this apartment house. I saw the first child attacked, in consultation with Dr. Morris. Subsequently, the father and two other children, one of whom died, were severely ill from diphtheria. It is worthy of mention, that, while these were ill, the wife and mother was removed into another house, and she was confined with her fourth child, under the care of Dr. I. O. Stone, one of our most prominent physicians, and her convalescence was not impeded by any puerperal disturbance from either diphtheria, typho-malarial, or puerperal fever. On examination, it was found that the waste-pipes in this house were in precisely the same condition as that of the house of which I have just spoken.

Who can doubt that the pyæmia, the typho-malarial fever, and the diphtheria were all caused by the same "special morbid poison"? At the last meeting of this Society, Dr. Playfair related some facts which recently occurred at Notting Hill, where puerperal septicæmia in a wife, "from which she barely recovered with her life", and diphtheria in the husband, "from which he nearly died", seem to have been due to the same causes which I have mentioned. I ask you to note the language used by Dr. Playfair, for I shall again have occasion to refer to this. He says "who could rationally disbelieve that those two diseases were produced by the same *septic* poison?" One he names, because of his theory of its cause, septicæmia; the other, produced by the same cause, he names, from its clinical phenomena, diphtheria.

The other qualifying phrase to which I will simply allude, but which time will not permit me to discuss in detail, is the following: "as definite in its progress and the local lesions associated with it" as certain specified diseases. This qualification involves two distinct and different points, the clinical history and the pathological anatomy. I will only say that in my judgment these several diseases mentioned differ in degree as to their definiteness in progress and the definiteness of their local lesions, and consequently puerperal fever cannot be compared or contrasted with them as a group in these particulars.

I will now give my reasons for believing that there is a distinct disease which may be properly called "puerperal fever". I think the definition given in the *Nomenclature of Diseases*, emanating from the College of Physicians, is absolutely perfect: a "continued fever communicable by contagion occurring in connection with childbirth, and often associated with extensive local lesions, especially of the uterine system". It is a disease which presents a group of general symptoms, independent of local inflammations, resulting from the absorption of some poison into the system. It is needless for me to discuss this point here, because it is evident from all that has been said that "localism" or "Broussaïsm" has no *status* in this Society. Those who would call this disease septicæmia or pyæmia are in agreement on this point with those who call it a fever.

We can arrive at truth in medical discussion only by using language accurately. There can be no accuracy of idea without accuracy of language. It is the established usage of standard authorities in medicine to designate as fever all those diseases which result from the absorption of some poison which produce certain morbid blood-changes and give rise to certain general characteristic symptoms, unless the specific poison is known. Under the denomination of fever, are properly and legitimately included not only those diseases which are severally called typhus, typhoid, relapsing, remittent, intermittent, and yellow fever, but all the infectious constitutional diseases which occur either epidemically or endemically.

When the specific poison is known which causes the morbid blood-changes and induces certain general characteristic symptoms, the disease is named from that poison, and so we have the accepted terms in medi-

cine of uræmia, septicæmia, pyæmia, and others of like character. I will here only allude to the fact that none of this latter class are known to be contagious or to occur as epidemics. The point we are trying to settle is not a question of name, except so far as this: I doubt not that we will all agree that the name given to a disease should be significant and appropriate.

The gist of the matter, stripped of its superfluous and obscuring elements, lies in the inquiry whether there be a disease which attacks puerperal women and only puerperal women.

A necessary preliminary is to ascertain from what sources we are to obtain our evidence by which we can settle the question whether there be a distinct disease peculiar to women in childbirth. I think we will agree that this evidence must be derived either—1. From the causes of the disease; 2. From the clinical phenomena; or 3. From the pathological anatomy.

I do not think that we are able, at the present day, to derive much information from studying the causes of this disease in settling this question any more than we can in settling the question whether typhoid fever, relapsing fever, or yellow fever are distinct diseases. In a sanitary point of view, I think a study of the causes of this disease to be of vast importance, and for this reason I esteem the paper which was read by Dr. Braxton Hicks before this Society in 1870 as a most valuable contribution.

If a puerperal woman, not protected by the immunity of a previous attack or by idiosyncrasy, be exposed to the poison of scarlet fever or of any other infective continued fever, I have no doubt that she will have scarlet fever, or whatever specific disease she may absorb the poison of. The puerperal state does not protect her from the influence of such poison. Dr. Hicks, as I understand him, does not claim that puerperal fever is only scarlet fever in the puerperal women, but names this as one of the causes in the same category with erysipelas, diphtheria, mental emotions, etc.

I think the evidence is conclusive to the minds of a great majority of the profession, established by numerous incontestable facts—facts observed not only in sporadic cases, but in very many epidemics, which have occurred not in hospitals or cities alone, but in epidemics which have ravaged large tracts of country in sparsely settled rural districts, that the poison of erysipelas may cause in women after childbirth a distinct disease, which some of us choose to call puerperal fever; and that the poison of puerperal fever, if absorbed into the system of a man or a child, will cause in that man or child erysipelas. But the clinical phenomena and the anatomical lesions which result from this common poison are so diverse as to warrant us in regarding them as two distinct diseases.

Of course it is quite needless for me to refer to the medical history of Great Britain for proofs of this assertion; but I may be permitted to refer to that of my own country for most striking corroborative evidence.

A reprint of Nunneley *On Erysipelas* was published some thirty years since, with notes by Dr. John Bell of Philadelphia, in which he gives most striking facts in regard to several epidemics in the United States, in which erysipelas and puerperal fever have appeared together.

I will also refer to a valuable monograph on *Erysipelas and Childbed Fever*, by Dr. Thomas C. Minor of Cincinnati, published during the last year, and which I had the pleasure of reading on my voyage over. The work is based on a most painstaking and laborious study of the vital statistics of the census of the United States for 1870, and of a puerperal fever epidemic which prevailed in South Western Ohio in the winter of 1872. The work is well worthy of perusal by all who assume to influence medical opinion on the subject of puerperal fever. This careful study of these vital statistics by Dr. Minor does not appear to show any connection of typhus fever, scarlet fever, septicæmia, and pyæmia, with puerperal fever. Epidemic scarlatina was very seldom associated with an outbreak of epidemic puerperal fever; but epidemic erysipelas was "invariably associated with an outbreak of epidemic puerperal fever, or vice versa".

I have but a single remark to add in regard to the question of causes of this disease. The argument of those who deny that puerperal fever is a distinct disease, rests mainly on the ground that the disease so called is the result of septic poisoning. Septic poisoning is a term now used very frequently and somewhat vaguely; but even those who contend that there is, properly speaking, no distinct disease of puerperal fever do not allege that all the resulting disease from septic poisoning is one and the same thing, and that this disease should be called septicæmia. Is there anything improbable or unphilosophical in the hypothesis that septic poison, acting on a system in a peculiar state such as never is found in the human system under any other conditions, the state which has been so graphically described in this discussion by Dr. Richardson and Dr. Farre, results in a distinct disease, which never is found except when the system is in this condition?

Has any proof been offered by anyone, anywhere, that epidemic and endemic influences, nosocomial malaria, contagion or infection, do not develop this poison in such a system, which results in a distinct disease?

We must find the answer in a study of the clinical phenomena and the anatomical lesions of the disease. If septic poisoning never occur as an epidemic, I do not say endemic, among those who are suffering from traumatism, and if it never develop contagion in this class of subjects, and if septic poisoning in puerperal women does occur as an epidemic, and is contagious and infectious, are not these elements sufficient to warrant us in regarding the two diseases as quite distinct?

The advocates of the septicæmia theory of puerperal fever, both on the Continent and in this country, have seen that they must accept this issue, and consequently they are driven to deny that puerperal fever ever occurs as an epidemic, or that it is contagious or infectious. One of your speakers at the last meeting said: "I do not believe that there is any specific condition justifying the name of puerperal fever"; and he logically adds, "nor do I believe that there is any special miasm arising from the puerperal patient capable of being conveyed to another patient; nor do I think that there is any evidence whatever to show that there has been an epidemic of puerperal fever in the strict sense of that word."

The author of the Address in Obstetric Medicine before the British Medical Association last year, said in that address: "I have not been able to find anything worthy of the name of evidence to prove its epidemic prevalence at any time or in any large district." The same author, in his work *On the Mortality of Childbed and Maternity Hospitals*, says: "I feel certain, and I believe I can prove, that an epidemic of puerperal fever never occurred." He also denies, with equal positiveness, that the disease is ever contagious.

Now if, during certain years or seasons, puerperal women in a given territorial district die of a disease, call it either puerperal fever, puerperal pyæmia, or puerperal septicæmia, in numbers fiftyfold or a hundredfold greater in proportion to the births than they have in preceding years, or than they do in following years, I think the profession generally would call this disease an epidemic. When the mortality from puerperal disease, call it puerperal fever or puerperal pyæmia, in that part of New York which is in the best sanitary condition of any part of the city, and in which are the residences of the most wealthy part of the population, in four months of the year 1873 is twenty times as great as it had been for twenty-five years before, and the percentage of deaths in proportion to births is more than double what it is in the parts of the city where the poor women are crowded in tenement houses, and quadruple the proportion of deaths during the same period from the same cause in the lying-in hospitals, I think we are justified in saying that an epidemic exists in this part of this city. If in Cincinnati, Ohio, in 1873, the number of deaths from puerperal fever was 122 while the annual average of deaths from this cause for five previous years was 13 $\frac{2}{3}$, I think most men would say that the disease was epidemic that year. In view of all the similar facts abounding in medical literature, I will not borrow a phrase from one of the speakers at the last meeting, and say that those who deny that this disease ever occurs as an epidemic, "must have minds which I believe to be not open to conviction"; but I will say that such persons must attach a subtlety of meaning to the word epidemic not consonant with the common sense. Please to observe that I use the article, and say *the common sense*, as otherwise the remark might seem discourteous.

I will not detain you now by a discussion of the question of contagion, for all have undoubtedly fixed opinions on this point. Those who regard puerperal fever as a distinct disease believe it to be "communicable by contagion"; while those who believe it to be only pyæmia or septicæmia in women after childbirth, do not consider the disease contagious.

Can a woman after childbirth be exposed to the danger of receiving the poison which produces typical septicæmia in larger doses than when she has retained within her uterus a portion of decomposed placenta? If puerperal fever be septicæmia, would not the disease under these circumstances appear in its most virulent forms? But we all know that this is far from the fact. One very important idea in this connection was first distinctly enunciated by Dr. Barnes in this Society some years ago; and that is that septicæmia in puerperal women is not actively contagious. "When arising from decomposition of the placenta, it generally began and ended with the patient attacked." During this discussion, Dr. Braxton Hicks has expressed a very similar sentiment; and I feel quite sure that all clinical observers will coincide with this statement.

I will submit for your examination the following propositions.

1. The clinical phenomena of puerperal fever are quite different from those which are met with in surgical septicæmia or pyæmia.

2. These affections do occur in puerperal women, and the result is a disease which does not constitute a continued fever "communicable by contagion".

3. When either of these affections complicate puerperal fever, they modify the clinical phenomena by symptoms which can be distinctly appreciated and described by any close observer.

I will not take up your time by giving the evidence on which these propositions are based, because I think that this has been done in a work *On the Puerperal Diseases*, which it will be indelicate for me to refer to in more definite terms.

I will add only a few words in regard to the pathological anatomy of the disease now under discussion. On the first evening of the discussion, Dr. Richardson argued that there were no local lesions "which would lead us in the dissecting-room in any case to say this was a case of puerperal fever, as we should say this was a case of scarlet fever or of typhoid or of typhus fever". I think it would be impossible to prove by the anatomical lesions that scarlet fever or typhus fever, or relapsing fever, are distinct diseases. A child is put in bed at night apparently well. A few hours afterwards, it is awakened by vomiting, it is very delirious, its pulse is very rapid, and the temperature is six or seven degrees higher than is normal, and the child dies in the early morning without the slightest irruption on the skin. No anatomical lesions can be found to characterise the disease. But scarlet fever is epidemic in the neighbourhood, or another child in the same family is taken ill with well marked scarlet fever within a few hours after the death; and any physician would feel warranted in registering the cause of death as scarlet fever. Such cases are not very rare, and, I dare say, have been met with by several gentlemen now present. Would the most able of the recent authorities on the continued fevers—would Sir William Jenner, or Murchison, or Hoffman, or Lebert—insist that no one would have a right to register a death as resulting from typhus fever or relapsing fever, unless certain characteristic anatomical lesions are found in the dissecting-room? All of these writers declare that these diseases have no pathognomonic lesions.

It was asserted by the author of the Address in Obstetric Medicine, that "pathologists believe that they have torn to tatters the view" that the disease we are now discussing "is an essential fever peculiar to puerperal women, as much a distinct disease as typhus or typhoid".

When? how? where? Show us the proof. Is there evidence that such pathologists have studied the disease anywhere except in hospitals and large cities, where the disease is very probably complicated with septicæmia or pyæmia?

Of what value would be the researches of the ablest pathologists of Germany or England on questions relating to the pathology of yellow fever, if such pathologists had no opportunity of studying this disease, except in Germany and England? Have Spiegelberg, or Schroeder, or Schmiedeburg, or Mayrhofer, or Orth, or Heiberg, or Olshausen, or Fehling, or Cohnstein, or Breisky, or Von Haselberg, ever studied puerperal fever as it is found in epidemics in rural districts, where pyæmia and septicæmia are rarely met with? German is a difficult language to acquire; and it gives an attractive appearance of learning to introduce such names, even if nothing be quoted from them. I am familiar with their writings, and would not undervalue the merit of their researches; but so far as the elucidation of the question now under discussion is concerned, I think it of equal importance that we should carefully study for the clinical phenomena of the disease your English classical writers—Hulme, Leake, Kirkland, Clarke, Gordon, Hey, Armstrong, and Robert Lee. The hint on this point thrown out by Dr. Farre at the last meeting seemed to me most appropriate and timely.

What progress is made in science? Now do "we free ourselves from error", or gain in scientific precision or accuracy of description in giving to this disease a new name—pyæmia, as Dr. Duncan would call it; while he confesses that it has no etymological significance in this disease, and, in fact, has no definite positive meaning?

What propriety is there in giving to an obstetrical disease a name significant and appropriate to a surgical disease, unless it can be demonstrated that the two diseases are identical in their clinical phenomena and their anatomical lesions? The burden of proof to show this identity belongs to those who would call the disease puerperal septicæmia. Some think that the negative has already been established.

I have neither the time nor the voice to discuss the other questions which have been proposed. With my warmest thanks for your courtesy in listening to me so patiently, allow me to close with the suggestion that it may be well for all of us who discuss puerperal fever to remember the exhortation of Oliver Cromwell, when he lost patience with a Scotch Assembly: "I beseech you, brethren, by the mercies of God, conceive it possible that you may be mistaken."

THE RELATION OF PUERPERAL FEVER TO THE INFECTIVE DISEASES AND PYÆMIA.

Address delivered at the Obstetrical Society of London, July 7th.

By CHARLES WEST, M.D., F.R.C.P.,

Physician to the Hospital for Sick Children, etc.

I CAME here to-night because I felt that honour implies duty; and, having now for some years had the honour of being one of your Fellows, I felt that, if on the occasion of so important a discussion as this, I stayed away, it would seem either as if I cared nothing about the exercise of my profession, or about the furtherance of it; or as if some other motive—I know not what—had kept me away from your assembly. What I have to say, I will say in as few words as possible.

And, first of all, I have but one criticism to offer, and that bears on one of the questions which have been suggested with reference to the share which certain microscopic organisms bear, or may be supposed to bear, in the production of the disease called puerperal fever. It appears to me—with all respect to the gentleman who in his able paper proposed that question—that it is somewhat out of time to raise it. We have not as yet a sufficient amount of knowledge on the subject to be able to apply it, or to draw from the observations that have already been made any correct and useful inference. No one can, I think, have read with care the very interesting discussion on the subject of the "Germ-Theory of Disease" without being struck by the way in which men of the greatest talent and the sincerest love of truth differ, not merely with reference to the conclusions that they draw, but also with reference to the very facts that they thought they had observed. I think, if this matter is to be settled, it must be settled in the first place in the case of some disease simpler in its nature than puerperal fever. I pass, then, from that subject in these few words, in which I would still wish to convey the very high respect I feel for a kind of knowledge to which I can make no pretension, and to assure you that what I have said means no disparagement to study carried on by means of the microscope, and no doubt as to the great results that hereafter we may arrive at from it; but I refer to the subject from the conviction that the question so raised is, in the case of puerperal fever at least, premature.

I now approach the other and more practical question. It may be allowed me, perhaps, to remind the Society of what, I doubt not, they have not forgotten: that some thirty years ago a physician, now taken from amongst us, but whose professorial chair it was my high honour for a short period to occupy, wrote a work on the very subject which we are now discussing; and I do not myself see that we have advanced far, if at all, beyond the conclusions which Dr. Ferguson laid down, that the phenomena of puerperal fever depend upon a vitiated state of the fluids, and that, in the case of a woman in the puerperal state, such vitiated state of the fluids is specially apt to arise. I do not think, therefore, that we can in any way assimilate the condition of what is called puerperal fever to typhus, typhoid, or scarlet fever. The disease wants those characteristics which more or less distinctly prevail in the case of the specific fevers. It has not the same regularity of course, the same regularity of incubation, the same regularity of outbirth. It has not the same diagnostic marks which we find in the case of the specific fevers; such, for instance, as the pustules which appear, even though in small number, and characterise even the slightest case of small-pox. Nor is this all. But with reference to these fevers we know, further, that for the most part, at any rate, they produce disease like to themselves; and that, further, though with many exceptions, they have a tendency not to recur where once they have happened. Now, all these characteristics are absent in the case of puerperal fever; while the very circumstance that a far greater proportion of cases of puerperal fever occur in primiparæ than in those who have given birth to many children, shows that there is a marked connection between the liability to an outbreak of the disease and the difficulties attendant on the process of labour. If, further, we expose a man to the contagion of puerperal fever, he does not get any disease as the result of it. If we expose a woman in the puerperal state to the contagion of scarlet fever, measles, or some other disease, she may have that disease, even though its characteristics may be masked and altered in some degree by the puerperal state; but it does not necessarily follow that she will have that same disease. Cases have been related by Dr. Collins of Dublin, with reference to epidemics of puerperal fever, where the introduction of a case of typhus fever into the hospital was followed on each occasion by an outbreak of puerperal fever.

So it would seem that a cause distinct from anything which we can identify as the special poison of puerperal fever may yet, by the influence which it exerts upon the woman in this peculiar condition, produce a disease not distinguishable by any of its phenomena from that assemblage of symptoms which we ordinarily call puerperal fever. It seems as if the puerperal state itself was the condition of the development of this set of symptoms. Moreover, we must remember that there is not any one single solitary cause to which we can refer the symptoms of puerperal fever. It occurs now from one cause and now from another. I remember at this moment the case of a lady in a state of perfect health, who was delivered at a time when puerperal fever was prevalent. She was a person in that position of society in which she was shielded from every possible danger. Soon after her delivery, she was exposed to a current of air, and caught cold. In a short time, the symptoms of puerperal fever developed themselves, of which she died. There was a case in which there was no special morbid poison existing—nothing but what could be derived from her own fluids, or brought about by some impression on the system. Moreover, we know that mental shock will have the effect of producing the symptoms of puerperal fever, leading to a fatal issue. I remember the case of a lady who progressed perfectly well after an easy labour; but, owing to some violent scene of domestic strife with her husband, she was seized almost immediately with symptoms of puerperal fever at a time when no such disease was prevalent, and of that disease she died.

I think, then, we are to look for the cause of puerperal fever rather to the condition present after delivery, than to any special poison. Poisons of various kinds may produce it. We know that, in Vienna, puerperal fever was exceedingly prevalent, owing, as was discovered, in a great measure to the fact that the students left the dissecting-room and went with their hands imperfectly clean to attend the women in their confinements; and when greater care was taken, when careful ablution and disinfectants were insisted upon, puerperal fever diminished in its frequency to a very great extent. We know that local violence may produce it: in short, we know that a great number of causes may give rise to it, and that the only one factor in the production of that class of symptoms consists in the special state of the woman after delivery. That state I need not recall. It is a state in which the fluids are laden with old, effete, and useless materials; laden also with materials out of which the old uterus is removed and a new one is to be built up. They are laden also with those elements out of which eventually the new secretion of milk is to be established. None of us except those few who, like Dr. Richardson, have given great attention to these inquiries, can describe at all wherein the alterations of the blood consists; yet, without indulging in any wild theory, we may say that there is a something. People used to call it a ferment. I do not care what it is called, providing we use the name not as defining the thing exactly, but as a name only to which we attach no other meaning than that of a something by which we are to distinguish this or that from the other, while as yet we know not its real nature. For instance, in the time of the old alchemists, calomel and corrosive sublimate, the chemical composition of which was unknown, were respectively called *Draco magnus* and *Draco mitigatus*; and, if we use names as the old alchemists used theirs, we shall be much more likely to keep from the error of hasty conclusions or rash generalisations, than if we use a name to which we tack a definite scientific meaning, while as yet we have no scientific grounds upon which to rest that meaning.

These were the chief things which it occurred to me might perhaps be worth the saying. Take a woman in the puerperal state checked in any manner, whether by poison from without, by mental shock, by cold, or by injury to the regular performance of those functions that ought then to go on, and you have the condition thereby produced out of which the assemblage of symptoms that we call puerperal fever—and all the world is pretty well agreed to give it that name—arises. The only other word I would utter is to quote a saying of a great wise old physician, who said that the highest aim of our art must be the greatest possible generalisation of diseases and the greatest possible individualisation of our patients; so that we have in each case to look, in the prevention of puerperal fever, not simply to the removing of possibility of contagion, not simply most carefully watching the local condition of the uterus and removing from its inner surface any possible decaying matter, not simply to the taking care that the air that surrounds the patient is good, but we are bound also to consider the patient's mental state, to regard minutely her individuality, and, if we wish to put a stop to the disease, to remove from around or from within our patient anything which can interrupt those important processes, the interruption of which gives rise to these symptoms, which we designate by the name of puerperal fever.

CONCEALMENT OF VENEREAL DISEASE IN THE ARMY.

By JOHN AMBROSE, B.A., M.D., Surgeon A.M.D.,
"Attached", 58th Regiment.

THE discussion which followed the reading of Mr. Acton's paper before the Royal Medical and Chirurgical Society, the recent Parliamentary debate, and numerous other signs and tokens, indicate the avidity with which the opponents of the Contagious Diseases Acts would add to their other objections to these statutes that of failure to compass all the good, in the way of disease-prevention, which might reasonably be expected of them. It, therefore, behoves those who are interested in the efficient working of these Acts to leave no means unsuggested of ensuring for them as large an amount of success as it is possible to achieve. At present, our efforts to control the propagation of venereal disease consist chiefly—I might almost say solely—in the care taken to bring under examination and, when necessary, hospital treatment, the prostitutes with whom our soldiers consort in certain military stations. This, obviously, is the step best calculated to strike directly at the root of the evil to be overcome, and the one without which any other measures would be likely to be of little avail. But, at the same time, what I may call subsidiary measures should be taken into account, and I should like to draw attention to one or two such, which I venture to think may be profitably considered.

During the past year and a half, a soldier admitted to hospital with primary syphilis or gonorrhœa (relapses excepted) loses the whole of his pay for the time he is under treatment for either of these diseases. Before considering the influence which this deprivation of pay appears to me to exert upon the amount of venereal disease in the army, I shall mention the other point of which I desire to speak, because the two subjects may be, I think, conveniently discussed conjointly. The other point is this: it was formerly the duty of the regimental medical officers to subject the men of the corps to which they belonged to a periodical inspection for the detection of venereal disease; but for some years this duty has been relinquished. If now we glance at our proceedings with reference to our mode of dealing with these contagious complaints for the last ten years or so, we find that, while, with the one hand, we have imposed certain salutary, if irksome and disagreeable, periodical inspections upon prostitutes, we have with the other hand exempted our soldiers from these very inspections to which, be it remembered, these same prostitutes have been subjected purely and solely for the benefit of the army and navy. Further, in the same decade, a measure has been introduced by which a soldier who confesses himself to be the subject of gonorrhœa or syphilis forfeits the whole of his pay while in hospital. There is now no substantial reason why a soldier suffering from a comparatively trivial, though none the less contagious, form of disease should not conceal and impart it to one or more of the women who, on his account, are submitted to a periodical examination. In this way, some of the good effected at the Lock Hospitals is, I fear, undone; and the drawback is not likely to be favourably affected by the fact, that the soldier frequently prefers avoiding the restraint of a residence in hospital, and devoting some of the pay of which he would be deprived in the event of his being admitted there, to remunerating a neighbouring chemist and druggist for the treatment he requires. The soldier, by so acting, no doubt transgresses the regulations, but he retains his liberty and his money. I say nothing here of the after-effects that irregular, and often insufficient, treatment of this kind must exert upon the man's constitution. The following brief narrative of facts will illustrate the remarks I have made, and prove that I have not been conjuring up imaginary difficulties.

The 58th Regiment came home from India in March of last year, and occupied the Anglesea Barracks at Portsmouth—a "protected" station—until April of this year. The amount of venereal disease in the regiment during 1874 was comparatively small, which gratifying circumstance I, in common with others, accepted as an indication of the satisfactory working of the Contagious Diseases Acts at Portsmouth. This explanation was, I believe, to a large extent, correct, and I do not consider that what I am now about to say in any way invalidates the comparison drawn by Dr. Parkes, in the BRITISH MEDICAL JOURNAL of February 20th, between the 58th and 106th Regiments, at Portsmouth and Parkhurst respectively, since the same condition of things which I am now about to describe must have existed in the 106th as in the 58th. When, however, month by month the admissions to hospital, in the 58th, on account of venereal disease, became still fewer and fewer, until, in January and February of this year, they numbered only three; and when, in the last week of February, there was not a case of either gonorrhœa or syphilis under treatment, I could not

help suspecting that some additional cause was in operation. On March 1st, I therefore addressed the principal medical officer officially on the subject, informing him that I suspected disease was being concealed, and requesting that I might be allowed to put my suspicions to the test by means of a "health-inspection". This permission was, with the approval of the lieutenant-general commanding the Southern District, readily vouchsafed, and I accordingly examined 447 lance-corporals and privates. I found that, of this number, 28, or 6.26 per cent., were the subjects of venereal disease, which, two or three of the cases perhaps excepted, was obviously of some considerable standing. The twenty-eight cases comprised eleven of primary syphilis, four of gonorrhœa, eleven of gleet, and two of balanitis. Those of the chancres were cicatrising; and the large amount of gleet discovered bears ample testimony to the fact that gonorrhœa, although concealed, had previously been present on a very considerable scale. It may be as well to mention that the senior medical officer at the Garrison Hospital, to which these twenty-eight men were forwarded for treatment, coincided in my diagnosis of each case. I have served for nearly eleven years with the 58th Regiment, and am consequently, I believe, tolerably well acquainted with the characters, mode of feeling, etc., of many of these twenty-eight men. I, therefore, claim to be in a position to judge, with about as much accuracy as a question of this nature is susceptible of, how far this concealment was attributable to one cause or set of causes, and how far to another. I need not tell any one conversant with the ways and customs of soldiers that it would, as a very general rule, be utterly in vain to expect that they would give a straightforward and satisfactory answer to the question, Why have you concealed your disease? When detected, the soldier is apt to be sulky, uncommunicative, and fully impressed with the idea that the fewer admissions he makes the better for himself. He has (no matter how one may endeavour to convince him to the contrary) a hazy indefinite suspicion that anything he might say would be afterwards used to his disadvantage. Abrupt direct questioning would, therefore, be likely to defeat its object, and I did not attempt it. The men were under my care in the Garrison Hospital, so I had ample opportunities afforded me of ascertaining their sentiments, indirectly and leisurely. This I did, and the result is, that I am perfectly persuaded the great majority were led to conceal their disease altogether for the purpose of avoiding retrenchment of their pay in hospital, while a minority—seven out of the twenty-eight—were actuated, in addition, by other motives, such as dislike of hospital restraint, and, in the case of officers' servants, special orderlies, etc., unwillingness to risk the loss of remunerative and congenial employment. I have also made inquiries of several intelligent and reliable non-commissioned officers, whose opinions unanimously and abundantly corroborate this. I need hardly say that, mixing with the men, and overhearing barrack-room conversation, as they do, these non-commissioned officers are not likely to be mistaken; and being themselves, in most instances, married, they could have no conceivable motive in misrepresenting matters. I accordingly look upon their evidence as absolutely conclusive, even apart from the fact that their opinion commends itself so thoroughly to common sense. The conclusion is forced upon me, that this extraordinary amount of concealment was chiefly due to a dislike on the part of the men to put themselves in the way of having their pay retrenched; and, in a minor degree, to other causes, the result of which could only have been obviated by subjecting the seven men concerned to an efficient system of "health-inspection".

If the interests of the Contagious Diseases Acts were alone to be taken into account, my experience would seem to furnish grounds for, at any rate, suggesting the propriety of remitting the retrenchment of pay to which a soldier is now liable, and of again having recourse to a system of health-inspections in the army. But, being fully aware that such interests are not the only ones to be regarded, and as it would appear scarcely probable that retrenchment of the soldier's pay was adopted, or periodical health-inspections relinquished, without deliberation having been bestowed upon all the attendant circumstances apparent at the time of deliberation, it would be unbecoming on my part to recommend a change. I do not for a moment presume to question the desirability of either of these measures, viewed as a whole, but restrict myself to the office of indicating how the Contagious Diseases Acts—which, it should not be forgotten, are even yet on their trial—seem to me to be affected by the presence of retrenchment and the absence of inspection, leaving it to others, who are in a position to take a more comprehensive and able view of the question than I am, to say what should or should not be done.

With regard to the possible reintroduction of health-inspections, I should like to make a few anticipatory remarks. Formerly, and when these inspections were in vogue, each regiment serving at home was provided with two medical officers. Now, a regiment has only one

medical officer attached to it. This one officer, when required to attend the sick of his regiment, as is frequently the case, has his time fully occupied. To inspect five hundred men thoroughly—and, if not performed thoroughly, the examination would be worse than useless, as it would be misleading—would occupy about seven hours of one examiner's time. This would be a very serious addition to the labours of an already sufficiently worked man; nor would the addition be one such as would tend, by agreeable diversification of his task, to invigorate the labourer. On the contrary, a more disagreeable duty could not easily be imposed upon a medical officer. For these and other reasons to which I deem it advisable not to allude here, I would venture to suggest that, in the event of health-inspections being revived in the army, medical officers should be specially appointed to conduct them. A few inspectors, selected on account of energy, intelligence, and aptitude, might be so distributed over the United Kingdom as to bring all the soldiery stationed therein within a really effective system of supervision. Resident in London, Dublin, Edinburgh, and perhaps one or two other military centres, these inspectors might be allowed access to the returns and other sources of information relative to their duties which are, from time to time, received at the offices of the Army Medical Department in these cities. They would, I doubt not, soon learn to interpret these returns, so as to be able to form a pretty accurate opinion as to the corps in which their inspectorial services would be most required, particular attention, of course, being paid to the regiments occupying or about to occupy "protected" stations. Should suspicion be aroused that disease was being concealed in a particular regiment, it should be pounced upon by an inspector; no more warning being given to the regiment than the few hours necessary to get the men together, and to prepare nominal rolls of each company for the inspector's guidance. If soldiers once know that they are liable to be thus examined at uncertain times, and without notice, and if every man detected in the act of concealment be punished to the extent prescribed for this offence in the Queen's Regulations, we should not, I believe, be much more troubled by disease-concealment in the army.

ON THE ACTION OF MEDICINES: OLD AND NEW.*

By JOHN KENT SPENDER, M.D. Lond.,
Surgeon to the Mineral Water Hospital, Bath.

II.

At the conclusion of my last paper, I spoke of the treatment of chronic pulmonary consumption by the application of blisters. I believe it was long ago affirmed that phthisis rarely occurred in any one even but slightly marked with small-pox. Dr. Copland observed that a copious eruption of acute small-pox often cured pulmonary consumption in an early stage, but as often accelerated the progress of the disease in an advanced stage. Other writers have stated that phthisis is hardly ever seen in persons much marked with small-pox, but I cannot confirm this assertion from my own experience. Certainly, however, it has been known from the earliest period of medical history that the development of a purulent eruption has sometimes cured consumption in the chest; and, in the early part of this century, the doctrine was firmly established that pustular eruptions and purulent discharges artificially produced have more or less influence in delaying or arresting the progress of consumption when the disease is not too far advanced. Even the "potential cautery" was not unfrequently used in old times for the same purpose.

The medical antiquarian is apt to consider a practical subject from a different stand-point from the busy practitioner. The latter is necessarily very much governed by current theories, and their acceptance by the literary leaders of the profession; and it is a fact that there has been a considerable change of opinion during the last twenty years on what is called "counterirritation". This change of doctrine is due partly to new physiological views of the influence of nerve-centres on the nutrition of distant organs, and partly to a growing distrust of the efficacy of outward applications. Sharing heartily in this distrust as regards a vast crowd of empirical things, I must yet announce myself a firm believer in the utility of the old-fashioned blister, the *emplastrum cantharidis*. But what a ridiculous caprice it is that fashion has anything to do with our choice of remedies! I have discussed, in my Fothergillian Essay, the scope of blisters in the relief of pain, and it is certain that they are not less useful in the treatment of some constitutional disorders.

It is within the experience of most medical men that enlargement or

suppuration of glands in the neck seems to diminish the liability to consumption in so-called scrofulous subjects. Of course, it is difficult to verify this statement, and equally difficult to disprove it; nor is it easy to deal in a scientific spirit with the converse assertion that the suppression of an accustomed evacuation or discharge is sometimes followed by consumption. But no one pretends now that a blister alters a tubercular deposit in a subjacent viscus merely because it causes a drain from the skin. An impression is made upon superficial nerves, transmitted to nerve-centres, and then reflected back on those peripheral processes of nutrition by which a morbid action may be checked and even controlled.* Hence we adopt the views of Dr. Laycock, who says that, by means of counterirritants, we may modify the condition of nerve-centres, and indirectly influence those peripheral nerves which preside over sensation and nutrition. Nor is there anything in this theory at variance with sound pathological doctrine. Sometimes an intestinal flux will seemingly arrest the destructive progress of pulmonary tubercle. Dr. Abercrombie relates an example in which cerebral disease operated in this way; and Sir B. Brodie used to say dogmatically that, after amputation of a scrofulous limb, phthisical symptoms, little noticed before, may rapidly increase.

Issues and setons were recommended by Portal and Whytt to be inserted in the arm, nape of the neck, or at the edge of the pectoral muscle. These rather severe measures were sanctioned by high authority so recently as twenty years ago; but, as truer ideas of the constitutional nature of consumption began to be received, not only were milder means employed, but the practice of counterirritation seemed likely to be extinguished altogether. A few bold spirits have cried aloud on behalf of the ancient plan, and the therapeutic pendulum appears settling down to the sober medication of blisters and liniments of iodine and turpentine.

The next question is, How and when are blisters to be applied? Almost always as temporary or "flying blisters", renewed at intervals of a week or more, the blistered surface being healed immediately with a soothing ointment. The most suitable part of the chest is obviously in front, just below the collar-bone; and the blister should rarely exceed three inches in length by two inches in breadth. There is a striking unanimity of opinion among authors that the practice is of benefit only in the early stages of disease, or in the chronic forms of consumption; and that it seems particularly serviceable in hæmoptysic and congestive complications. Dr. Tanner recommends blisters when the tubercle is near the surface, with adhesions between the pulmonary and costal pleura.

Thus employed, blisters may be valuable auxiliaries to internal treatment, and, by their physiological action, may stop for a time the local ravages of disease. In my early days of practice, I watched with much interest several cases thus treated by my father: cases in which general and local symptoms were evidently checked by the judicious use of blisters. Equally plain was the deterioration of health when the blisters were discontinued for any length of time. A milder degree of vesication can be kept up by painting over the skin not quite healed from a recent blister with equal parts of glycerine and liniment of iodine: this should be done for a week or two on alternate days. A liniment of croton-oil may suit the less sensitive skin of some male patients, but this remedy is regarded with much less favour than it was a quarter of a century ago. Other counterirritants are simply troublesome without being effective, and, by their transient nature, can hardly be expected to have much influence on a chronic disease.

I turn to the subject of *suppositories*,† which have been by no means generally used until the last few years. They were faintly recognised in the *Pharmacopœia* of 1864, other suppositories were added in the second edition of 1867, and three new ones were published in the *Additions to the British Pharmacopœia* (1874). Possibly a reason why suppositories were not more employed was, that our druggists were unable to provide a good excipient or medium; nor were we more fortunate in possessing an apt and easy instrument for administration. These difficulties have been overcome, and the pharmacist has contrived, by means of curd soap and starch, to give us an acceptable article, which is easily made and keeps very well. It is not pretended that suppositories are of superior efficacy to enemata; but the former may contain valuable medicines in a small bulk, and can be introduced by the patient without extrinsic help.

About the general use of suppositories, Mr. Bransby Cooper gave some sensible directions which will bear repetition. The substance should be properly inserted into the rectum, otherwise it will increase instead of diminishing the sufferings of the patient. If it be only placed within

the anus, under the influence of the sphincter muscle, it will produce an aggravation of all the symptoms; while, if it be passed into the bowel above the sphincter, it will speedily produce the desired soothing effect. A hollow tube should be used, with a movable rod inside; the bolus can thus be introduced high above the sphincter, which cannot be conveniently done with the finger.*

Of the many maladies which are beneficially and decisively treated with suppositories, I may enumerate some forms of diarrhœa, particularly that which may be called "emotional diarrhœa". I know a clergyman who found this "emotional diarrhœa" seriously to interfere with the steadiness and comfort of his Sunday work; and he was always most threatened just before any service when it was his duty to preach. No medicine administered by the mouth did any permanent good; but the introduction of a *suppositorium plumbi compositum* every Saturday night gave calm and comfort all the next day. After a few weeks, the suppository was withheld without any return of the diarrhœa. In this case, the more immediate application of the remedy to the nervously irritable tract of intestine accomplished what the same medicine failed to do when used in a remoter way.

Then there are certain troubles in defæcation which are equally well relieved by the use of the *suppositorium morphiae*. An elderly lady had always two or three evacuations of the bowels in the early morning, the copiousness of which seemed to do no harm, nor was even objected to; but each act was followed by a sense of local uneasiness, which was not lost until after the middle of the day. A complete riddance of all suffering was brought about by the nightly introduction of a morphia suppository with soap. The suppository of tannic acid with soap may be tried whenever opium is from any cause inadmissible. I have heard of the carbolic acid suppository being employed to rectify an unaccountable offensiveness of flatus or of feces.

A suppository of opium often removes some of the painful worries of hæmorrhoids; and chloral has been lately used in the form of a suppository for alleviating the pain of abdominal cancer. Any reflex channels which we can make use of for the alleviation of pain should never be neglected; for local nerves and nerve-centres are often the ready path by which remedies may choose to travel. When substances are slowly dissolved in one of the mucous tracts of the body, it is reasonable to suppose that some of the benefit must be felt proximately in neighbouring organs and tissues. Thus Sir Henry Thompson advises the addition of conium to opium, by enema or suppository, in cases of malignant disease of the prostate gland. Dr. Edis has lately given us an interesting paper on the capacity of the rectum to receive and absorb therapeutic substances.† Ergot may be administered in this way for the control of hæmorrhage. Dysmenorrhœa is relieved by a bolus containing half a grain of morphia and one-twentieth of a grain of atropia; and hardly anything (except hypodermic injection) alleviates the morning sickness of pregnancy better than an opiate suppository introduced the previous night. And motor energies may be similarly quickened, as when constipation is overcome by a suppository containing a grain of extract of belladonna.‡

I trespass on obstetric ground so far as to venture the suggestion that uterine troubles are often far more beneficially affected by anodyne suppositories and enemata than by any remedy put into the vagina. It is familiar to the accoucheur that an ice-water enema arrests *post partum* hæmorrhage when the injection of a frigid stream into the uterine cavity is not unattended with danger.

In treating the exigencies of stomach-disease, it is a moot point how long it is safe to continue the use of *enemata of food*. Dr. B. Foster pushes this practice with boldness and confidence; but a recent critic in the *British and Foreign Medical-Chirurgical Review* delivers some seasonable cautions. It is impossible to discuss just now the general rules which ought to govern the use of food-injections; but it is clear that, in the case of incurable stricture of œsophagus, there is nothing else to be done, and, therefore, we have to consider how we can best promote the feeding of the body in this way. It seems that the ordinary fluid food which is generally used for this purpose is either not retained long enough in the rectum, or cannot be digested there for want of a digestive ferment. Dr. W. O. Leube of Erlangen discovers this digestive ferment in the fresh pancreas of the ox or pig, which, finely minced, he mixes with scraped meat, rubbing them well together with a little warm water, so that the mass may be easily injected. Before this is done, the rectum ought to be washed out with water;

* Quoted in Dr. Warren's *Manual*, p. 874.

† *BRITISH MEDICAL JOURNAL*, Dec. 14th, 1874.

‡ See some remarks by Frousséau (vol. iv, p. 12, New Swedenham Society) on the "Synergy" in the different portions of the muscular apparatus of the digestive canal. He recommends suppositories of lard and honey as very useful in cases of chronic constipation. After surgical operations on any of the pelvic viscera, the benefit of morphia suppositories is often very marked. See a case related by Mr. Bryant in the *Obstetrical Transactions*, vol. xiv, p. 79.

* The application of a blister to stop the "epi-cerebral ana" is a pertinent example of this (see Dr. Buzzard in the *Præticæ*, iv, October 1868).

† The word "suppository," as now used, is rather a descent from the high classical level. "Cervicæ pæ polo supposituras Atlas." (Ovid, *Fasti*, v, 180.)

and the fæces resulting when this food has been retained sufficiently long have usually the character of ordinary fecal matter. Further, by a series of experiments, Dr. Leube has proved that this method of feeding *per rectum* enables a considerable quantity of nitrogen to be taken up into the system.

These researches, published by Dr. Leube early in 1872, induced me to try the addition of pancreatic emulsion to enemata of soup and beef-tea. A maiden lady, aged 33, was under my care during the spring and summer of 1872 for an obscure disease of stomach and liver, the principal symptom of which was severe and frequent vomiting. There was also intermittent jaundice, but no gall-stones were found; and neither by myself nor by a medical friend was an absolute diagnosis of the case ever made. However, I had to deal with the symptom of vomiting in a very practical way, as it was clear that, unless something were done, the system would succumb to starvation. For quite two months, the use of food-injections was compulsory, and, during nearly all that time, pancreatic emulsion was added to the injections with the greatest possible benefit. The nutritive material seemed to be easily appropriated; the bulk of the body was fairly kept up, and there was a good fecal evacuation every other day. It is scarcely possible that the practice of feeding by the bowel could have been carried on so long without the admixture of pancreatic emulsion, of which a large dessert-spoonful was used each time. The case ended fatally, from a complication of disorders, while I was abroad for a short holiday; and the medical friend under whose kind care the patient was had no time to make a *post mortem* examination. For cases like gastric ulcer, in which feeding *per rectum* has to be carried on for a limited time, the addition of pancreatic emulsion to the food promises to be of the greatest advantage.

Those who have read Dr. John Harley's paper in a recent volume of the *Medico-Chirurgical Transactions*, on the effects of *coniium* in some extreme forms of tonic and clonic muscular spasm, will be glad to learn any facts which seem to corroborate the necessity of giving the *succus conii* in comparatively large doses. Last summer, a married lady, who had just passed the menopause, was afflicted with a return of an old malady, which I call "hysterical chorea", from want of a more exact definition. The spasms were too tonic for pure chorea, and, in their, occasional character of pseudo-opisthotonos, resembled some of the vagaries of hysteria. However, the signal failure of all so-called sedative and antispasmodic medicines (including bromide of potassium and chloral) made me cast about for some new and potent thing, and hemlock seemed just the drug for which I was searching. Two fluid drachms of the *succus conii* were given at first four times a day, the doses being steadily increased until three fluid ounces were consumed in the twenty-four hours. And I am glad to say that nothing could have been more successful. An improvement quickly began, and continued without intermission until the usual health was recovered in less than three weeks' time. The total quantity of hemlock-juice taken amounted to forty-six fluid ounces. Now, here was a patient whose severe and fatiguing convulsions had never been abated by anything short of opium-narcosis; and they always returned when the narcotism passed away. But the hemlock made a dynamic impression on the nerve-centres, so that by degrees the rhythm of muscular movements was restored.*

It is much to be regretted that the *croton-chloral-hydrate* does not appear in the recent *Additions to the British Pharmacopœia*. The power of this medicine over neuralgia seems so unquestionable, that I am confident it will soon occupy a leading place among our antidotes to pain. There are certain cases of what Dr. B. W. Richardson calls "neuralgic fever", *i.e.*, general neuralgia with some pyrexia, which are completely controlled and ultimately cured by a combination of quinine and croton-chloral. In an instance of this sort very lately under my care, a maiden female, aged 49, I gave a grain of quinine in solution with three grains of croton-chloral in a pill, every two hours during the daytime; and, when the desired success was obtained, the medicines were gradually left off. Moreover, there is this good point about croton-chloral, that, even if it fail to produce any benefit, it never seems to do any harm.

I have just alluded to the lately published *Additions to the British Pharmacopœia*, which undoubtedly include some new preparations of considerable value. Reserving for another paper a detailed comment on these, I venture to say a word of commendation here of the tincture of larch and the ammoniated tincture of quinine. The former was introduced by Dr. Greenhow years ago as a remedy for chronic bronchitis, and for some time past I have prescribed it in combination with paregoric and similar drugs. The ammoniated tincture of quinine satisfies a long felt *desideratum*, and enables us to administer a true and

typical nerve tonic with a medicine (ammonia) which acts more after the fashion of an immediate stimulant. And a medical friend tells me that he has found this preparation more than usually efficacious in those forms of neuralgia for which quinine would usually be prescribed.

(To be continued.)

CASE OF RECURRING HYDATIDIFORM MOLE.*

By ALFRED SHEWEN, M.D.Lond.,

Physician to the Farringdon Dispensary.

I SAW the patient in the first instance on February 4th, 1873. She was then complaining of great debility, loss of appetite, pains in the back and limbs, and depression of spirits. She stated that she had had a discharge more or less constantly since the previous Christmas, and for two or three months previously she had been very irregular in her periods. But her chief complaint was the great prostration, want of appetite, and inability for exertion of any kind.

She gave the following history. She was fifty-three years old, was married at twenty-eight, had had nine children, the last of which was still-born; the others were quite healthy, and all alive. The ninth, the still-born child, was born in the patient's fortieth year, and was but a seven and a half months' child. She described it as looking quite starved to death; it was nothing but skin and bone, although a fairly developed child in other respects. The placenta was said to have been full of lumps of fat. Two years afterwards, she began to suffer with a continual discharge *per vaginam*, accompanied by intense prostration and debility, which continued for about two months, the discharge being sometimes watery and sometimes bloody, and ended by a sudden accession of pain in the stomach and back, and great hæmorrhage from the vagina, with the passage of large lumps of flesh sufficient to fill an ordinary chamber. She described what she passed as a chamberful of bladdery sea-weedy looking stuff hanging in strings together. The bladders varied in size from a pea to a hazel-nut, and were strung together like a string of beads on a fine thread. There was no fœtus. She made a good recovery, and the menses returned, but irregularly. Two years afterwards, she had an ordinary miscarriage, and recovered without difficulty. After this, she became very irregular, the menses coming and going in a very erratic fashion. The patient was now in her fifty-third year. For two months previously to my seeing her, she had been continually more or less unwell. She had never had any sudden gushes of water from the vagina, but what she had passed was pale and smelt very badly, and now and then fleshy masses had passed with it. So great were her depression of spirits, loss of appetite, and distaste for everything, that she began to feel quite weary of her existence. She attributed her condition entirely to a change of life.

She recovered sufficiently in the course of a week to dispense with my services, and I saw no more of her for a couple of months.

On April 4th, I found her in extreme agony, completely doubled up with pain in the abdomen, and retching. Inquiring, I found that, since I saw her last in February, the discharge had never entirely stopped; and that, for the last week, it had somewhat increased, but she had felt well enough that morning to go to church, and was in no pain. In church, she felt strange and faint, and when she reached home after the service she was seized with intense pain in the abdomen and retching. Soon afterwards she passed a half a chamberful of clots and fleshy masses with strings of bladders, such as she had passed six years before.

The patient's abdomen was exquisitely tender, and the uterus could be felt as large as the foetal head above the pubes. There was free hæmorrhage from the vagina. The os uteri admitted my hand without difficulty, and, having explored the uterus thoroughly, I brought away all the fleshy masses and clots I could find. Judging from an external examination of the uterus, one might have expected to find many more than was really the case. There was no fœtus.

After the operation, the patient had no more retching, and the pains in the abdomen ceased. She made a perfect recovery in about a fortnight.

The masses she had passed proved, on examination, to be a very good specimen of the hydatidiform mole.

* Abstract of paper read before the South-Eastern Branch: West Kent District.

BEQUESTS.—The late Mr. Joseph Fade Duckett, of Kingstown, Dublin, has bequeathed to the following Dublin hospitals the sum of £500 each:—The Adelaide, Mercer's, Stevens's, Meath, and Sir Patrick Dun's.

* The *succus belladonnæ* and the *succus hyoscyami* are among our newest therapeutic resources.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JULY 7TH, 1875.

W. O. PRIESTLEY, M.D., F.R.C.P., President, in the Chair.

Donation from Dr. A. Farre.—A letter from Dr. Arthur Farre was read by the president, offering a large collection of casts showing the various conditions of the uterine organs, including the placenta, in health and disease, for the acceptance of the Society. Three casts were shown, merely as specimens of the collection. These were beautifully modelled and painted, representing as naturally as possible the appearance of morbid specimens. After a few words from the PRESIDENT, the offer of Dr. Farre was accepted by the Society by universal acclamation.

Specimen of Nighled Ovarium.—Dr. EDIS showed, for Dr. Stothard of Hull, a shrivelled fetus of about the fifth month of utero-gestation, that had been expelled at full term together with another living fetus; the case had been one of twins. Both placentae were attached to the same bag of membranes, the one being considerably smaller than the other.—The PRESIDENT suggested whether the case was one of superfetation.—Dr. EDIS replied that the position of the placenta scarcely warranted such a conclusion.

Uterus after Caesarean Section.—Dr. NEWMAN exhibited a specimen of an uterus removed from a patient *post mortem*, in which Caesarean section had been performed eight years since on account of extensive disease of the os and cervix uteri. The case had been previously reported to the Society in 1872. The woman was delivered with the aid of the long forceps of a living child at full time. In August 1874, the integument of the abdominal wall suddenly gave way, and a large coil of intestine protruded; this was returned by Mr. Kow, but she died within a week. A large dissecting subperitoneal abscess was discovered lying mainly between the under surface of the rectus abdominis and transversalis fascia.—The PRESIDENT observed that it was in reference to this case that Dr. Farre had desired to show one of the casts present.—Dr. PLAYFAIR inquired if anything had been discovered in the condition of the cervix which would explain the difficulty for which Caesarean section had been resorted to.—Dr. NEWMAN replied that he had only made a slight examination of the uterus. When pregnancy occurred in 1871, there were distinct traces of scar tissue, the cervix being deeply indented and changed in structure.

Dermoid Cyst.—Dr. BARNES exhibited a specimen containing hair and several well developed teeth, and a firm jaw-shaped plate of osseous substance. The cyst had been removed by ovariectomy. It was filled with pus at the time of the operation. The patient died on the second day.

Venous Coagulum.—Dr. BARNES also exhibited an uterus, the internal surface of which was covered with dark decomposing mucous debris; the left femoral vein being blacked with coagulum, there having been diffuse cellulitis of left thigh. The patient, aged 45, married, was admitted May 8th, with an abscess under left arm, which had burst before admission. She had been subject to eczema for three years. She was delivered on June 19th, at about the seventh month, and died on July 10th. The case was of interest as throwing some light on the discussion at the present time.

Colloid Tumour.—Dr. BARNES also exhibited a large conglomerate of colloid tumours, weighing 28 lbs., which had grown from the omentum. It was supposed to have been ovarian, and had been removed by gastrotomy twenty-five days previously, the patient doing well. The few large vessels connecting the growth with the omentum had been tied by silk ligatures and left in the abdomen. Mr. Haward had examined the tumour, and pronounced it to be malignant.

Extra-uterine Fibroid removed by Gastrotomy.—Dr. ROUTH exhibited a specimen weighing 17½ lbs. His object was merely to show the tumour in its recent form. On a future occasion, he would give full particulars both as to the history and the treatment.

THE RELATION OF PUERPERAL FEVER TO THE INFECTIVE DISEASES AND TO PYÆMIA. (Continued from p. 780 of last volume.)

The PRESIDENT: We now proceed to the discussion on puerperal fever, which has been adjourned on two or three occasions. I may remind the Fellows and visitors of the rule which has been laid down, and which has been pretty closely followed, that each speaker should occupy not more than fifteen minutes. It is the general feeling that the discussion should close this evening, and, if necessary, the time can be

prolonged for that purpose. If Mr. Spencer Wells be present, he will have an opportunity of replying. I may add that we are honoured to-night with the presence of two of our distinguished honorary Fellows—Dr. Fordyce Barker (who has come from America especially to take part in the discussion) and Dr. Charles West. Dr. Fordyce Barker has explained to me that he has much to say on this subject that may be somewhat at variance with what has been said by previous speakers, and he fears that he will scarcely be able to conclude within the prescribed limits; he, therefore, throws himself on the indulgence of the Society, if he transgress. Before I call upon Dr. Snow Beck to continue the discussion, I will ask the Secretary to read a short communication from a foreign Fellow—Dr. Cordes of Geneva.

Clinical Observations on the Relation of Scarlatina to the Puerperal State.—In the latter part of 1865, the five children of Mrs. F. (one excepted) were taken with scarlatina. None died. In our country, it is not so dangerous as it is in England. Mrs. F., being pregnant, but quite healthy and very strong, took care of them, and did not look fatigued by it, nor has she the slightest symptom of the disease. On January 1st, 1866, being taken with labour-pain, but having lost no water, she came down to her mother, about two miles away from her other children, whom she left in the country, wishing to be confined in the town, and to avoid the contagion for the one baby to come. On January 2nd, she was confined with a large beautiful girl. After a few hours, the scarlatina began to show itself in the throat of the baby. The physician would not believe it was scarlatina, because there was no case in the neighbourhood. On the 3rd, there was a consultation with another physician, and both agreed that the baby was suffering from scarlatina, which could not come out, and the child died on the 4th of the same month. The eruption came out a few hours before death. Now, is it not a singular thing that the baby could have been infected, being in its mother's womb, without the mother being taken with any kind of eruption, or erysipelas, or puerperal fever, or anything? Everything happened for her in that case as usual, except that she had no baby to nurse.

Dr. FORDYCE BARKER and Dr. WEST then delivered addresses, which will be found printed at length at pp. 95, 97.

Dr. SNOW BECK: I never felt so strongly the feeling that I would have been glad to escape from the position in which I may have been placed as I do this evening, after hearing the very learned and eloquent addresses with which we have been favoured. But I feel emboldened by the sentiment with which Dr. Fordyce Barker concluded, that possibly we may yet all be mistaken, to state the conclusion to which I have been led, chiefly from my own observations, upon the nature of the diseases which at present engage our attention. These observations have led me to a conclusion directly opposed to the opinions expressed by the previous speakers; for I am unable to perceive that there is any special or specific disease connected with childbirth, or to which the term "puerperal fever" can be properly applied. I must be also bold enough to contend that the definition published by the Nomenclature Committee of the Royal College of Physicians cannot be maintained in practice, for I have never yet been able to make out "a continued fever, communicable by contagion, occurring in connection with childbirth, and often associated with extensive local lesions, especially of the uterine system", which is essentially connected or associated with the condition of the system after parturition, or, in other words, which is not met with at any other period of the woman's existence. With reference to this definition, Dr. Arthur Farre informed us that the word "communicable" was only intended to convey that it might be communicated, but that it might also have a spontaneous origin; and the word "often" was only to call attention to the frequency with which these complications arise. Dr. Farre added that the Nomenclature Committee were entirely at a loss where the term puerperal fever ought to come in the catalogue of diseases. It was not placed among the fevers at all, but amongst the general diseases, far away from the fevers, finding a place of refuge at last at the bottom of the list after pyæmia, erysipelas, etc. But why should the Nomenclature Committee be in any such difficulty, if there really existed any continued fever, communicable by contagion, especially connected with childbirth? Whilst admitting this difficulty, however, Dr. Farre said he was not prepared to admit there was no such disease as puerperal fever. He should be sorry to shut out the idea as one that is impracticable and not to be entertained. If we are to look for a puerperal fever at all, one that can be properly so called, a disease which is *sui generis*, we shall probably find it in the interruption to those healthy processes going on in the lying-in woman: first, the milk-process, the milk-secretion, and that attendant disturbance of the constitution which we term milk-fever; and, secondly, a much more important one—the change which goes on in the uterus, and which we all know as the involution process. Now, we know, continued Dr. Farre, that, when this process is interrupted,

there is an arrest of all the eliminative action which that involution process implies; and we may fairly conclude that, in consequence of this arrest, there is some accumulation in the body of those effete matters which ought to be expelled from the system, and this, added to the already blood-dyscrasia, must very much aggravate the disease. But may it not be replied that this sounds very like admitting that, up to the present time, no such special or *sui generis* disease has been recognised? If such a disease be developed in the changes which take place after the birth of the child, why has it not been found and described during the years of diligent study which so many of our most able and acute physicians have devoted to the elucidation of these diseases? And why is it that we have got no further than the unsatisfactory statement that, if we were to look for a puerperal fever at all, we may probably find it in some arrest of these healthy processes? What proof, it may be asked, is there that, in the serious and fatal diseases following childbirth, there is any interruption of these healthy processes which go on in the lying-in woman, any arrest of this assumed eliminative action? Supposing, however, for a moment that such an interruption or arrest should take place, what proof is there that this arrestment would create in the system so serious a disease—a disease *sui generis*, and capable of being communicated by contagion? It must not be forgotten that the growth of the uterus is a healthy physiological process; that the tissues which are formed are perfectly healthy tissues. When and where have there been any facts observed which justify, or even countenance, the supposition that the retention in the system of any portion of a healthy tissue will generate such a disease, and that the majority of the women in whom it becomes developed will die? I am not aware of any facts upon which the least reliance can be placed which justify the inference that such a disease-creating action is even probable; and I must add that, instead of speaking of it as being possible or probable that such a *sui generis* disease would be found, if looked for, would it not have been more satisfactory, and certainly more conclusive, if the symptoms which would indicate such a disease during life had been given, or the appearance on the dead body described, by which its previous existence might be affirmed? So far as my knowledge extends, no reliable facts have ever been recorded which show that any such *sui generis* disease has ever been observed in practice; nor can I think that anything is gained by substituting the term *post partum* fevers for that of forms or varieties of puerperal fever; for these terms are evidently intended to denote the same class of morbid phenomena, whatever their nature may be. In further considering these questions, I must contend that the process of child-bearing is a natural function in the female, and that Nature has provided her with all the powers requisite for the complete performance of this function as a part of her natural endowments. Every day's experience appears to exemplify this fact, not only in the human female, but also in the female of all other animals. Yet, on the other hand, no one doubts that the peculiarities of the system after parturition modify, to a certain extent, any disease which may have existed previously to the confinement, or which may have commenced subsequently. But I am not aware of any observations which support the notion that there is anything in these conditions which, in a healthy female, is the source or element of disease, or which in any way can alter, or has altered, the essential nature of any disease with which she may be attacked. All women, however, are not in health when they become pregnant, and consequently are not in health at the birth of the child, and many women are not endowed by Nature with the constitution and formation favourable to the propagation of their species. Women in either of these categories must necessarily suffer from different diseases, and from various causes, after parturition; but the fault is here with the individual, and not with the natural and physiological process of procreation. But, if it be true, as I believe it is, that there is not any disease specially connected with childbirth, it must not be forgotten that the converse is equally true, that there is not any disease from which the lying-in woman is exempt; in other words, that the condition of the system induced by pregnancy, or that which follows after parturition, does not prevent the existence of any other disease which may attack the female at any other period of her existence. Hence we must be prepared to meet with, in the lying-in woman, any of the diseases to which flesh is heir, and the diseases so met with become naturally divided into two classes, one class arising from the general system, and being the result of changes and accidents, to which all women are liable at any period of their existence; the other class arising from the uterine system, and being the consequence of accidents incident to pregnancy or childbirth, yet not comprising any disease specially connected with either of these states. When speaking of these diseases, Dr. Farre observed that he had been in the habit of dividing what he termed *post partum* fevers into three classes: first, those irritative fevers arising from some local irritation, and not implying blood-infection of

any kind, pyrexial states of a fugitive and transient nature resulting from simple mammary irritation, slight injuries to the soft parts, laceration, and the like; secondly, under the name of the milder forms of infective fevers would be classed all those in which the infection is not of a specified nature, in which the process does not undergo a period of evolution, a period of development, and in which the consequences follow no definite order; thirdly, the eruptive fevers, and those which depend upon a blood-infection, the poison following a specific course, having a regular period of incubation, and terminating in those several diseases, eruptive fevers and the like, which occur, of course, in the lying-in woman in common with others. And, in glancing at the different diseases met with after childbirth, it may be well to do so under these heads. First, then, it would appear evident that those pyrexial states of a fugitive or transient nature, which are met with in almost every woman who has been confined, cannot be classed as belonging to the same category as those serious and often fatal diseases which follow parturition or abortion. We might as well include all the diseases in the nomenclature of diseases, for every one of these might by possibility be met with in a woman recently confined. Yet it is singular how often these trifling and transient affections have been considered as the commencement or form of serious disease. Dr. R. Ferguson, in his admirable essay on *Puerperal Fever*, wherein he correctly attributes the most serious diseases to a vitiation of the fluids, though the nature and source of this vitiation is not so clearly stated as perhaps it might have been, remarks (page 101), that a dose of salts and senna so invariably brought on metro-peritonitis, that he forbore the use of this drastic irritant as a routine dose; also (p. 16) that, during a reputed epidemic of the peritoneal form, after two doses of Dover's powder, of ten grains each, the patients did not require any other treatment. Secondly, it is well known that the lying-in woman is often exposed to, and not unfrequently attacked with, the eruptive fevers, or acute specific diseases. I believe that every one of these diseases has been met with at one time or another, and we cannot deny the proofs that they have been communicated by the nurse in attendance, and possibly, though very rarely, by the medical attendant. We all know that these diseases exercise a great influence, though in different degrees, upon the pregnant uterus. The rules under which women are received into the different lying-in hospitals, when the pains of labour have commenced, and often during the night, give great facilities for the introduction of these diseases. Different instances are recorded where typhus and other fevers have been so introduced into lying-in hospitals, and have spread from patient to patient, constituting a so-called epidemic. On one of these occasions, it is recorded that, after the introduction of a case of typhus fever into the Dublin Lying-in Hospital, "puerperal fever appeared in forty-eight hours afterwards, although the hospital had been free from it for a year before". But the disease which thus became developed was no doubt typhus fever, for evidence is entirely wanting to show that any of these infective or acute specific diseases have ever been known to change their nature. Some of the symptoms usually characteristic of these diseases may have been masked, or possibly absent in some instances, but their specific nature has in no way been changed. I cannot place any confidence in the statement that all these infective fevers "are excessively prone, if brought near the lying-in woman, to originate puerperal fever"; or that, by some wonderful and potent influence in a woman recently confined, all these different specific diseases are transformed into one and the same disease. Dr. Braxton Hicks appears to draw some subtle, and to me incomprehensible distinction, between puerperal diseases and puerperal fevers, and has carried this transmutation of diseases even further than those who have preceded him. He imagines that these diseases not only change their nature when they enter the system of a woman recently confined, but when they again leave her system and enter into that of another, to quote his own words, "it becomes reconverted into the zymotic form from whence it had sprung". The experience, however, which has been adduced by the different Fellows during this discussion, appears conclusive that these eruptive fevers do not become changed in any respect when developed in a woman recently confined; and I feel assured Dr. Arthur Farre correctly stated the fact when he said "I do not consider these diseases as in any way taking any part in the puerperal fever". Nor is there any evidence, such as in a scientific point we have a right to require, that the same cause can produce directly different results in different individuals, such, for example, as that mentioned by Dr. Playfair, where the same cause, included under the very vague term of "unhygienic condition" of the house, is said to have produced diphtheria in the husband, and puerperal fever in the wife. I must admit to having a mind "not open to conviction" by such tales, where the effects supposed to have been produced are contrary to everything that has been observed in the course of nature

or in disease, and when the statements rest only on the imagination of the narrator, unsupported by sufficient facts. Thirdly, all these diseases of the general system which have been adverted to, are of minor importance, as only a small minority of them prove fatal. They evidently do not constitute that serious class of diseases which come on so insidiously, continue gradually from bad to worse, and so frequently end in death, that, as Dr. William Hunter said, "treat them in whatever way you will, at least three out of every four will die". These diseases which have invested the term puerperal fever with such fearful significance, arise from the uterine system, and are included in Dr. Farre's second class; though I feel assured he has erred in supposing they are "infective fevers", or can be termed "the milder forms of infective fevers". They really constitute the serious, and too often fatal, diseases which are met with after childbirth. Let me sketch a case as illustrative of the class of diseases referred to. A healthy woman after a natural confinement, with or without hæmorrhage, remains very well for two or three days; then has a rigor, which is followed by a very frequent and feeble pulse, a feeling of great prostration and sinking, some pain across the lower part of the abdomen, with considerable tenderness when pressed; gradual swelling of the abdomen and tympanitic resonance, considerable thirst, some sickness, with loose offensive motions. Gradually the patient becomes weaker and weaker; some shortness of breath, with slight cough and expectoration, is noticed, and she sinks after two or it may be three weeks, without more marked symptoms. After death, the peritoneal cavity contains more or less turbid serum, some soft, friable lymph is deposited on the peritoneal surface, particularly in the pelvis, with more or less injection of the peritoneum or the omentum; the uterus is large; when cut into, the tissues are healthy; the inner surface covered by a mucopurulent, somewhat reddish secretion; more or less pus-like fluid is found in the uterine sinuses, which are pervious throughout to fluid injected into the pelvic veins. What is the origin and nature of an illness such as this? A great variety of names have been applied to this condition, according to the view which authors have taken of its nature. It has been called peritonitis, puerperal peritonitis, peritoneal inflammation, metropertitonitis, etc., under the belief that the effusion of turbid serum in the peritoneal cavity, the deposit of soft friable lymph on the surface, and some injection of or under the peritoneum, were unquestionable signs of previous inflammatory action. But these morbid signs differ much from the appearances of undoubted inflammation of the peritoneum, and are now recognised as exudations which result from the impregnation of the general circulation with some noxious fluid or material. It has been termed phlebitis, uterine phlebitis, suppurative phlebitis, in consequence of the pus-like fluid found in the uterine sinuses, being considered unquestionable evidence of the previous existence of inflammation in these canals. Dr. Robert Lee has recorded several similar cases under the name of uterine phlebitis, and has described the pus-like fluid as suppuration resulting from previous inflammation. But it is extremely doubtful whether inflammation can ever take place in the uterine sinuses. These canals are only channels formed in the contractile tissue itself, and lined by a delicate and apparently non-vascular membrane. It cannot be supposed that inflammation could occur in this delicate membrane; and if it occurred in the adjoining tissue it would be inflammation of the contractile tissue of the uterus itself. There has been considerable difference of opinion expressed as to whether the pus-like fluid found in these canals was the result of inflammatory action, or had been taken up from without through the open orifices of these vessels at the inner surface of the uterus. But this question has been definitely decided by the injection of the perchloride of iron into the gravid uterus to arrest *post partum* hæmorrhage. Where death has followed in these cases, the uterine sinuses have been found gorged with black grumous fluid containing an abundance of iron, and as this iron could not be formed by any secretion from these canals, it follows that it must have been taken up from the inner surface of the uterus, where it had been deposited after injection. I suspect a similar explanation will account for these supposed cases of lymphangitis; the pus-like fluid found in the lymphatics not being formed in consequence of inflammatory action in the delicate walls of these vessels, but the vessels becoming filled by the fluid being taken up from without into their canals. I have not, however, had an opportunity of satisfying myself upon this point from the careful examination of any case. Cases similar to the one sketched have also been described as puerperal fever, typhoid form of puerperal fever, low typhoid pneumonia, typhus, etc., when the symptoms presented during life have alone been taken into consideration. They have also been termed pyæmia, septicæmia, ichoremia, etc., from the symptoms and course of the illness being evidently similar to those which follow the introduction of noxious fluids into the general circulation. It is to be regretted that so much confusion has been introduced respecting the meaning of

these terms; but, so far as the present subject is concerned, it does not appear to be of much consequence which term is employed. Mr. Spencer Wells, in the opening address says: "Supposing that the blood in the uterine veins clots, softens, breaks up, is the seat of chemical and vital changes, is detained in or near the pelvis, or is carried away to distant parts, or alters the composition and properties of all the blood in the body; that we have purulent infection or pyæmia, putrid infection or septicæmia: can all this arise in a healthy woman placed in favourable conditions, if she be not exposed to some morbid poison?" Now, the first thing essential to such changes must be the presence of clots in the uterine veins or sinuses; and, as these clots have never yet been shown to exist, it is difficult to see how they could be the cause of so much that is supposed to follow. I am aware much has been said respecting the formation of clots in the uterine sinuses after parturition, and that these clots mainly contribute in many cases in arresting any escape of blood; but I am also aware that the blood during hæmorrhage does not come from these sinuses, that it is not a venous hæmorrhage by retrogression, and that these clots, about which so much has been said and repeated, have never been shown to be present in the canals themselves. Much, I am also aware, has been echoed from one writer to another as to the influence of hæmorrhage in predisposing the system to those conditions known as pyæmia or septicæmia; but the only relation between uterine hæmorrhage and septicæmia is one of sequence of events. Want of contraction of the uterine tissues allows the blood to escape from the utero-placental arteries; the same want of contraction leaves the canals of the sinuses pervious, allows noxious fluids to be taken up through their open orifices, and to be conveyed into the general circulation. These facts appear to be the answer to Mr. Spencer Wells's question. Can all the consequences which he has depicted arise in a healthy woman placed in favourable conditions, if she be not exposed to some morbid poison? There cannot be a doubt that they can arise, have arisen, and will again arise, under the conditions named. Indeed, it has always appeared to me one of the extraordinary circumstances in relation to this subject, that such questions should ever have been entertained; for every one knows that isolated cases of the most serious affections, ending in the death of the individual, every now and then occur in all parts of the country, as well as in large towns, with ladies in good health, placed in the most favourable conditions, and surrounded by every care and attention that art can devise. If the succession of these cases occurring year after year be not sufficient to answer this question, I know not what evidence can be required. The same succession of cases appears to be an undeniable answer to the supposed influence of a vitiated atmosphere of overcrowding in any institution, or the supposed benefits to be derived from cottage hospital, isolation, etc. All that is required for the production of these serious conditions of the system is a means by which these noxious fluids can be readily conveyed into the general circulation, and this means exists when the uterus remains imperfectly contracted, or afterwards becomes partially relaxed, so that the canals of the uterine sinuses continue pervious, and any fluids formed at the inner surface, or which may have been injected into the uterine cavity, may enter at the open orifices of these canals and be conveyed into the general circulation. This want of contraction or subsequent relaxation, which practically is the same thing, may occur in the most healthy individual, living in the most healthy situation and separated from actual or supposed injurious influences. Whilst the simple means to avoid the whole of these evil consequences consists in procuring and maintaining such an amount of contraction as will render these canals impervious, and prevent the passage of any fluids along them. When the want of contraction or the subsequent relaxation is considerable, a portion of the placenta is often retained or coagula form in the cavity of the body from the blood which has flowed from the pervious arteries. In these cases, the sinuses also remain patent; the usual noxious fluids, rendered more injurious by the decomposition of the retained placenta or coagula, are taken up in larger quantity when the symptoms become more marked and the course more quickly fatal. Whilst dwelling upon this cause of that serious condition of the general system arising from the uterine organs after parturition or abortion, and which I am under the impression has been much overlooked, I do not wish to infer that it is the only cause, or that other causes may not induce similar results. Severe laceration of any of the parts concerned in childbirth, followed by inflammation, inflammation arising from long-continued pressure of the head forced into the pelvis, the formation of abscesses in the cellular tissue outside the vagina or in the pelvis, and other accidents, may any of them produce the condition of septicæmia. But, except in rare and exceptional cases, I cannot think that slight lacerations are followed by such serious consequences as have been attributed to them. Laceration of the perinæum may exist at the same time as want of contraction in the

uterus, but it is the want of contraction in the uterus which admits the septicæmic condition of the system to be induced, not the laceration of the perinæum. Once the way is open to the system being impregnated with noxious fluids or materials, the effect which is produced greatly depends (1) upon the nature of the fluids introduced, some being followed by no perceptible influence, others by serious and fatal consequences; (2) upon the amount, as in the experiments upon animals; a small amount produced disturbances of the system from which the animal recovered, whilst a large amount always caused death; (3) the state of health of the individual at the time of impregnation, for what to one appears a poisonous dose to another only causes general disturbance; (4) to continual renewal of the infecting matters; as Cruveilhier remarked, the chief cause of the fatal result was, that the purulent infection was incessantly renewed from the original source. Moreover, purulent infections have not the same decided course of action as the poisons, whatever these may be, which originate any of the infective fevers or acute specific diseases; and, when we take into consideration the various factors of disease which have been glanced at, combining together in very varying proportions in women recently confined, it is not difficult to perceive that we may often meet with combinations which puzzle our powers of diagnosis, and render it impossible for us to determine the exact nature of the illness. But, because we are unable to unravel some of these puzzles, or to determine the precise nature of any complicated or obscure illness, is that any reason why we should rush into the regions of romance, or, by concocting some high-sounding word, or imagine we have solved a substantial difficulty or have explained a pathological entity? The question of contagion has been made the standing point from which many have endeavoured to maintain the existence of a special and essential disease occurring in connection with childbirth; but it would be impossible to enter upon this question at present. Some of the acute specific diseases, after being conveyed into the lying-in hospitals, have spread from patient to patient, and have thus been mistaken for an apparent epidemic. But the reliable evidence is not sufficient to show that any other disease than these infective fevers or acute specific diseases has been propagated either epidemically or by contagion. Most, if not all, the recorded histories on this point appear to admit of another explanation, and many to have their foundation in the management of the woman during the period of parturition, or from the circumstance that some minute yet essential particulars in the history of each case have been overlooked in the course of the illness. To quote the words of Dr. Fleetwood Churchill: "I rather think these accounts prove too much; for *post hoc* is not always *propter hoc*." And, so far as bacteria are concerned, these bodies, we are told, are found in the interior of the organs in every dead body, from whatever cause the death may have arisen, their development being only a question of time and temperature.

The discussion was continued by Dr. ROUTH, Dr. GRIFFITHS, Dr. GREENE, and Mr. WALLACE, when Mr. Spencer Wells was called upon to reply on the whole debate.

Mr. SPENCER WELLS: The great difficulty I have in replying to-night in the few minutes that remain before the end of the discussion, consists principally in the great number of speeches that have been made, and the extremely numerous and important topics which have been suggested by different speakers. But I think I may congratulate the Society upon the very great importance of the discussion that has been carried on, and upon the very great ability which has been shown by a great number of gentlemen who have addressed us, and by none more so than by our friend from the other side of the Atlantic, to whom we have all listened with so much pleasure and instruction to-night. I will, with your permission, while what our friend has said is fresh in our minds, refer to two or three topics which he has raised, inasmuch as that will perhaps prevent the necessity of a good deal of repetition in discussing the first three questions which were placed before the Society in the little programme by which I endeavoured to give a direction to the thoughts of gentlemen who were going to speak. There was really nothing in those questions intended in the way that Dr. Farr supposed to lead to any very definite conclusion, or to any kind of suggestion that I myself had formed any decided or positive opinion upon them; it was more with the hope that different gentlemen would take up the different questions according as their opportunities gave them means of information, and would bring before us the results of their own individual experience upon these different questions. Dr. Barker at once started the question by his statement that we must, as he says, from identity of cause, presume identity of result; or, at any rate, that, if we have a specific morbid poison to deal with, that specific morbid poison always produces the same results; or, as I think I understood him to say, that you might, from the same specific morbid poison, get very different results in different women under different condi-

tions. For instance, given a morbid poison, and that morbid poison received by a healthy woman, it would produce in her a very different condition from what it would produce if received by a puerperal woman, and by the puerperal woman, if she be in an unhealthy condition at the time. I do not know that I exactly interpreted his meaning; but, if I did, I should like to say that I would go somewhat beyond that, and assert that, if you have a specific morbid poison, it must, under all conditions, produce identity of results. I do not believe, if you inoculate small-pox in a patient, that you can produce a chancre; I do not believe, if you inoculate a chancre in a patient, you could produce hydrophobia: I believe you as certainly produce identity of result from identity of cause in the animal body as you do in the vegetable. If you sow a grain at the proper season in a fruitful soil, the seed will germinate; if you sow a grain of wheat, you do not get barley or oats. The seed germinates, and you get the same variety of vegetable produce. It is the same, I believe, with animal poisons. If you sow a seed of hydrophobia, or a seed of syphilis, or a seed of small-pox in a patient, you get a crop of small-pox, a crop of syphilis, a crop of vaccine, or a crop of erysipelas, according to the poison you have sown. It is the same with medicine. If you give a dose of castor-oil, you do not send the patient to sleep; if you give a dose of opium, you do not produce purging. All these poisons produce the same result. So with puerperal fever. If you suppose that in puerperal fever you have a specific disease different from any other fever, or from any other condition which we meet with in surgical or medical practice, you must show us some cause which will, under all conditions, produce that disease just as certainly as you produce small-pox by inoculating small-pox or scarlatina by exposing a patient to the poison of scarlatina. That carries me to the question which Dr. West started, as to what share bacteria or some other form of vegetable or animal life in its lowest form may have in producing these diseases, or carrying the poisons that produce them. I agree with Dr. West, that we are only on the threshold of this inquiry, and the question which I put before the Society was simply what relation have bacteria and allied organic forms to the pyæmic process in the puerperal state; in other words, to puerperal fever. I put that question in hopes that Dr. Burdon Sanderson or some other gentlemen, who have lately made important investigations on this subject; who have investigated the subject of splenic fever, sheep-pox, relapsing fever, diphtheria, and erysipelas, would have come here and given us the benefit of their experience. The great use of this discussion has been, that it has brought here not only the ordinary Fellows of the Society, but others from distant parts: a professor from Glasgow, whose candour and ability excited universal admiration amongst us, and a hope that some day he may occupy a still more important position than that which he now fills so creditably; and some of our past presidents, and several of our honorary Fellows and gentlemen from the provinces practising obstetrics very largely. It has also brought a distinguished physiologist, who is among us to-night, and who I was in hopes would have spoken, who has done more perhaps to prevent disease in the country than any other man—Dr. William Farr, who, by making known the incidents of diseases, and showing their causes, has done more perhaps to check preventable disease than anyone else. I hope that, at some future time, he will favour the Society with some statistical account of the prevalence of this fever in different localities. We have been favoured by a promise from Dr. Farr of another paper on the subject, so that, at any rate, the discussion has not been fruitless in good to the Society, and I trust that it will be beneficial to the profession at large. We have been favoured by Dr. Farr with an account of a recent epidemic of puerperal fever in the district in the South of London. It is only for the week ending June 19th. In the printed return of deaths, it was stated that the cause of death was given as peritonitis and fever, which were presumably cases of childbed fever. There were three cases in the week and one in the preceding week, which it was found, on investigation, were all attended by one medical man. Between the first case and the other three, he attended two cases without a fatal result, so that the first case was probably the cause. It has not yet been quite ascertained how the first case began, whether it was a case of ordinary peritonitis or not. The investigation is still being carried on. Scarlatina is still prevalent in the district; in the same week, there were nine or ten deaths registered. An interesting question arises, and is being investigated, whether the two women who escaped from childbed fever between the first and third cases by this gentleman were protected by previous attacks of scarlatina. That is a most important matter; it is still being investigated, and I hope Dr. Farr will let us know the results. I have one or two letters here, showing the very close connection of scarlatina with puerperal fever, which it will perhaps be interesting to the Society to read. One is from Dr. Jackson of Notting Hill. He gives the particulars of a case that occurred in September 1864. "The husband,

about 30, had a severe attack of scarlet fever, from which he recovered. The wife, who had, some years previously, had the fever, and who was in the end of her eighth month of pregnancy, waited upon and attended her husband day and night. In about fourteen days from the date of her husband's illness, she began to feel ill, shivering and feverish, but had neither sore-throat nor eruption. Labour suddenly and sharply set in. The child was born alive, well developed and strong, but covered with the distinct and characteristic scarlatina rash. From birth, it was restless and uneasy, and died on the third day. The mother progressed most satisfactorily, and feverish symptoms abated. Milk and lochia were well established. Some slight apparently dyspeptic symptoms were complained of at the end of a fortnight, but these gradually disappeared. The cuticle on both hands desquamated. At the end of the fifth week, she was quite well, and left town for the country." I have several other letters giving instances of the close connection which Dr. Barker has alluded to between erysipelas and puerperal fever. One is a letter from Mr. Freer of Stourbridge. "Some years since, I left home for a few days' holiday, leaving two patients expecting their confinements. The evening before I started, my father was thrown from his horse upon the forearm and right olecranon. The next morning, the arm was red and swollen. Two days afterwards, he attended both my patients, who had very natural labours, not requiring any assistance, and my father was not half an hour with either of them. Upon my return on the fifth day, I found both my patients dying, and my father's arm so much inflamed, that I had to make incisions from the elbow to the wrist. Each case had rigors in twenty-four hours. Two years since, I was engaged to attend the wife of a clergyman in her first confinement—a very fine healthy lady, aged 26. Upon entering the bedroom, I found a nurse in attendance with an erysipelatous blush and swelling upon the side of the face. Upon inquiry, she told me that, two days before, she had been in a Liverpool hospital to have the nasal duct opened. My patient was seized with rigors at the end of thirty hours, and died of puerperal fever on the eighth day. The nurse died of rapid erysipelas of the head and neck on the twelfth day." I have also a letter from Mr. Pemberton of Banbury, which I need not read through. It goes to show that, in a house where there is typhoid fever, a woman being confined may get puerperal fever; but then I do not think at all that it follows from that that the cause was the same. You may from drains get a variety of poisons, a variety of chemical and organic products thrown out, and one patient may get one and another another. You may get sulphuretted hydrogen, phosphoretted hydrogen, and a variety of chemical substances and vegetable or animal organisms of a low form, and one may affect one patient and another another. Showing how this bears upon surgical practice, and somewhat in answer to the question which Dr. Playfair started, I will read a letter from Dr. Keith of Edinburgh, giving me an account of a most remarkable series of cases in which erysipelas, with the puerperal fever and septicæmia after ovariectomy, seem to have been in close association. "On May 19th, my friend, who assists me at my operations, became uneasy for the first time about a puerperal case. The patient died on the 26th. On the 24th, he helped me at an ovariectomy, but did not see his puerperal patient till after the operation. Next morning, my patient was in a typhoid state; had bad bed-sores, all sorts of eruptions, and superficial abscesses. He recovered after this pyæmic condition had lasted a month, and had no suppuration in the pelvis. On the 30th, he assisted me at a tedious ovariectomy. The patient was quite well for six days; pulse and temperature were natural. She then suddenly shivered; the pulse rose to 170 and the temperature to 106 within a few hours, and she died five days after. On the same day (the 30th), he opened a small superficial abscess in a lady's neck. She went after this to the country; was quite well for five days, then shivered and died five or six days after of erysipelas of the head. On June 6th, he attended a simple case of natural labour in a healthy woman. She shivered the next day, and died on the 10th of septicæmia. As he went home from this confinement, he himself shivered, and was laid up with erysipelas of the face, from which he recovered. The medical man who attended the last puerperal case during the few days she lived examined for an instant a patient in the first stage of labour, four days after the death of the last case, but declined to attend her. This patient had metritis, and is now recovering, the veins of the left limb being all plugged up." I have seen this kind of thing myself in surgical practice, and it has led me to be extremely careful in getting each gentleman who attends the operations at the Samaritan Hospital to sign a paper before going into the room that he has not attended an infectious case for seven days, and has not attended a *post mortem* examination during that time. I believe that a precaution of this sort would really very much protect puerperal women from many of the infectious diseases to which they are subject, and which, I believe, are, as scarlet fever, or as measles, or as small-pox, or as erysipelas, confounded together under

the name of puerperal fever. I hope the end of this discussion will be to give more accurate names to the different conditions which have been confounded together under that one name. I should like to say a single word as to the great question of what is called homicide by infection, and the attempt that has been made, I think unfortunately, to enlist the sympathies of this Society in the protection of careless and ignorant women, who deserve the punishment they have got. I think, if a woman be cautioned by her medical man, who tells her that she has attended a woman in her confinement who has died of puerperal fever, and that, if she attend other women, she is liable to poison them, and, if she go on in defiance of this caution, to attend other women, and says, "Well, if this one die, I will give up", such a woman is not deserving of the sympathy or help of the Society. I think we should do good service if we rather stimulated the Fellows of the Society and the midwives that they employ not to carelessness, but to additional caution, teaching them not only to wash their hands, but to use disinfectants, and, above all things, to avoid any possibility of doing damage to the patients who employ them. Only this day, I heard of a case which shows that a practitioner would do well to err on the side of overcaution. I was asking about a gentleman, whom I knew some twenty years ago, who had settled down in practice in a large town. He was an able man, a gentleman in every sense of the word, a person of good character and great ability. I was told that he did not get on. I asked why, and it appeared that, in early life in that town, he was introduced to two families. He attended a lady in one of those families, who died of puerperal fever through no fault of his. He attended another lady shortly afterwards, and the people blamed him, and said that, having attended one woman with puerperal fever, he ought not to have attended a second, and he never got over it. I will not say that he deserved his fate; but certainly, if he had shown a little more caution, he would have proved the truth of the old maxim, that "honesty is the best policy". I believe the Fellows of the Society will do great good, not only to themselves, but to all whom they influence, if they inculcate, not carelessness, not protection of ignorant midwives, but instruction to those midwives that they must be over-cautious, and that, if they find themselves in danger of propagating or carrying about disease, they must err on the safe side, and say: "For a time, I will give up practice; I will not run the risk of damaging the patient who has entrusted her life to my care."

THE Sanitary Committee of Birmingham have recommended that the salary of Dr. Hill, as Medical Officer of Health and Public Analyst, shall be increased from £650 to £1000 per annum.

MEDICAL OFFICERS' FEES FOR AMPUTATIONS.—The Local Government Board have issued a general order altering the general consolidated order with reference to the payment of fees to district medical officers for amputations. Under the latter order, the prescribed fee for the amputation of a leg, arm, foot, or hand, or for the amputation of a finger or toe, in the case of a pauper, could not be paid to the medical officer, except in cases of sudden accident immediately threatening life, unless the medical officer had obtained, at his own cost, "the advice of some Member of the Royal College of Surgeons of London, or some Fellow or Licentiate of the Royal College of Physicians of London", before performing the operation, and produced to the guardians a certificate from such Member, Fellow, or Licentiate, stating that in his opinion it was right and proper that the amputation should be then performed. The object of the provision is obviously to save the pauper from so serious an operation as amputation, which in after-life may be prejudicial to him, unless a second opinion of some competent person is first obtained as to its necessity. So far, there can be no objection to the provision; but the requirement that the certificate shall be given by some person holding a license or degree of the Royal College of Surgeons of London, or Royal College of Physicians of London, has frequently, for obvious reasons, been the subject of complaint. Under the new regulation, the certificate may be given by any person registered under the Medical Act, 1858, who is qualified by law to practise both medicine and surgery in England and Wales, under a diploma, degree, or license granted by competent legal authority in Great Britain or Ireland. We would express our decided opinion that, having regard to the small stipend paid in too many instances to district medical officers, the department might have gracefully availed themselves of the opportunity of directing that in future a fee (say of one guinea) should be paid to the consultee, and that such outlay should be paid by the guardians, instead of throwing the cost on the medical officer, the latter being empowered to apply to the guardians or to the relieving officer in cases where he should perceive the necessity of obtaining an opinion.

British Medical Association.

FORTY-THIRD ANNUAL MEETING.

EDINBURGH—August 3rd, 4th, 5th, & 6th, 1875.

List of Hotels and Lodgings at which Visitors can be accommodated.

Members intending to be present are requested to apply at once to the addresses given.

ADDRESS.	ACCOMMODATION.	CHARGES.	ADDRESS.	ACCOMMODATION.	CHARGES.
Princes Street. (Central.) 83. Bedford Hotel	For from 10 to 12 persons	6s. 6d. a day for bed, breakfast, and attendance.	Montgomery Street (North-East.) 16. (Main door) Mrs. Boyd	Dining-room and double bed-room, with 2 single bed-rooms	£2 2s.
99 } Dijay's Family 100 } Hotel 101 }	Bed-room - Breakfasts Attendance Table d hôte	from 2s. 1s. 6d. 4s. 6d.	West Stanhope Place. (West.) 4. Margaret McNab	Dining-room and 2 bed-rooms	£1 10s.
109 The Palace Hotel & 110. Macgregor's Royal Hotel	50 Bed-rooms, a day or two's notice required Sitting-rooms	from 6s. to 2s. 6d. per day, accrdg. to floor. from 12s. 6d. to 6s., according to floor. The usual charges of a first-class hotel.	Hanover Street. (Central.) 25. Albert Hotel	Parlours Single bed-rooms Double bed-room Attendance	4s. and 5s. a day. 2s. 6d. per night. 5s. per night. 1s. 6d. per day.
George Street. (Central.) 120 } Veitch's Private 122 } Hotel	Ground floors—Sitting-room, bed-room, and dressing-room Drawing-room floors—Sitting-room, 2 bed-rooms, and dressing-room	£3 3s., or 10s. 6d. per day. £5 5s., or 16s. 6d. per day.	Rutland Street. (West.) 26. Mrs. Mitchell	Dining, drawing, and 5 bed-rooms, with dressing-rooms Separately	£6 per week. £2 2s. and £3 3s.
137. Mrs. Hart	Parlour floors—Same as above Bed-rooms Drawing-room and 2 bed-rooms Breakfast and attendance	£3 3s. or 10s. 6d. per day from 2s. to 5s. per night £4 4s. per week. 2s. 6d. a day for each person.	Coates Place. (West.) 3. Mrs. Gray	2 sitting-rooms and 3 or 4 bed-rooms	£5 5s. altogether.
Hope Street. (West.) 11. Mrs. Scott 9. Mrs. Austino 5. Mrs. Banner 6. Mrs. Stewart 8. Mrs. Watson 14. Mrs. Davidson	1 sitting and 2 bed-rooms 2 sitting and 2 bed-rooms 1 sitting and 2 bed-rooms 2 sitting and 4 bed-rooms 2 sitting and 3 bed-rooms 1 sitting and 1 bed-room	£4. £2 5s. £1 5s. £5. £3 5s. 1s. per week.	West Register St. (Central.) Café Royal Hotel	24 bed-rooms	Bed and attendance per night 3s. Breakfasts from 2s. 6d.
Hope Terrace, Whitehouse Loan South) 5. Mrs. Galloway	Large sitting-room and two bed-rooms	£3 for 3 or 4 persons, if 2 persons, less.	Charlotte Square, (West.) 25. John Middlemiss	Sitting-room and 6 bed-rooms	£4 14s. 6d. per week. 2s. each for breakfast.
Grosvenor Street. (West.) 5. Mrs. George Millons	Dining-room and 2 bed-rooms Drawing-room, 3 bed-rooms, and dressing-room	£3 3s. £1 4s. Extra bedrooms 10s. Coal and gas extra.	Fettes Row. (North.) 7. Miss Skirring	Board and lodging	£2 2s. per week.
West Maitland St. (West.) 6. Miss Gordon	Dining, bed, & dressing-rooms Drawing and 2 bed-rooms Extra bed-rooms	£2 10s. £3 3s. 10s., coal & gas extra	Dundas Street. (North.) 14. William Gunn	Dining-room, drawing-room, and 2 bed-rooms	£3 3s. per week.
8. Mrs. Robertson	Drawing and 2 bed-rooms Parlour and several bed-rooms	£3 3s. According to arrangement.	Archibald Place. (South.) 3. Mrs. Milne	A few rooms vacant.	
7. Mrs. Garrick	2 sitting-rooms and 4 or 5 bed-rooms	Altogether £3 3s., or bed-rooms 10s. a week each. £2 each floor. £1 10s.	Stafford Street. (West.) 15. Mrs. Wybber 23. Mrs. Dickson 25. Mr. Nisbet 29. Mr. Scotland 16. Mr. Buchanan 4. Miss Mills	2 sitting and 3 bed-rooms 2 sitting and 3 bed-rooms 1 sitting and 5 bed-rooms 1 sitting and 2 bed-rooms 1 sitting and 2 bed-rooms 1 sitting and 1 bed-room	£4 4s. £3 3s. £3 10s. £1 10s. £2 10s. £1 15s.
10. Mrs. Maxwell 15. Mrs. Milne	2 sitting-rooms and 1 bed-room 1 parlour and 2 bed-rooms		Duncan Street. (North.) 10. Miss Christie	Dining and large bed-room Parlour and bed-room	£1 10s. £1.
Randolf Cliff. (North-West.) 1. Mrs. Henderson	Sitting and 2 bed-rooms Sitting & double-bedded room	£3 3s. £2.	Pitt Street. (North.) 13. Miss Maitland	Sitting and bed-room Large sitting-room & bed-room	13s. a week. 15s. a week.
Gladstone Terrace. (South.) 6. Mrs. Thomson	Parlour, bed-room, and bed closet	1s. for two gentlemen a week.	Glengyle Terrace. (South.) 4. Alfred Wright	Bed and breakfast for one for a week	No charge to be made.
Melville Place. (West.) 11. Mrs. MacConochie	Sitting-room and 2 bed-rooms	£2 10s. per week, nothing extra. £2 per week, nothing extra.	Albany Street. (North.) 2. Mrs. Bryce 2A. Mrs. Caley 5. Mrs. Milne 9. Mrs. Waterstone 11. Mrs. Smith 16. John S. Smith	2 sitting and 2 bed-rooms 1 sitting and 1 bed-room 2 sitting and 3 bed-rooms 1 sitting and 3 bed-rooms 3 sitting and 6 bed-rooms Drawing, dining, parlour, and bed-rooms Sitting-room and 3 bed-rooms Dining, drawing, and bed-rooms	£2 10s. £1. £2 17s. £2. £7 for the whole, each £2 15s., £2 5s., and £1 10s. £1 15s. All £3 13s., or bed-rooms 10s. ea. pr. wk
11. Mrs. Macfarlane	Sitting-room and bed-room		20. Mrs. Cooper 26. Miss Macfarlane		
Pannure Place. (South-West.) 18. John Stewart	Parlour and bed-room in private family. No children	£1 5s.			

List of Hotels and Lodgings (continued).

ADDRESS.	ACCOMMODATION.	CHARGES.	ADDRESS.	ACCOMMODATION.	CHARGES.
Albany Street. (Continued.)			Castle Street. (Central.)		
38. Mrs. Bowe	Drawing, bed, & dressing-rooms Dining-room and bed-room	£2 10s. £1 10s.	57. J. Macdonald	Drawing-room floor Sitting-room and 3 bed-rooms	£4 4s. Attendance 2s. each. Breakfast 2s.
39. Mrs. S.	1 sitting-rooms and 5 bed-rooms	From 12s. to £1 10s.	47. Mrs. Macindoe	Drawing-room & 2 bed-rooms Dining-room, with 2 bed-rooms	£2. £1 10s.
43. Miss Strachan	2 sitting-rooms and 5 or 6 bed-rooms	£2 10s., or bed-rooms 10s. each a week.	20. Miss Cockburn	Drawing-room & 3 bed-rooms	£3 13s. 6d.
35. Mrs. Jackson	3 sitting and 8 bed-rooms	£2 12s. 6d.	11. Miss Witherstone	1 large bed-room	15s. a week.
46. Mrs. Warner	Sitting and 2 or 3 bed-rooms	£2 5s.	24. Miss Struthers	Drawing-room & 2 bed-rooms	£1 10s. a week.
51. Mrs. Creall	Dining and 2 bed-rooms Parlour and 4 bed-rooms	£2 2s. per week. £1 10s. per week.	Maitland Street. (West.)		
Dublin Street. (North.)			23. Mrs. Newby	1 sitting and bed-room 1 parlour and 3 bed-rooms	£1 10s. £2 10s.
33. Mrs. Glendinning	1 sitting and 1 bed-room	12s. to 16s. a week.	23. Mrs. Ransom	1 sitting and bed-room 1 parlour and 3 bed-rooms	£1 1s. £2 2s.
15. Miss Black	1 sitting and 1 bed-room	£2 2s.	2. Miss Davidson	2 sitting and 4 bed-rooms	£5 5s.
14. Mr. Stewart	1 sitting and 2 bed-rooms	No charge given.	3. Mrs. Malcolm	1 sitting and 2 bed-rooms	£2 13s. 6d.
28. Mrs. Elphinstone	1 sitting and 2 bed-rooms	£2 10s.	4. Mrs. Hay	1 sitting and 3 bed-rooms	£2 15s. 6d.
33. Mrs. Caravanna	1 sitting and 1 bed-room	23s. per week.	6. Mr. Anderson	2 sitting and 4 bed-rooms	£3.
15. Mrs. Taylor	1 sitting, with 2 bed-rooms Several rooms	30s. at a moderate charge.	11. Mr. Gowans	2 sitting and 4 bed-rooms	£3 13s. 6d.
Alva Street. (West.)			16. Mrs. Massey	Will probably have several rooms 1 sitting and 2 bed-rooms	£2 5s.
2. Mrs. Casey	2 sitting and 2 bed-rooms	3s. 6d. and 2s. 6d. per night. Bkfst. 1s. 6d.	18. Mrs. Bell		
5. Mrs. Stewart	Drawing-room, dining, and parlour floors	£2 12s. 6d., £2 2s., and £1 5s. each.	Rutland Square. (West.)		
6. Mrs. Dudgeon	Dining-room and 2 bed-rooms	£2 10s., other bed-rooms 10s. ea. a wk.	22. James Turner	Sitting-room and 2 bed-rooms Sitting-room and 2 bed-rooms	£2 5s. £2 3s. This to include attendance. Breakfast 1s. 6d.
12. Mrs. Peddie	Sitting-room and 4 bed-rooms	£3 13s. 6d. a week.	24. Mrs. Goldie	2 sitting and 7 bed-rooms	£7 7s., extra bed-room 10s.
16. Mrs. McFadyen	Drawing-room & 2 bed-rooms	£2 10s.	Manor Place. (West.)		
18. Miss Ritchie	Drawing & dining-room floors	£2 10s. and £2 2s. each.	6. W. Stewart	Drawing-room and 3 bed-rooms Dining-room and 2 bed-rooms	£3 13s. 6d. £2 12s. 6d. Breakfast 1s. 6d. each. 1s. 6d. per night.
Atholl Crescent. (West.)			13. Mrs. Campbell	4 or 5 good bed-rooms	
4. Mrs. Inglis.	Dining-room and 2 bed-rooms Drawing-room and 3 bed-rooms Parlour and 3 bed-rooms Bed-rooms at the top	£3 per week. £4 per week. £3 per week. 10s. each. Breakfast an attendance 2s.	Melville Street. (West.)		
19. Mrs. Francis	Dining-room and 1 bed-room Drawing-room and 2 large bed-rooms Parlour and 3 bed-rooms Top flat - 4 bed-rooms Breakfast and attendance	£2 2s. per week. £3 13s. 6d. per week. £2 12s. 6d. per week. 7s. 6d. per week each. 14s. per week.	39. Thomas Hardie	Drawing-room and 2 bed-rooms Dining-room and 2 bed-rooms Parlour and 2 bed-rooms Linen and gas- 1 sitting and 2 bed-rooms 1 sitting and 2 bed-rooms 2 sitting and 7 bed-rooms 1 sitting and 2 bed-rooms	£4 4s., with attendance. £3 3s., with attendance. £2 2s., with attendance. Extra. £3 3s. £3 3s. £3 3s. £5 5s. for the whole. £3 13s. 6d.
Forres Street. (West.)			4. Mr. Kerr		
2. Gumm's Private Hotel	1 large drawing-room and 5 bed-rooms (2 of them double). Can accommodate 9 or 10	£5 per week. 2s. 6d. for breakfasts and attendance.	48. Mrs. Finlayson		
Coates Crescent. (West.)			59. Mrs. Drummond		
12. Mr. Gall	2 sitting and 4 or 5 bed-rooms	£4 10s.	43. Mr. Fraser		
Queen Street. (North.)			Shandwick Place. (West.)		
42. Mrs. E. R. Constable	Drawing-room and 2 bed-rooms Dining-room and 2 bed-rooms	£3 10s. £2 16s.	11. } Royal Alexandra 12. } Hotel 13. }	10 or 12 bed-rooms (to be reserved)	Breakfast, lodging, and attendance, 7s. per day. £1 15s. £9 9s. £7 15s. £3 13s. 6d.
Duke Street. (North.)			10. Miss Richardson	1 sitting and 1 bed-room	
24. Mrs. Watson	1 sitting and 1 double bed-room	£1 10s. or £2 for two.	6. Miss Beck	3 sitting and 7 or 8 bed-rooms	
19. Mrs. Taylor	2 sitting and 2 bed-rooms	£3 3s.	3. Mrs. Gidden	3 sitting and 7 bed-rooms	
22. Miss Turnbull	1 sitting and 1 bed-room	£1 5s.	2. Mrs. Hardie	1 sitting and 3 bed-rooms	

Dr. GILLESPIE, of Edinburgh, has requested us to state that, as he has had numerous applications from Members to procure accommodation for themselves and families, he must decline to undertake such a responsibility; but he has, at very considerable trouble, formed the foregoing list of Hotels and Lodgings, with Addresses of those to whom Members visiting Edinburgh at the ensuing Meeting can apply.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 24TH, 1875.

ARMY MEDICAL REGULATIONS.

THE Code of Regulations for the Medical Department of the Army, drawn up by the Royal Commission, of which Mr. Sydney Herbert was Chairman, and which was published in 1859, has been long out of print. A new edition, embracing the changes introduced into the department, has been for some time anxiously looked for, not only by army medical officers, but by militia and volunteer surgeons, who may at any time be called on to act with regular troops, and who are quite at sea for want of an authorised guide to direct them in their duties.

The code of 1859 was complete. It defined the duties of administrative, staff, and regimental medical officers; the organisation of general, regimental, and field hospitals; the duties of attendants and nurses; the sanitary measures and precautions for preserving the health of troops. It regulated the duties of sanitary officers attached to armies, and prescribed rules for drawing up sanitary and other reports. To this code was prefixed a lucid letter from Mr. Sydney Herbert, explaining the nature and the principles of the changes introduced by the new code. An appendix was added, containing the dress-regulations of army medical staff-officers. In short, it was what it professed to be, an authoritative exposition of the rank, privileges, pay, and duties of army medical officers of all grades, in all places (India excepted) and under all circumstances, drawn up in a businesslike form in clear language, forming a goodly volume of 249 pages.

As we have said, this code has been out of print for a long time; and a new edition, embodying the recent and impending changes in the organisation of the service, has been anxiously looked for. The expected "code" has at last appeared, in the shape of a flimsy-looking pamphlet of eleven pages, without even a paper cover. Its meagre contents in no way belie its mean exterior. There is nothing on the face of it to enable us to trace its parentage, or even to show what department is responsible for its issue. This much, however, is only too apparent: it is the most unbusinesslike, the most ill-written, confused, and contradictory work, in the shape of an official document, that has ever come under our notice.

Our first care was to look for an authoritative explanation of the present position of medical officers "attached" to regiments, but we looked in vain. There is not a word on the subject from first to last, with the exception of some ill-written and altogether inconsistent and contradictory rules for the way in which the medical officer is to carry on the duties of his present anomalous and unsatisfactory position, to which we shall revert presently. Perhaps, when we consider that the War Minister himself cannot say precisely what the position of an "attached" medical officer is, it is unreasonable to expect a confused and bewildered subordinate to be better informed. The Secretary for War, when asked in the House to say whether a medical officer so placed is not a regimental officer, at one time said he is, at another time that he is not.

Turning to the rules for his guidance, we are told in the second paragraph of the section that the attached officer is to attend the sick of the corps in the station hospital, and to be available for any other professional or departmental duty for which he may be detailed. There is not a word to show how this rule is to be carried out when the "station hospital" is, as it often must be, at a distance from the regi-

ment to which he is "attached". The third paragraph we must quote *in extenso*, as a specimen of the slovenly and unintelligible composition of these regulations.

"3. He will attend parades of his corps when inspected by a general officer, but will not be required to attend any other unless professional assistance is wanted; and on such occasions it will suffice for the medical officer to remain within call, in the event of his services being suddenly required; but, when attached to Royal Artillery, he must be on the ground when firing at target practice is going on."

It will be seen that by this rule he is to attend a parade when professional assistance is wanted, and he need not attend it, for in the next line he is told he need only be within call if his services are needed.

The fifth paragraph directs that all sick soldiers are to be sent to the "station hospital", excepting such as do not require hospital treatment, who are to be dealt with by the "attached" medical officer in the "inspection-room" of the barracks; while in the very next paragraph he is forbidden, without any qualification, to treat any soldier out of hospital.

Paragraph 7 directs him to attend all officers "if unattached to the corps residing within the prescribed radius". What is the prescribed radius? Is it a fixed quantity, or is it to be determined by the officer in command, or how? There is not a word of guidance here. Old officers understand the term well enough, but scores of those who have entered the service of late years are quite ignorant of its meaning. It is added, that he is to attend "such of their (the officers') families as are entitled to medical attendance". But the medical officer is left to find out as best he can who are and who are not entitled to his attendance.

We have seen that the sick are to be treated in the station hospital; yet the medical officer is directed to keep all his medical records, instruments, etc., in the barrack inspection-room already mentioned.

Turning to the regulations relating to station hospitals, we see the same confusion and contradiction arising from a futile attempt to preserve the "regimental system" and yet to carry out the new. In the third paragraph of this section, we are told that the sick in "station hospitals" will be grouped regimentally, and, as far as practicable, treated by the medical officers attached to their respective corps; while in the next sentence it is said that it will be competent for the medical officer in charge of the station hospital "so to appropriate the wards and distribute the patients of the different corps as to facilitate the classification and treatment of cases of disease and injury". Here we have power given to one officer to deal regimentally with the sick, and to another in the same hospital to classify and distribute them as he may see fit.

It will be seen that these regulations fitly reflect the present chaotic state of the department; but surely the medical officers of the army and the auxiliary forces may reasonably complain that the publication of these regulations was not delayed until the scheme of reorganisation which has been so long incubating was completed, and that the task of compiling them was not given to some one capable of drawing them at least in intelligible language.

HOSPITAL GOVERNORS, PHYSICIANS, AND GENERAL PRACTITIONERS.

A SPECIAL general meeting of governors, held at the Chester Infirmary on the 9th current, discussed two questions whose importance is quite as great to the whole profession, and to the supporters of infirmaries in general, as to the parties more immediately concerned. The first of these questions referred to certain privileges which it is customary in the case of many hospitals to attach to the payment of subscriptions to the funds; and the other to the appointment of a physician to the infirmary. As to the former question, it was proposed and carried that a considerable reduction should be made in the number of recommendations of in- and out-patients, which subscribers to a certain amount have hitherto had the power of granting, in order to the receipt of the

benefits of the charity. This was done on the representation to the subscribers, by the board of management, that the greatly increased cost of all the articles required for the cure of the sick, no longer justified the board in accepting so many recommendations as formerly from individual subscribers; and was the local settlement of a matter of detail, to which we should not have referred here, except for the general interest which it excites. Why, it may be asked, is it necessary that subscribers should be granted privileges of recommendation at all? If an infirmary be instituted for the purpose of relieving the sick and hurt of a given district, why should not all proper cases be admitted on the certificate of a medical man, or on application to the infirmary authorities? Surely this plan would work better than the present system, which compels the sick or their friends to undergo the trouble and inconvenience of sending to a subscriber in order to obtain a recommendation for admission. In many provincial infirmaries, we believe, the admission of acute medical cases is a comparatively rare occurrence; and we have been informed that the medical men have attributed this fact to the compulsion laid on the sick to be supplied with a subscriber's recommendation as much as to any other cause. Besides, it seems to us that the system is a very questionable one as regards the subscribers themselves, whose sympathies it ought to be possible to evoke, and whose subscriptions ought to be obtainable, without detracting from the worth of the one or diminishing the value of the other, by the granting of what looks like an equivalent in the power of giving recommendations. We cannot believe that the sympathies of subscribers require that this inducement should be held out to them; nor do we think that withholding it would diminish the liberality with which our infirmaries are at present supported; while the advantages to the sick of immediate admission to a place where they can be well cared for are too great to require specification. Nor would the abrogation of this power of subscribers be without precedent. In some of the largest hospitals in the kingdom, for instance, the mode of procedure which we are now advocating obtains, and works so well that there is no talk of returning to the other plan. Besides which, as everyone who has any acquaintance with the subject well knows, the rule is frequently broken, even where it exists, by medical men, not subscribers, sending in suitable cases, or by the act of the house-surgeon or other official. It does not appear that the entire abrogation of a rule which is of so questionable a character, and which is besides so freely broken, would cause any loss to any one.

The second question was of even more importance, and we heartily congratulate the supporters of the Chester Infirmary on the manner in which it has been settled. Dr. Waters, who has been physician to the hospital for twenty-five years, having resigned, the question of appointing his successor came to be discussed. According to the laws of the institution, as we pointed out on a former occasion in these columns, graduates in medicine of certain universities are eligible to the office of physician. It would appear, however, that, though this is so, the custom in force at Chester for many years past, as seems also to be the case at some other institutions whose laws are as liberally framed, has been more stringent than the rule. Thus it seems that the invariable use and wont at Chester has compelled the holder of the office of physician to the hospital to be not only a graduate in medicine of one of the universities named in the rule, but has also required that he should not be in practice as a general practitioner. We need not go into the cases quoted by some of the speakers at the meeting as authority for maintaining the custom as it is stated to have been; suffice it to say that the names of one or two gentlemen were mentioned, in whose case the fact that they were in general practice either prevented their being elected to the office of physician, or compelled them to restrict their practice to pure physic afterwards. There was not, indeed, perfect unanimity on the subject, the statements of some of the speakers being called in question by other members present. But two things seem certain, and obviate any necessity to discuss the matter any further. The first is, that the rule of the hospital, while it compels the

three physicians to be graduates of certain specified universities, says nothing whatever about their confining their practice to pure medicine. And the second seems to us to be, that there is no sound reason, in the nature of things, why the custom, if it have subsisted up to the present time, should continue. As we remarked some time ago, when a question very similar to this was being discussed in reference to some changes which were proposed to be carried out at the Bradford Infirmary, there appears to be no more reason that medical cases at infirmaries should be treated by pure physicians than that surgical cases should have the services of pure surgeons. This view was strongly advocated at the Chester meeting, not only by many influential lay members of the Board of Management, but also by the medical staff, who were stated by the senior physician to the hospital to concur in it; and with such support there is no wonder that it was all but unanimously adopted. We have formerly expressed our opinion on the general question, and we understand that what we then said has largely influenced the present result. We cannot refrain from congratulating the profession that a custom which dates from a time when the general practitioner was in every respect a much inferior man to the physician proper is gradually dying out, as it comes to be recognised that the distinction no longer exists; and, though we by no means disapprove of, but, on the contrary, highly approve of, some amount of specialisation of medical work, we are glad to find ourselves in harmony with what this Chester decision seems to indicate as becoming the general feeling of the profession, that such specialisation is to be obtained rather by a process of gradual evolution than by any arbitrary line of demarcation, which has sometimes in the past prevented the best men from filling the most important offices.

THE ABUSES OF HOSPITAL SATURDAY.

ON Saturday, the 17th instant, there was a meeting of the Board of Delegates to make final arrangements for Hospital Saturday, which is to be held on the 31st. The meeting was attended by numerous representatives from places of business and working men's clubs. A statement was made by the chairman, Captain Mercier, to the effect that the prospects of this year's collection were satisfactory, that the managers hoped to be able to reduce the expenditure to less than one half of that which was incurred last year, and that they felt confident that the amount received would be at least three times as great as on the first occasion.

The plan of distribution is to be the same as before. "Each institution", it was announced, "would receive to the uttermost that to which its merits entitled it, under the following heads, viz.: amount of relief actually given, economy practised, and efficiency attained". Dispensaries are to be placed on a footing of perfect equality with the hospitals. Collecting boxes have for some time past been placed in post-offices, railway stations, and other public buildings; and we understand that, on the 31st, public collecting tables will be placed in five hundred leading thoroughfares of the metropolis; and it is proposed that each table should be presided over by a lady. Indeed, there appears to be the same intention which was so conspicuous last year, of making a general appeal to the public on behalf of the working men. Instead of the collection being a contribution to the hospitals from the artisans themselves, it is, in a great measure, an appeal from the working men to the general public for pecuniary assistance. If it is to have this character, why should it be separated from Hospital Sunday? One Committee and one organisation might serve for making an appeal to all classes of the community on behalf of the distressed working man. And it certainly appears a misnomer to call a collection which is made by ladies from all the passers by in our great thoroughfares a working man's Hospital Saturday Fund.

We are far from wishing to discourage charity, and are glad to see any manifestation of sympathy which the wealthy show towards their poorer neighbours; but this movement has been spoken of as a great effort on the part of the working classes to assist themselves; whereas it appears to us that there is, on the contrary, a danger of its encouraging

them in the habit of begging for help from others. We cannot say that it appears to us a matter of congratulation that so many large firms and employers of labour are taking part in this movement, and encouraging their men to contribute towards it. We have always maintained that workpeople in the receipt of high and regular wages ought to provide for their own medical necessities: either by paying in the ordinary way the small fee of a general practitioner during illness, or else by subscribing to some provident medical institution. Instead of this, by the general collection which is now being made on behalf of the working class, they are being encouraged in the idea that the well-to-do among them, as well as the really needy, have alike a right to hospital treatment. A great injustice is thus done to the general practitioners, whose patients are drawn away from them; a stress of work is thrown upon the hospitals, which they were never intended to bear; while the consultants, who are willing enough to give their services to the sick poor, are called upon, somewhat imperiously, to prescribe for those who present a Hospital Saturday letter, but who may not have given one farthing to the fund themselves, while they are altogether above the level of gratuitous assistance.

So far as the movement indicates a growing feeling amongst working men that they ought to contribute to their own medical wants, we rejoice at it. But we regret that this wholesome feeling is being misdirected. We believe that, if it succeed, as its promoters anticipate, it will tend to increase the abuse of hospitals, which is now so much complained of; that it will hinder their reform; and that it will injure rather than improve the *morale* of the class for whose benefit it is intended.

DR. LANGDON DOWN, the founder and first president of the new Thames Valley Branch of the British Medical Association, gave, last week, a most hospitable and brilliant reception to some hundreds of the local profession and their wives at his model training institution for imbeciles at Normansfield. This brilliant and generous inauguration of the new Branch can hardly fail favourably to influence its social progress.

DR. LUSH, in a speech of considerable ability, to which the reports do great injustice, has this week advocated the claims of the Army Medical Department in the House of Commons. The debate was mainly a recapitulation of a good deal that has already been said, and we are bound to add that Mr. Hardy did not show to advantage. He is well capable of taking a much broader and more statesmanlike view of the facts, and of saying Yes more gracefully, or No more logically and convincingly. His grand point—that medical officers must like the army well enough, or they would retire from it earlier—is the sort of fallacy which can hardly serve anything else than the momentary purpose of a debate. Even if it were true in any sense, or had any force in deciding the question at issue—and it is neither true nor forcible—it would lose all meaning in the face of the fact, which Mr. Hardy well knows, that part of the complaint is, that retirement-allowances are so poor that men prefer to stay on and half-starve in the army, rather than to retire when the energy and push of the first maturity of manhood are long past, to starve wholly on the Government pittance. The main complaints are, that Promotion is too slow, Retirement too little tempting; and that Forage and other allowances have been harshly, and in some instances by a breach of faith, curtailed. Is it anything more than a bad joke for a minister to say, "Promotion is slow because men don't retire; and they don't retire, I suppose, because they like the service"? Supposition has no place in the argument. They do not retire, as Mr. Hardy knows, because they cannot; and the slowness of promotion makes men unwilling to enter. Hence overwork of those who are in the service, continued grumbling, and increasing discontent. No doubt it is largely a question of money, as well as of position; but that is the case throughout the country. It is, moreover, not wholly a money question.

THE MORTALITY OF ANÆSTHETICS.

AN immense body of evidence, which was collected in these columns in 1870-72, proved, as we think, indisputably, the superiority of ether in point of safety over chloroform or bichloride of methylene for the purposes of anaesthesia. The result of that mass of evidence has been to introduce the inhalation of ether largely into British hospitals, whence for the last twenty-five years it had been almost wholly banished. Among the hospitals where it was thus introduced was St. George's Hospital, where Mr. Pollock, having seen it used, has become lately an enthusiastic advocate of its employment. His enthusiasm is well founded, although a little too exclusive. It has been shown by the tables furnished to us by the Registrar-General, and by our own records, that the deaths from chloroform in this country are nearly one per month. Chloroform, according to the published figures of Mr. Morgan, is eight times as dangerous to life as ether; but the use of ether is not devoid of danger. Of the two deaths published this week, one, which is attributed in the public reports in the papers to chloroform, was really due to the use of bichloride of methylene, an agent which seems to be even more dangerous than chloroform. Ether administered by the American method is nearly as rapid in its action as chloroform, and it is so much the more safe, that the reasons which impede its general substitution for chloroform are not easily to be understood. The statement that ether is absolutely safe is, however, by far too unqualified. It is not physiologically probable that any anæsthetic can ever be introduced which is absolutely safe; certainly none is at present known. Mr. Hutchinson pointed out two years since, in our pages, that ether seems to have dangers peculiar to itself when administered to aged people; and a case which we report to-day further indicates that safety cannot be guaranteed with certainty for ether with patients of any age; but it is certainly less liable to produce death than chloroform. We would refer to an abstract of a series of abstracts in the *London Medical Record* for May 1873 of the mass of evidence on the subject, by which we produced what was called at that time "a chloroform panic", which had the happy effect of largely introducing ether into use in this country. Its use is steadily extending; and, except nitrous oxide, which is preferable and safer for short operations, such as extraction of teeth, ether is at present the anæsthetic which deserves the most general use.

THREATENED DEATH DURING THE ADMINISTRATION OF ETHER.

DR. FREDERICK HAYNES of Leamington writes to us:—Some few months ago, a patient, to whom I was administering ether, nearly died. The ether used was pure sulphuric ether. The patient was a girl, aged 14; and the anæsthetic was administered for an operation for necrosis of the tibia (Mr. Marriott operating). A fluid-ounce was poured on to a sponge, wrung out of hot water, placed in a leather cone, and was given with as little air as possible when first administered. The patient had been under the influence of ether for about ten minutes, when she suddenly became blue in the face, and the jaws closed with a spasm, and the pulse could not be felt at the wrist. I immediately called the attention of the staff to her condition; pulled out her tongue, and turned her quickly on her left side, that being the readiest method for artificial respiration. She gave a few gasps, vomited, and eventually recovered. I report this case, as it shows ether not to be free from danger, even when pure sulphuric. Though I have often administered chloroform, and ether pretty frequently, I never had a case which gave me so much anxiety. The patient was anæsthetised and ready for operation in two minutes.

THE ROYAL COLLEGE OF SURGEONS' TEST.

A CORRESPONDENT writes to us with reference to the "pass and pluck lists" of the Royal College of Surgeons, published in last week's *JOURNAL*: "The following list shows the position occupied by the eleven medical schools of the metropolis. The percentage of rejections at the primary and pass examinations have been added together, so

that the number appended to each school shows the number of rejections from an average of two hundred candidates. It will be seen that one of the largest and one of the smallest schools have run a very close race for the first place. St. Mary's has lost the post of honour by less than half a length, or, to be more precise, by the third-part of one candidate. 1. Guy's, 39; 2. St. Mary's, 39.3; 3. University College, 40.1; 4. St. Bartholomew's, 42; 5. London, 59.2; 6. St. George's, 59.4; 7. Middlesex, 67.2; 8. King's College, 73.7; 9. Charing Cross, 74; 10. St. Thomas's 75.9; 11. Westminster, 108.5."

MEMORIAL TO MR. PRESCOTT HEWITT.

At a meeting held at St. George's Hospital on July 17th Mr. Caesar Hawkins in the chair—the following resolutions were passed. 1. Moved by Mr. Charles Hawkins, and seconded by Mr. Henry Lee: That this meeting takes the opportunity of Mr. Prescott Hewett's resigning the office of Surgeon to St. George's Hospital to present him a memorial in recognition of his services in the advancement of medical science, and of the influence his character has had on the profession and the public. 2. Moved by Mr. George Pollock, and seconded by Mr. Brudenell Carter: That a committee be appointed to carry out the above resolution; that subscribers be restricted to members of the medical profession, and the subscription be limited to one guinea from each person. 3. Moved by Sir James Paget, and seconded by Mr. T. Holmes: That the Chairman be requested to forward the resolutions to Mr. Prescott Hewett. 4. Moved by Dr. Blandford, and seconded by Dr. Barnes: That Mr. Charles Hawkins be requested to act as Treasurer, and Mr. James Rouse as Honorary Secretary to the Committee. On the motion of Dr. Pitman, a vote of thanks was carried to the Chairman for presiding. All St. George's Hospital men, and many others who have a personal regard and professional esteem for Mr. Prescott Hewett, will concur, and may well be pleased to take part, in this testimony of respect to the distinguished Senior Surgeon of St. George's, whose career has been marked by solid work, much professional reserve, and a nice sense of propriety in all the affairs of life.

HEALTH AND THE WEATHER IN PARIS.

OUR Paris correspondent writes, under date July 18th:—The continuous rain we have had for some time seems to be telling on the general health of the public; for in the mortuary report for the past week (902), there has been an increase of 90 deaths over the previous week (812). As usual whenever there is the slightest fall of temperature, pulmonary affections furnish the largest number of fatal cases. But, while winter affections are on the increase, those peculiar to summer are on the increase also. These are to be met with in the form of choleraic diarrhoea or cholera, from which there have been 28 deaths, against 16 the week previously. Croup and diphtheria are on the decline.

THE GENEVA CONVENTION.

THE death has just taken place of General Dufour, who presided, in 1864, at the meetings in Switzerland of the European delegates who framed the well known international "Geneva Convention" to secure the neutrality of wounded soldiers in time of war. There can be little doubt that the influence of General Dufour, who was a man of remarkable character in many respects, greatly contributed to the acceptance of the treaty by the great European powers, especially by France. The general, who was born in Constance in 1787, served for many years in the French army under Napoleon the First. He returned to Switzerland when the Empire fell, and eventually became commander-in-chief of the troops of the Swiss Confederation. At one time, Napoleon the Third served under him in Switzerland, and to the last of the Emperor's life he retained his friendship and confidence. General Dufour, who was a highly scientific soldier, as the ordnance maps of Switzerland prepared by him—the best, perhaps, in Europe—sufficiently testify, always maintained that not merely the principles, but that all the particular provisions, of the Geneva Convention for the Care of the Wounded in

Time of War, when rightly interpreted and carried out, were of a thoroughly practical nature, and in no way antagonistic to strategic considerations. The Convention has lost a staunch supporter by the death of General Dufour.

SCARLATINA AT SEVENOAKS.

SERIOUS reports have been current respecting an outbreak of scarlatina at Sevenoaks. They have, we find on investigation, been very much exaggerated. We may state from accurate information that, with the exception of one fatal case, the outbreak has been of the mildest possible character, so much so that members of the same family as those who were attacked were not affected. The sanitary authority have, by the advice of the superintending medical officer of health, successfully taken every precaution to prevent the spread of the disease.

CONCEALMENT OF DISEASE IN THE ARMY.

THE paper by Dr. Ambrose, of the 58th Regiment, which we print in another column, seems to us a very important one, and affords the first direct evidence of the effects of Lord Cardwell's order in October 1873 in tending to the concealment of enthetic disease. We hope its publication may lead the War Office authorities to reconsider an order, which must be acting also in other regiments in the same way. Of course, it is possible that the amount of concealment may be relatively the same in protected and in unprotected stations, and that the result of the statistics may not be actually affected by the concealment; but it may be otherwise, and, at any rate, the fact of so large a concealment of disease must tend both to the injury of the soldier and to the interference, to a large extent, with the successful operation of the Contagious Diseases Acts. The great point, of course, is to get the soldier into hospital as soon as possible, in order to prevent him from propagating the disease. The paper of Dr. Ambrose is in many ways valuable, and probably his experience coincides with that of other medical officers.

RECENT URBAN MORTALITY.

DURING last week, 5,174 births and 3,328 deaths were registered in London and twenty other large towns of the United Kingdom. The average annual rate of mortality was 22; and the rates in the various towns were as follow: Portsmouth and Wolverhampton, 12; Norwich, Bristol, and Bradford, 18; Dublin, Sunderland, and Birmingham, 19; Edinburgh and Liverpool, 21; Leicester and London, 22; Sheffield, 23; Manchester, 24; Glasgow, 25; Leeds and Newcastle-upon-Tyne, 26; Oldham, 27; Nottingham, 30; Hull, 31; and Salford, 36. The average zymotic death-rate in the eighteen English towns was 5.9, and ranged from 0.4 and 1.5 in Portsmouth and Wolverhampton, to 10.5 in Hull, and 11.9 both in Nottingham and in Salford. Scarlet fever showed an increased fatality in London and Hull. No death was referred to diarrhoea in Portsmouth, whereas the annual death-rate from this disease ranged upwards to 6.7 and 7.4 per 1,000 in Leicester and Nottingham. In London, 2,203 births and 1,481 deaths were registered; the births being 40 below, and the deaths 8 above, the average for the week. The 1,481 deaths included 4 from small-pox, 27 from measles, 90 from scarlet fever, 10 from diphtheria, 61 from whooping-cough, 26 from different forms of fever, and 204 from diarrhoea; in all, 422 deaths from these seven diseases, being 41 above the average, and equal to an annual death-rate of 6.4 per 1,000. The 90 fatal cases of scarlet fever exceeded the number in any week since the beginning of December last. The fatality from diarrhoea exceeded the average for the week; and of the 204 deaths referred to that disease 158, or 77 per cent., were of infants under one year of age, and 34 of children aged between one and five years. The annual death-rate from diarrhoea averaged 3.1 per 1,000 in London, and ranged from 1.9 in the west, to 4.6 in the east groups of districts. In greater London, 2,604 births and, 1,696 deaths were registered. In outer London, the general death-rate and the zymotic death-rate were 14.7 and 3.2 per 1,000 respectively, against 22.4 and 6.4 in inner London. At Greenwich, the mean reading of the barometer was 29.69 inches; the mean tem-

perature of the air was 56.2 deg., or 6.4 deg. below the average, and was below the average on each day in the week. The mean degree of humidity of the air was 87. No rain fell on Monday or Tuesday, but the amount measured on the other five days was 3.27 inches, of which 2.39 inches fell during the 44 hours ending at 7 A.M. on Friday. So large an amount of rain has not fallen in London during any week since the last in September, 1871, when 3.34 inches were measured.

THE SEAMAN'S HOSPITAL, GREENWICH.

HIS Royal Highness the Duke of Edinburgh has consented to become President of the Seaman's Hospital, Greenwich, the oldest institution established for the exclusive relief of seamen of all nations. The Committee urgently appeal for funds to carry out fully the objects of the Hospital, the yearly expenses of which amount to £9,500, whilst the permanent income amounts to £4,865 only. The hospital is thoroughly cosmopolitan in its manner of bestowing relief. "Seamen of every nation are admitted without any letters of recommendation; an applicant being a seaman has only to show his need of medical treatment, and he is at once received into the hospital; and, after recovery, he is retained as a convalescent until he is fully capable of resuming his duties on board ship."

A MEDICAL ASTROLOGER IN TROUBLE.

AN inquest was recently held at Marshfield on the body of a young man who died of consumption. During the earlier part of his illness, he was attended by Mr. Bush; but, as he did not improve, he called in a herbalist named Bigwood, who lived at Corsham. This man treated him from May 11th till June 5th; but then, as it was evident that he was much worse, Mr. Bush was again sent for. He pronounced the patient to be in a sinking condition; and the man died the next day. Under these circumstances, Mr. Bush very properly declined to give a certificate of death, and accordingly the case came before the coroner. Bigwood's evidence we give in his own words; for, as we are not ourselves conversant with the mysteries of medical astrology, we cannot pretend to translate it into ordinary language. He said:

"I am a 'licensed botanist', residing at Corsham. I was first requested to visit the deceased on May 11th. He was then down stairs, sitting in a chair. He asked me if I thought I could do him any good. I told him I thought I might, but it would be like raising the dead from the grave; but the deceased wished me to give him a trial. I then asked him if he was under a doctor. He said: 'Yes; but the doctor says he can do no more for me.' I told him I would give him a trial; but I did not think that I should raise him, for he had no blood in him. I told him that his liver did not throw any blood, and that it was very dry. I thought by his countenance that his liver did not throw any blood, as he looked as sallow as death. I sent him a bottle of medicine next day, which contained seven different sorts of herbs. They were herbs governed by the sun. These herbs strengthen the heart, which I wished to do. I work on a botanist scale of astrology. I send medicine all over the country. I consider that my license allows me to do so. When I advertise, I advertise for fits. I do not advertise for consumption, for I know it is no good. I use a hundred different sorts of herbs. I give medicine for every part of the body where it is afflicted. I use the Government stamp on all bottles of medicine sent out, no matter what are the contents. The medicine I gave him was for the chest, heart, lungs, and liver. I sent him four bottles of medicine and a box of twenty pills; the pills to be taken with the medicine. The pills were made with the same herbs as the mixture, ground unto powder with cayenne, hickory-pickry, and rhubarb, which I buy of a chemist in Corsham. I ask for hickory-pickry, for I know no other name for it. I have raised men very near from the grave with that medicine and pills. I have been practising twelve years. I judge all complaints by astronomy. If I have the date of a man's birth, if he lived in London and sent to Corsham to tell me he was bad, I could tell what his complaint was, and what to prescribe for him. This I have done many times, and made many cures. The deceased was born January 6th, 1852 (I do not know the hour and minute). The sun was in opposition sign with the stomach when he was born; that showed that the sun stood in afflicted sign to the body. The moon rules the liver; and that is where his disease was, and that is what he died from. I never had a patient die that had been taking my medicine since I have been in practice. If they fall worse,

I tell them they must get a doctor. By watching the movements of the heavens, I can tell when to call in an experimental medical man, or there would be many such caddles as this, as I would not be responsible for their lives unto the end without further counsel. I would not be responsible, as there would be upsets about it. I do not confine women or do bone-setting."

The jury returned a verdict of death from natural causes—to wit, phthisis; but they requested the coroner to censure the herbalist severely; and to tell him that he had had a very narrow escape of being committed to Gloucester Jail on a charge of manslaughter.

THE FRANCO-GERMAN WAR.

IT is announced that the surplus of the fund subscribed for the relief of the sick and wounded in the Franco-German War has been invested in first class securities in the joint names of His Royal Highness the Duke of Connaught, Lord Shaftesbury, and Colonel Loyd Lindsay, as trustees. The interest accruing from this investment is added to the principal sum from time to time, thus creating a fund which will be applicable to the relief of the sick and wounded in any future international war which may unfortunately arise, similar in its nature and character to that which in the first instance excited the sympathy and elicited the generous contributions of all classes in this country. The Committee, duly regarding the purpose for which the fund was created, have not felt justified in applying any portion of it to the relief of sick and wounded in the protracted civil struggle now going on in Spain. Still less can they, consistently with the trust reposed in them, apply this fund to the relief of distress which, however severe and widely spread, is in no way connected with the operations of war.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.

THE thirteenth annual meeting of this society was held in the Council Chamber, on July 13th. The yearly report, submitted by the secretary, showed that the society had made a great advance during the past session. The members had increased from forty to fifty, and their attendance at the ten meetings of the session had been nearly one-half greater than that of previous years. The communications submitted to the meetings, of which upwards of thirty had been made, had shown more general research and originality than previously. One evening of the society had been devoted to a general discussion upon the subject of Vaccination, its benefits and dangers. The result determined the society to repeat such discussions upon some debated medical subject every succeeding session. A number of important morbid specimens had been added to the pathological department. The society in all respects, financially and otherwise, was pronounced to be in a most prosperous condition. The following gentlemen were elected as office-bearers for the ensuing session. *President*: E. Bronner. *Treasurer*: W. Whalley. *Secretary*: D. Goyder. *Committee*: R. H. Meade, J. Foster, P. E. Miall, J. Dunlop. *Pathologists*: M. Lee, A. Rabagliati. *Auditors*: W. H. G. Buckley and C. H. Taylor.

CONFESSIONS OF A QUACK DOCTOR.

MR. G. A. BRINE, the pauper in Sherborne Workhouse, whose revelations with regard to the tricks of vagrants have attracted some attention, writes this week to the *Charity Organisation Reporter* on the subject of quack doctors and itinerant medicine vendors. He says:

"I commence with the quack doctors. In the first place, I must tell you that I never engaged in the dirty business on my own account. I have been a tool in the hands of others. The first time it was in Yarmouth. A quack, who was lodging in the same 'ken' with me, asked me if I was willing to earn a couple of shillings easily. I replied in the affirmative. This was, to come into the market-place in the afternoon, while he himself was expatiating on the virtues of his infallible medicines, and purchase half-a-dozen boxes of the pills, saying that myself and others had derived immense benefit from their use, and that, for the future, I was resolved never to be without them, the money to pay for them having been given me beforehand by the 'doctor'. Well, I carried out my instructions to the letter, and so well pleased the modern Esculapius, that in the evening he employed me to work

for him at a salary of £1 per week, besides travelling expenses. I was now to be initiated in the sublime mystery of compounding the 'medicines', almost invariably 'pills'. My duty was to collect the ingredients; and I now solemnly declare that I got them ready made from the sheepfold or the rabbit-warren. Those from the sheepfold had to be considerably reduced in size, after which they were coated with finely pulverised sugar and flour, and, after being dried to a proper consistency, were placed in pill-boxes, which are easily obtained, and then held forth to the dolts, who were silly enough to listen to him, as 'American sugar-coated pills', purely vegetable, and warranted not to contain one particle of mercury, colocynth, or other deleterious poison, so extensively used by regular doctors. These pills are a sovereign remedy for bilious disorders, liver complaints, dyspepsia, or indigestion, the symptoms of which are learnedly described by the 'orator' (which was generally myself), learnt by heart from a medical work by Dr. Buchanan.

"When we were travelling in country villages, there was no 'ill which flesh is heir to' but what my master (blatant ignoramus as he was) would not undertake to cure—worms, piles, tusk or itch, gout, rheumatism, ulcers, fits, etc.; but the naked truth is, that he was a greater fool than I; he could not read a paragraph in a newspaper, and could scarcely write his own name. He knew no more about the maladies he professed to cure than a hog; but he possessed in an eminent degree that grand, indispensable qualification, any amount of cheek, and his takings on an average were £10 a week."

SCOTLAND.

DR. A. P. AITKEN, Demonstrator of Chemistry in the University of Edinburgh, has been elected Professor of Chemistry in the Veterinary College, in the room of Professor Dewar, resigned.

DR. GRANT, the President of the Canada Medical Council, has been paying a visit to Edinburgh, his chief object being to observe the anti-septic method of surgery in Mr. Lister's hands.

WE understand that Dr. Smith-Shand of Aberdeen is candidate for the vacant chair of Medicine in Aberdeen University. Dr. Smith-Shand is undoubtedly one of those who are doing most to advance the science and art of medicine in this important centre of medical education and practice; and his attainments and achievements are such as to place it beyond doubt that he would fill with distinction the office to which he aspires, and would add to the usefulness and lustre of the chair of medicine in the University.

INCURABLE HOSPITAL FOR GLASGOW.

WE hear that the estate of Broomhill, Dumbartonshire, consisting of about eighty acres, has just been purchased, on behalf of the Association for the Relief of Incurables of Glasgow, at the price of £14,000. The estate lies in the neighbourhood of Kirkintilloch. The mansion-house, to which large additions have recently been made, is situated on an elevated ground, commanding an extensive view of the Campsie Hills, and is large and roomy, and can be easily adapted to the requirements of the institution. Entry will be obtained immediately to the mansion, and at Martinmas to the grounds belonging to the estate. In the meantime, the Society is busily engaged in the out-door branch of its operations; that is, in relieving those suffering from incurable disease at their own homes. There are at the present time more than two hundred upon the maintenance fund.

MORTALITY IN THE BRITISH ISLES.

AT the Scottish Meteorological Society, last week, an interesting paper was read by Mr. Buchan on the Rates of Mortality in the British Islands. The author showed that, taking averages from the statistics of ten years in the larger, and five years in some of the smaller towns, the general result of the curves was to the effect that, in England, in the winter months, every one of the large towns showed an excess above the average mortality; that excess, however, being very unequal. In Scotland, Aberdeen showed a steady rise from the beginning of October to the end of the year, while in Greenock the effects of the winter cold were much less perceptible. For the summer season also, from

July to September, all the large towns in England but one showed an excess of mortality; this excess was, however, very unequally distributed in point of time. In London, the mortality was highest at the end of July; in Norwich, not till the end of September. The most remarkable fact that came out was that, in Leicester, there was an excess of 40 per cent. in the summer months, being double that of any other place. In Scotland, on the other hand, no town exceeded its average in July and August; in fact, in Aberdeen, the lowest rate of the whole year occurred in these months. Of annual rates of mortality, Glasgow stood highest with 35 per 1,000, Manchester and Liverpool next, with 30. Portsmouth was lowest in England, with 20; Aberdeen in Scotland, with 23. Every one of the English towns showed a tendency to a minimum in October; the Scotch death-rate also was low in that month. It was shown that the high summer rate was due chiefly to diarrhoea, and that in children under one year. In this respect, Leicester was exceptionally high, Edinburgh and Aberdeen exceptionally low. Every Scotch town, in fact, had a lower death-rate from diarrhoea than the English ones, whose temperatures were all higher.

SCARLET FEVER IN LONDON.

AT the last meeting of the Scottish Meteorological Society, Dr. Arthur Mitchell read a paper on Epidemics of Scarlet Fever, the result of an inquiry into the scarlet fever epidemics of London during the last thirty-five years. There had been six epidemics during that time, of which two remained at a maximum for nearly twelve months; in three, the maximum being reached, there was an immediate and steady decline. The curve for the thirty-five years showed the prevalence of the epidemic to be steadily and distinctly below its mean from January to the end of August, and above its mean during the rest of the year; and, with the average thus brought out, the curves for the several periods, and even those of single years, substantially corresponded.

NEW FEVER HOSPITAL FOR THE SUBURBS OF GLASGOW.

THE foundation stone of a combination fever hospital for the burghs of Partick, Hillhead, and Monyhill was laid last week. The site of the building is at Knightswood, in close proximity to each of the burghs. When completed, it will be capable of holding seventy patients, while the ground surrounding and belonging to the institution will admit of its being greatly enlarged, should occasion render it necessary. The cost of the building will be about £10,000.

DINNER TO DR. LOWE.

DR. LOWE, the President of the Edinburgh College of Physicians, was last week entertained to dinner by a large party of his professional and other friends: the occasion for the demonstration being the fact that Dr. Lowe is about to leave Edinburgh. Sir Robert Christison was in the chair; and a number of the leading members of the profession were present. The chairman, in proposing the toast of the evening, assured Dr. Lowe that, wherever he might take up his abode for the future, he would carry with him the warmest wishes for his welfare of the numerous friends he had left behind him in Edinburgh.

NEW WATER-WORKS FOR DUNDEE.

AFTER a long series of local and parliamentary contests, the town of Dundee is about to tap a new reservoir, which is expected to supply all possible wants of the town for a very long time to come. As lately as 1848, this burgh was dependent for its supply of water upon scanty public wells and peripatetic vendors at one halfpenny a pitcher. A company was formed in 1844, and opened a supply from Monikie, about ten miles from Dundee, in 1848, calculated to supply 70,000. With the rapid growth of the population and manufactures, a larger supply became necessary, and small additional works were opened in 1868. By this time, the population of the town and suburbs, including Broughty Ferry, had increased to 140,000, or just double the number originally provided for. In 1869, the town council took over the waterworks into their own hands, and set about looking for a fresh source of supply. The place fixed upon was the Loch of Lintrathen, which is principally

supplied by the River Melgam, and this was accordingly dammed up and enlarged into an extensive reservoir; its distance is eighteen miles from Dundee. When filled to the level of twenty feet above the ordinary summer level of the loch, the reservoir will contain 250,000,000 cubic feet, or 1,542,000,000 gallons of water. It is situated at the height of 676 feet above the level of the sea. The pipe is twenty-seven inches in diameter, and is calculated to supply a first instalment of 8,000,000 gallons a day. The works are now nearly complete, and will be shortly opened.

DR. YELLOWLEES' LECTURES ON INSANITY IN GLASGOW UNIVERSITY.

OUR Glasgow correspondent writes:—These lectures, whose commencement we noticed a few months ago, were brought to a pleasant termination by the presentation of an address to Dr. Yellowlees on Saturday last. At the beginning of the session, an invitation was issued to the members of the medical profession; and, in the address, those who attended expressed the pleasure they had experienced, and the benefit they had derived from the lectures. They particularly noticed the great advantages from the actual study of cases at the asylum, and commented very favourably on Dr. Yellowlees' skill as a clinical teacher.

IRELAND.

ZYMOTIC DISEASES IN BELFAST.

DURING the second quarter of the year, 114 deaths took place from measles, 88 from scarlatina, 39 from fever, 30 from diarrhoea, 27 from whooping-cough, 10 from small-pox, and 6 from diphtheria; the deaths from the principal zymotic diseases thus amounting to 314, or 23.6 of the total deaths registered. The insanitary condition of Belfast, especially the impurity of the water supplied, and the overcrowding of the poorer classes, sufficiently explain the high death-rate from preventable diseases.

A FILTHY SPOT.

THE sanitary condition of Borrisoleigh, in the Thurles union, has lately been brought under the notice of the Local Government Board by a resident, who complains of it as "the most filthy spot in Ireland"; and, referring to the water-supply, states that there is no water for the use of the inhabitants, except what is filtered by passing through three water-closets. This filtration, as it is termed, is rather a peculiar one, and one not very desirable in a sanitary point of view; and the Local Government Board have referred the matter for the consideration of the guardians, who, it is to be hoped, will speedily put an end to such a disgraceful condition of matters.

PAUPER NURSING.

IN a recent charge of manslaughter against a nurse of the Limerick Union for negligence, whereby a fever-patient lost his life, although the charge broke down, some peculiar circumstances in the management of this workhouse were brought to light. It seems that, during the time this fever-patient and thirty others inhabited the ward, the night-nursing was performed by the prisoner, assisted by a pauper girl; the nurse could not read nor write, and yet was supposed to be able to administer the various medicines prescribed by the medical man; there was, also, no clock in the ward or corridor to tell the hours. The judge who tried the case hoped that the trial would have the effect of awakening the guardians to the necessity of making considerable changes in the management of the workhouse, and especially the hospital portion, an opinion in which few will differ from his lordship.

HEALTH OF DUBLIN: QUARTERLY REPORT.

THE births registered in Dublin during the quarter ended 3rd July amounted to 2,194, being equal to an annual ratio of 1 in 36, or 28 in every 1,000; and the deaths to 1,906, affording an annual ratio of 1 in 41, or 24 in every 1,000. There was a considerable decrease as regards the mortality from zymotic diseases, the number being 251, or 72 under

that in the preceding quarter, and 166 less than in the corresponding quarter of last year. Scarlet-fever caused 42 deaths; fever, only 51; small-pox, 2; measles, 6; diphtheria, 11; croup, 20; whooping-cough, 9; erysipelas, 13; influenza, 7; dysentery, 1; and diarrhoea, 26. The deaths of 111 children were ascribed to convulsions; bronchitis caused 253, owing to the inclement weather; pneumonia, 79; phthisis, 261; and other lung affections, 35. Apoplexy proved fatal in 39 instances, paralysis in 41; whilst other brain diseases caused 64 deaths; heart-disease produced 109; liver disease, 26; and kidney affections, 28. The rainfall at Dublin during the quarter measured 5.058 inches.

MEDICAL ADVERTISING.

AT the annual meeting of the South Wales and Monmouthshire Branch, on July 16th, the subject of medical advertisements in non-medical papers was introduced by Mr. Andrew Davies, and discussed. The following resolution was carried unanimously:

"That this Branch desires to express its opinion that the system permitted by many authors of medical works of advertising their works in the non-medical papers is one which, being open to much abuse, ought to be discouraged and condemned."

DEATHS FROM ANÆSTHETICS.

THE following particulars of further deaths from anæsthetics have reached us this week.

A patient died on the 16th instant, under the influence of bichloride of methylene, at the Central London Ophthalmic Hospital, Gray's Inn Road. The case is recorded in the daily papers as having been due to chloroform. The man was a healthy looking sailor, aged 27, who was about to undergo iridectomy. Previously to the operation, he was carefully examined by Dr. Wilkinson, who found his pulse good, and his heart acting quietly and regularly. The man appeared quite calm and free from anxiety respecting the operation. The "machine" spoken of in the daily papers consists of a truncated cone of stiff leather, in the top of which a loose plug of cotton-wool is placed; on to this half a drachm of bichloride was poured, and, after a minute or so, when the symptoms of laryngeal irritation were subsiding, a drachm was added. The patient struggled considerably, though not more than might have been expected from a man of his physique, but at last sank back, breathing quietly. He was now lifted up by the shoulders and placed in position, as during his struggles he had nearly slipped off the table. Dr. Wilkinson now noticed that the man's face was flushed and rather dusky, that his breathing was slow and rather stertorous, and that his pulse was scarcely perceptible. From the commencement of the inhalation to the appearance of these symptoms, between four and five minutes had elapsed. Artificial respiration was at once commenced, and persisted in for about twenty minutes. Galvanism, etc., were also used, but without avail; the respiration became more irregular, the face more livid, and the patient died. The necropsy gave only negative results. The heart appeared healthy; it was neither spasmodically contracted nor unusually relaxed; it contained scarcely any blood. The other organs were also healthy; the blood was, however, everywhere very dark and fluid.—A death occurred under very similar circumstances at the same hospital about fifteen months ago, and the advice of Dr. B. W. Richardson was then obtained, in the hope of preventing a repetition of such an occurrence.

An inquest, reported in the *Times*, was some days ago held at Addenbrooke's Hospital, Cambridge, touching the death of Mrs. Ann Shaw, the wife of an innkeeper of Soham, Cambridgeshire, who was admitted into the hospital last Wednesday, suffering acutely from the effects of an accident to one of her eyes. She was told that nothing would give her relief but the removal of her eye. She asked for chloroform to be used, but died while under its influence. Professor Humphry, who would have performed the operation, stated that the chloroform was administered by Mr. Wherry with great care and caution. Every means was used to restore animation, but in vain. Professor Humphry thought it right that the public should know that persons could not expect to have the benefits of anæsthesia without the risks attending thereon. All agencies for producing unconsciousness were attended with some danger. The jury returned a verdict "That deceased died while under the influence of chloroform, and that the same was carefully and properly administered".

Professor Humphry's remarks are always carefully thought out, and

in this case convey a timely intimation. There is, however, another question of importance in connection with these deaths which we have before raised, and as to which a great deal of evidence has been collected in our columns. Does not the weight of evidence tend to support the belief that ether and nitrous oxide are much less dangerous anaesthetics than chloroform? And if so, is it not desirable that the use of ether should be more generally substituted for that of chloroform? When we agitated this question very freely a couple of years since, ether was hardly at all used as an anaesthetic agent in this country, having been superseded by chloroform. We believe that it is now very largely used, both in hospital and in private practice; operators such as Dr. Keith, and lately Mr. Pollock, and anaesthetisers of such experience as Mr. Clover, have reported most favourably on it. We should be glad that this subject, which we have never ceased now for some years to press upon professional attention, should continue to receive study. It is one of which the importance morally and scientifically is so apparent, that it needs few words to impress it. With a view to hasten its solution, we would suggest that it might with advantage be specially discussed at the approaching meeting in Edinburgh; and that either through the agency of the Scientific Grants Committee, or by the means of a Committee specially appointed by the Surgical Section, steps should be taken for searching investigation and conjoint inquiry into the relative safety of ether and chloroform, and the extent to which ether and nitrous oxide gas can be substituted in the various classes of surgical operations for chloroform.

Since the above was written, Mr. Pollock has addressed the *Times* on the subject. He very broadly indicates a public and judicial censure of practitioners employing chloroform, and suggests that ether is absolutely without risk. The place in which these suggestions are made seems to be ill selected, and the imputations on his professional brethren appear to go further than would be expected from a surgeon of Mr. Pollock's caution and judgment. Mr. Pollock concludes his letter as follows.

Chloroform acts directly on the heart, and with little notice, by stopping its action, destroys life. Ether could be made to kill, just as holding a man's head under the water will do, by producing suffocation; but it is a stimulant to the heart's action. I have no desire, however, to enter into a physiological dissertation on this subject. Suffice it to say that, if the use of one anaesthetic is dangerous and that of the other safe, it behoves us to employ alone that which is safe. Is it not almost criminal to venture on that which is not safe?

I ought perhaps to apologise for intruding a professional question on a non-professional journal; but one must employ a big hammer to drive a large nail through a thick piece of wood. We have some very thick pieces of wood to deal with. The question has been brought forward in the leading medical journals of the day; and yet within one week we read of the loss of two lives, which, I say it with regret, might not have occurred had ether been employed in place of chloroform. I, therefore, seek the aid of your great influence to bring to the mind of the public, as well as the profession generally, the importance of a correct knowledge on this subject.

It is a big subject. It is a question between living or dying. If our judges, coroners, and magistrates, if the members of the bar and the public, were once satisfied of the danger of the one and the safety of the other, I need not pause to inquire what may be the position of that man who is hereafter unfortunate enough to lose a patient under the influence of chloroform.

I have no personal interest in this question. I write purely for the sake of those who may require and those who may be called upon to administer anaesthetics, with the hope that we may see abolished the use of that which is proved to be occasionally fatal for that which is known to be safe and efficacious.

By your inserting this letter, you may do much to carry out this object, and help to put a stop to the records of "Death from misadventure" (see the *Times*) when an anaesthetic has been administered.

He seems here to imply that his professional brethren, including many eminent hospital surgeons, are such "very thick pieces of wood", that nothing short of penal threats in the *Times*, and the fear of magistrates (convinced by Mr. Pollock), can induce them to make up their minds on a scientific question. He cannot really mean this. Such a letter from Mr. Pollock is "like a pistol-shot from a rose-bud"; and

those whom it hurts will hardly know whether they are most pained or astonished. Surely Mr. Pollock must have regretted this letter when he read it next morning in the *Times*.

UNQUALIFIED PRACTITIONERS.

AN inquest, which has excited much interest, was resumed this week at the Court House, Islington, before Dr. Hardwicke, Coroner for Central Middlesex, and his deputy, Mr. Danford Thomas, on the body of Emma Jane Plain, aged nine months, who is alleged to have died from the effects of a medicine administered to her by the owner of a "provident dispensary", a non-qualified medical practitioner. The previous proceedings were reported in the *Times* of Tuesday last. Mr. Brown and Mr. Selater attended on the part of the British Medical Defence Association, and Mr. Merriman, solicitor, represented Mr. Hugh Ker of the Copenhagen Street "Provident Dispensary". The previous evidence went to show that the deceased, usually a remarkably healthy child, was taken ill a fortnight ago. The next morning, the mother took the deceased to the dispensary, and Mr. Ker prescribed medicine. It took three doses, but expired on the following morning. When the child was dying, the father went to the dispensary and asked Mr. Ker to come and see it, but he referred him to Mr. Kane of Offord Road. The latter said the medicine was "queer-looking stuff", and he took it away with him. It was stated that Mr. Ker had previously attended patients in Mr. Plain's house for fever and a woman in confinement, and was supposed to be a qualified medical man. Mr. Derry Jones, who had been directed to make a *post mortem* examination, expressed his conviction that the cause of death was diarrhoea, but in a form amenable to proper treatment. He had examined the medicine, and found it to be "liquor ammonia acetatis", with excess of ammonia. That was not a proper medicine for such a case. Inflammation might have been caused by the excess of ammonia. It would, no doubt, have acted as an irritant; but he could not positively say that death had been accelerated thereby. Mr. Thomas James Kane, of Offord Road, Barnsbury, said he saw the deceased about half-past 10 on the morning of the Wednesday, and it had been dead about an hour and a half. He understood that he had been called at the request of Mr. Ker, of the Copenhagen Street Dispensary. He declined to give a certificate as to the death, as he knew nothing of the case. He had no connection with Mr. Ker or his dispensary, though on one occasion he indiscreetly gave him four or five of his cards. Mr. Ker never acted as his assistant, nor did he ever see any patients at the request of Mr. Ker, except in this case. Mr. Derry Jones, recalled, adhered to his previous statement that the medicine was an improper medicine in the case. To combat this, Mr. Merriman read extracts from Tanner's *Practice of Medicine* and a work by Sir Thomas Watson. Mr. Jones admitted that they were good authorities, but pointed out that the admixtures they referred to were not applicable to children of such tender years, and said it would have been more to the purpose had his interrogator quoted from more modern works, with respect to children specially in such cases. Mr. Hugh Ker said he lived at 110, Copenhagen Street, and kept the provident dispensary. He had no medical qualification. He attended lectures at the Manchester Royal Infirmary, but did not go through the full course. In 1859, he had studied under a properly qualified medical man at Mansfield. In answer to questions put by the coroner and the jury, as to whether he had any qualified assistant at the Copenhagen Street Dispensary, Mr. Ker said that, acting upon the advice of his solicitor, he declined to answer them, as he considered them not relevant to the inquiry. He saw the deceased at the dispensary, and it was suffering from exhaustion. He prescribed for it, and heard that it had died on the following morning. He was not asked to give a certificate, and he was not in the habit of giving certificates. The coroner asked what he did if a person died under his care. Mr. Ker refused to answer the question. In reply to the jury, he admitted he had attended a fever case and a woman in confinement at the same house where the deceased died, but he denied that he represented himself as a qualified medical man. He had some cards of Dr. Kane's, but there was no understanding between them. Over his shop in Copenhagen Street were the words "Provident Dispensary". On a side window was written "Surgical Operations". He attended simple cases; but, when they were serious, he got a qualified man to attend. He admitted that the medicine produced was the same he had prescribed for the deceased. It was a lime mixture, with an excess of ammonia given as a stimulant. The jury returned the following verdict:—"That Emma Jane Plain died from the mortal effects of diarrhoea, and that such death was from natural causes; but the jury desire to draw attention to the fact,

that the deceased received medical treatment at a dispensary in Copenhagen Street, where medicines were administered by an irresponsible unqualified medical practitioner. The jury further wish to add that a dispensary under unqualified medical men, and under the management of irresponsible persons, must be fraught with danger to the community."

IN MEMORIAM.—J. F. CLARKE.

OUR obituary columns recently recorded the death of a medical veteran who was for thirty years known as "Clarke of the *Lancet*", but ended his days as "Clarke of the *Medical Times*". Mr. J. F. Clarke of Gerrard Street was one of the most familiar figures in metropolitan medical gatherings for the last forty years, and there are few of his own generation who will not be ready to do justice to his rare combination of good qualities and pleasant endowments. He had a sprightly wit, and a kindly generous nature. Of a poetic and vivacious turn, his writing was never dull; and in his best days, and under his best inspirations, he often rose to something like eloquence. His grand quality was fidelity, and the star of his faith was the late Mr. Wakley. He had worked for him and fought for him, and shared his hopes, troubles, defeats, and victories. He loved to tell, and often renewed the pleasure, of the early days when nearly everything was wanting to success, when the printers had no copy, when funds were scarce, and when professional wrath was unbounded. But Clarke never wavered in his allegiance; and, during the lifetime of his chief, his purse, his labour, his time, and his whole heart, were always at the command of the man whom he served and the journal with which he identified the work of his life. When times changed and his chief had gone to rest, and he found himself stranded and laid up, he did not acquiesce in the decree, but determined to die, as he had lived, a journalist, though under other colours. The pages of the *Medical Times* and *Gazette* have during the last few years often owed much to his bright touch. His reminiscences of professional life published there are spirited, lively, and truthful; and they abound in discriminating judgments. He had the rare gift of burying enmities with a kindly jest; his heart was too warm not to respond to advances, to forgive injuries, and to overlook slights. There are many eminent men in the profession who owe him much; there are few who will not remember him as a man who played a manly part through many difficult scenes, who was ever ready to assist any good cause, and whose pen has for forty years helped on the changes which separate the medical institutions of this day from those of his early life as by a century of progress. His later years were clouded by a sense of ingratitude in quarters where he had least expected it; but this did not embitter him, although he often complained of it; and to the last he retained the generous, loving, faithful nature which all who remember him will always identify with the name of James Fernandez Clarke.

MILITARY AND NAVAL MEDICAL SERVICES.

MOVEMENTS OF ARMY MEDICAL OFFICERS.—Surgeon-General J. C. Brown, C.B., Indian Medical Service, Honorary Surgeon to Her Majesty, is allowed leave of absence for six months, from such date as he may avail himself of it, to visit the hills on medical certificate.—Her Majesty has been pleased to appoint Surgeon H. A. C. Gray, M.D., to be a Surgeon in Her Majesty's Indian military forces at the Presidency of Bengal.—The following arrangements have been made in India. Surgeon-Major C. Smith, M.D., to be garrison-surgeon at Bangalore.—Surgeon (local rank Surgeon-Major) F. Prout, from medical charge detachment 43rd Foot, Calicut, to general duty, Madras, when relieved by Surgeon Stewart.—Surgeon A. Brebner, M.D., from A Battery 9th Brigade Royal Artillery, to B Battery C Brigade Royal Horse Artillery, and medical charge of head-quarters 20th Brigade Royal Artillery, *vice* Illingworth.—Surgeon J. Barker, from doing duty 76th Regiment, to A Battery 9th Brigade Royal Artillery, *vice* Brebner.—Surgeon-Major J. A. Illingworth is transferred to the Bengal command. The following orders by the Madras Government have been confirmed. Surgeon H. N. L. James, M.D., from medical charge detachment 89th Regiment, Port Blair, to general duty, Burmah Circle.—Surgeon W. Finlay, from general duty, Burmah Circle, to medical charge detachment 89th Regiment, Port Blair.—Surgeon-Major D. M. Davidson, M.D. (Madras Army) has obtained furlough to England, to appear before a medical board.—Surgeon W. Price, in medical charge 10th N.I., Bombay, has obtained leave of absence, preparatory to furlough to Europe, for thirty days.

ASSOCIATION INTELLIGENCE.

PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

AT a Meeting of the Committee of Council, held at the Queen's Hotel, Birmingham, July 13th, 1875. Present: Dr. Sibson, F.R.S., in the chair; Dr. Falconer (Treasurer); Mr. Alfred Baker, Sir J. Cordy Burrows, Mr. Callender, F.R.S., Dr. Alfred Carpenter, Dr. Charles Chadwick, Dr. R. Farquharson, Dr. B. Foster, Mr. R. S. Fowler, Dr. E. L. Fox, Mr. J. R. Humphreys, Mr. W. D. Husband, Mr. T. V. Jackson, Dr. T. Eyton Jones, Mr. F. E. Manby, Mr. R. H. B. Nicholson, Dr. W. Procter, Dr. J. Sawyer, Dr. Shettle, Mr. T. Heckstall Smith, Dr. A. B. Steele, Dr. T. Underhill, Dr. W. F. Wade, Dr. E. Waters (Chester), Mr. C. G. Wheelhouse, Dr. E. Wilkinson.

The minutes of the last meeting were taken as read.

Read letters of apology for non-attendance from Mr. George Southam and Dr. F. Bateman.

Resolved—That the members of the Committee of Council of the British Medical Association desire to express their deep regret at the serious illness which has befallen Mr. Southam, and their warm sympathy with him on his present disability. They trust that, with improved health, Mr. Southam may again co-operate with them in conducting the business of a Society in which he has displayed deep interest; and they congratulate him on the progress which has been made during his tenure of office as President of Council in the prosperity, numerical and financial, of the Association, and the recognised legal status acquired by its Act of Incorporation.

Resolved—That Dr. Sibson be requested, in the absence of the President of the Council, to take the chair.

Resolved—That, with the exception of one, the whole of the candidates nominated for election be, and they are hereby, elected members of the British Medical Association.

Read resolution from the Metropolitan Counties Branch, of which the following is a copy:

"That the Committee of Council of the British Medical Association be requested to appoint a special Committee to consider the advisability of legislative restrictions for habitual drunkards."

Resolved—That Dr. Stewart, Mr. W. C. Garman, Dr. Farquharson, Dr. Bodington, Mr. Nicholson, Dr. Carpenter, and Dr. Foster, be a Subcommittee, in accordance with the request of the resolution.

Read letter from Dr. Wolfe, Glasgow, upon the formation of a Scotch Medical Association.

Resolved—That where there is no Branch of the Association already formed in Scotland, the Committee of Council will, with great pleasure, assist in the formation of a Branch, and that Dr. Wolfe be informed that any twenty or more members can unite for the purpose of forming a Branch of the British Medical Association.

Read letter from Dr. Stewart, and enclosed abstract, of which the following is a copy:

"75, Grosvenor Street, W., July 12th, 1875.

"Mr. President and Gentlemen,—My connection with the Committee of Council of the British Medical Association being now at an end, I have requested Dr. Sibson, as my old and valued friend and as treasurer of the fund with which my name is connected, to be the bearer of this communication.

"A large sum of money having been contributed, chiefly by members of the British Medical Association, with the view of manifesting their friendly feelings towards myself, they have most kindly permitted me to appropriate £400 of the amount thus realised to the formation of a fund for the recognition and encouragement of important researches into the origin, spread, and prevention of epidemic disease, and have adopted certain rules, in accordance with which it shall be regulated.

"And as we know of no other body to whom we could with more perfect confidence entrust the management of such a fund, the Committee which has called it into existence and myself unite in earnestly requesting the Committee of Council to accept the responsibility of its administration.

"I have the honour to be, Mr. President and Gentlemen,

"Yours very faithfully and gratefully,

"A. P. STEWART.

"To the President and Committee of Council of the British Medical Association."

[Extract from BRITISH MEDICAL JOURNAL, April 3rd, page 456, meeting of Committee *re* "Stewart Grant".]

"Dr. Stewart consents to allow a small part of the amount subscribed to be expended on a personal gift; but he desires that the bulk of the fund be applied in establishing a grant which shall be in the gift of the Committee of Council of the British Medical Association. It was

agreed that this fund should be called the 'Stewart Grant'; and the following scheme for its application, suggested by Dr. Stewart, was submitted to the meeting and approved.

"1. The object of the Stewart Grant shall be to encourage researches into the origin, spread, and prevention of epidemic disease, or such cognate subjects as the Committee of Council of the British Medical Association may from time to time, after due deliberation, determine.

"2. For this end, the funds shall be invested in the names of three trustees, to be appointed by the Committee of Council of the Association.

"3. The accumulated interest shall be given biennially, or less frequently: Firstly, and as a general rule, in recognition of important work already done by such person or persons as the Committee of Council of the British Medical Association, or a Committee appointed by them for such purpose, shall deem most deserving, with a view to the continuance by such person or persons of like researches in the same direction; or, secondly, as an encouragement to such person or persons as the Committee of Council or a Committee by them appointed shall consider exceptionally qualified to undertake the investigation of such question or questions as shall appear likely to lead to further important results."

Resolved—That the thanks of the Committee of Council be given to Dr. Stewart for his disinterested disposal of the large proportion of the sum subscribed for his testimonial and trust, and that his offer be hereby accepted. That Dr. Stewart be further informed that a Committee will be appointed to devise a scheme for carrying out his intentions, which will report to the next meeting of the Committee of Council at Edinburgh, when the Committee of Council will again communicate with Dr. Stewart.

Dr. Sibson, on behalf of Dr. Stewart, then handed a cheque for £400 to the Treasurer of the Association.

Resolved—That Dr. Sibson, Dr. Chadwick, Dr. Wade, Mr. Heckstall Smith, and Dr. Wilkinson, be requested to act as the Subcommittee to consider and report in accordance with the foregoing resolution.

Read Minutes of the Journal and Finance Committee of the 13th July.

Resolved—That the Minutes of the Journal and Finance Committee of this day's date be approved, and the recommendations carried into effect.

Read resolution of the Council of the Metropolitan Counties Branch:

"That in the opinion of this Council it is advisable—

"1. That no person resident in the United Kingdom should be admitted as a member of the British Medical Association unless either registered under the Medical Act, or possessing a qualification entitling to registration.

"2. That the names of persons proposed for admission to the Association through the Committee of Council should be submitted for examination to the Council of the district in which they reside, previously to their election being decided on."

Resolved—That the Committee of Council are unable to see the necessity for alteration of the present mode of election.

The Committee then proceeded to consider the By-Laws proposed.

Resolved—That the by-laws, as amended, be approved, and placed before the Annual Meeting in August next for adoption, in accordance with the instructions of the last Annual Meeting held at Norwich, August 1874.

Report of attendances of the twenty elected members of the Committee of Council was then read, of which the following is a copy, viz.:

List of Attendances for the year 1874-5 of the 20 members elected by the Council.

MEETINGS 6.

Foster, Dr. B., Birmingham ...	5	Wade, Dr. W. F., Birmingham	3
Wilkinson, Dr. Eason, Manchester.....	5	Burrows, Sir J. C., Brighton ...	2
Callender, G. W., Esq., F.R.S.	4	Quain, Dr. R., F.R.S.....	2
Carpenter, Dr. A., Croydon ...	4	Underhill, Dr. T., West Bromwich	2
Fox, Dr. E. L., Bristol	4	Bastian, Dr. H. C., F.R.S.	1
Manby, F. E., Esq., Wolverhampton	4	Bateman, Dr. F., Norwich.....	1
Smith, T. H., Esq., St. Mary Cray	4	Hill, Berkeley, Esq.....	1
Wheelhouse, C. G., Esq., Leeds	4	Smart, Insp.-Gen., M.D., Naval Hospital, Haslar	1
Harrison, R., Esq., Liverpool..	3	Waters, Dr., Liverpool	1
Humphreys, J. R., Esq., Shrewsbury.....	3	Humble, Dr. T., Newcastle-on-Tyne	0

The name of Dr. Humble, of Newcastle, was taken off in accordance with law; and the attendances of Dr. Waters (Liverpool), Dr. Bastian, Dr. Bateman, Mr. Berkeley Hill, and Inspector-General Smart, being

equal, lots were taken, and the four last-mentioned names were also taken off.

Seven gentlemen having been nominated to succeed the five taken off in accordance with the law, a ballot was taken; and the following having the largest number of votes, it was

Resolved—That they be, and are hereby, nominated to the vacancies, to act on the Committee of Council for the ensuing year, viz.: Dr. Clifford Allbutt, Leeds; Mr. Timothy Holmes, London; Mr. Baker, Derby; Mr. Hodgson, Brighton; Dr. Morris, Spalding.

Resolved—That medical students be admitted to the addresses and the sectional meetings of the Association at its Annual Meeting in Edinburgh, on such regulations as may be adopted by the Reception Committee.

Also that an additional Secretary be appointed to the Physiological Section; and that Dr. Stirling, Edinburgh, be requested to act.

Also that any of the graduates in medicine of the University of Edinburgh who may receive their degrees on Monday, the 1st of August, may, if properly nominated, be admitted members of the Association by the Committee of Council at its meeting on Tuesday, the 2nd of August, without the usual previous list being sent round.

BRITISH MEDICAL ASSOCIATION: FORTY-THIRD ANNUAL MEETING.

THE Forty-third Annual Meeting of the British Medical Association will be held at Edinburgh, on Tuesday, Wednesday, Thursday, and Friday, August 3rd, 4th, 5th, and 6th, 1875.

President.—E. COPEMAN, M.D., Senior Physician to the Norfolk and Norwich Hospital.

President-elect.—Sir ROBERT CHRISTISON, Bart., M.D., D.C.L., LL.D., F.R.S.Ed.

An Address in Medicine will be given by JAMES WARBURTON BEEBIE, M.D., F.R.C.P.Ed.

An Address in Surgery will be given by JAMES SPENCE, F.R.C.S.Ed., F.R.S.E., Professor of Surgery in the University of Edinburgh.

An Address in Physiology will be given by WILLIAM RUTHERFORD, M.D., F.R.S.E., Professor of the Institutes of Medicine in the University of Edinburgh.

The business of the Association will be transacted in Six Sections, viz.:

SECTION A. MEDICINE.—*President*: Dr. Quain, F.R.S., London. *Vice-Presidents*: Professor W. T. Gairdner, Glasgow; Dr. Grainger Stewart, Edinburgh. *Secretaries*: Dr. Claud Muirhead, 7, Heriot Row, Edinburgh; Dr. Stephenson, 33, Buccleuch Street, Edinburgh.

SECTION B. SURGERY.—*President*: Professor Lister, F.R.S. Edinburgh. *Vice-Presidents*: Professor Pirrie, Aberdeen; Professor Macleod, Glasgow. *Secretaries*: Thomas Annandale, Esq., Charlotte Square, Edinburgh; Dr. John Duncan, 8, Ainslie Place, Edinburgh.

SECTION C. OBSTETRIC MEDICINE.—*President*: Dr. Matthews Duncan. *Vice-Presidents*: Dr. Keiller; Professor Simpson. *Secretaries*: Dr. Peel Ritchie, 16, Hill Street, Edinburgh; C. J. Cullingworth, Esq., 260, Oxford Street, Manchester.

SECTION D. PUBLIC MEDICINE.—*President*: Right Hon. Lyon Playfair, M.P., C.B., F.R.S. *Vice-Presidents*: Inspector-General Smart, M.D., C.B.; Dr. Arthur Mitchell. *Secretaries*: Dr. Andrew Smart, 24, Melville Street, Edinburgh; Dr. Fraser, Knutsford.

SECTION E. PSYCHOLOGY.—*President*: Dr. Lowe, F.R.S., Edinburgh; *Vice-Presidents*: Dr. Sibbald; Dr. Clouston. *Secretaries*: Dr. Brown, Royal Asylum, Edinburgh; Dr. Saundby, Saughton Hall, Edinburgh.

SECTION F. PHYSIOLOGY.—*President*: Professor Burdon Sanderson, F.R.S., London. *Vice-Presidents*: Dr. McKendrick; Professor J. Dewar. *Secretaries*: Dr. Lauder Brunton, F.R.S., 23, Somerset Street, Portman Square, London; Dr. Caton, 18, Abercrombie Square, Liverpool; and Dr. Wm. Stirling, Physiological Laboratory, University of Edinburgh.

Honorary Local Secretaries.

Dr. John Batty Tuke, 20, Charlotte Square, Edinburgh.

John Chiene, Esq., 21, Ainslie Place, Edinburgh.

Dr. J. G. McKendrick, 2, Chester Street, Edinburgh.

Dr. J. Bishop, 28, Alva Street, Edinburgh.

Tuesday, August 3rd.

II A.M.—SERVICE IN ST. GILES'S CHURCH. Sermon by Rev. Dr. Alexander.

I P.M.—MEETING OF COMMITTEE OF COUNCIL.

3 P.M.—MEETING OF THE COUNCIL, 1874-75.

3.30 P.M.—GENERAL MEETING.—President's Address; Annual Report of Council; and other business.

9 P.M.—PRESIDENT'S RECEPTION IN ASSEMBLY ROOMS, MUSIC HALL.

Wednesday, August 4th.

9.30 A.M.—MEETING OF COUNCIL, 1875-76.

11.30 A.M.—SECOND GENERAL MEETING.

11.30 A.M.—ADDRESS IN MEDICINE.

2 P.M.—SECTIONAL MEETINGS.

9 P.M.—CONVERSAZIONE GIVEN BY THE ROYAL COLLEGE OF PHYSICIANS IN THE INDUSTRIAL MUSEUM.

Thursday, August 5th.

9 A.M.—MEETING OF THE COMMITTEE OF COUNCIL.

10 A.M.—THIRD GENERAL MEETING.—Reports of Committees.

11 A.M.—ADDRESS IN SURGERY.

2 P.M.—SECTIONAL MEETINGS.

6.30 P.M.—PUBLIC DINNER IN MUSIC HALL.

Friday, August 6th.

10 A.M.—ADDRESS IN PHYSIOLOGY.

11 A.M.—SECTIONAL MEETINGS.

1.30 P.M.—CONCLUDING GENERAL MEETING.

4 P.M.—PARTY IN THE ROYAL BOTANIC GARDENS, GIVEN BY THE UNIVERSITY OF EDINBURGH.

Saturday, August 7th.

EXCURSIONS.—Bass Rock, Melrose, Trossachs, Roslin, Dalmeny Park, and Hopetown House.

ARRANGEMENTS FOR ADDRESSES, SECTIONS, SOIRÉES, ETC.

President's Address—Tuesday, 3.30 P.M., Queen Street Hall, 6, Queen Street.

Addresses in Medicine, Surgery, and Physiology—Lecture Room in the Industrial Museum.

President's Reception—Assembly Rooms and Music Hall, George Street.

The *conversazione*, given by the Royal College of Physicians, will be held in the Industrial Museum.

University Garden Party—Botanical Gardens, Inverleith Row.

Rooms for Sections:

A. Medicine—Mathematical Class Room.

B. Surgery—Anatomy Class Room.

C. Obstetric Medicine—Materia Medica Class Room.

D. Public Medicine—Chemistry Class Room.

E. Psychology—Hebrew Class Room.

F. Physiology—Physiology Class Room.

Meetings of Council; Latin Class Room. Reception Room; Reading and Writing Room; Lower Library Hall. Editor's and General Secretary's Room; Court Room. Local Secretaries, Treasurer, and Editor of *Daily Journal*; Professors' Reading Room. Annual Museum; Practical Chemistry Class Room.

In the Vestibule of the Library (all in University Buildings)—Post Office and Telegraph Office; Registration Office; Ticket Office; Cab Office; Inquiry Office.

Refreshment Room.—By permission of T. C. Archer, Esq., Director of the Industrial Museum, the Buffet and Refreshment Rooms attached to that institution will be open to members of the Association during the meeting. They can be reached either by the main entrance of the Industrial Museum, or (which will be more convenient for members) by a lobby communicating with the University Quadrangle. A moderate tariff has been arranged for Luncheons, etc. Lavatory, etc., adjoining Refreshment Rooms.

All places will be carefully placarded.

Papers.—The following papers have been promised in addition to those enumerated in last week's JOURNAL.

Anderson, T. McCall, M.D. On the Treatment of Aneurism of the Arch of the Aorta by means of Galvano-puncture.

Black, D. Campbell, M.D. On certain Aspects of Medical Advertising.

Bodington, G. F., M.D. On the Control and Restraint of Habitual Drinkers.

Braidwood, P. M., M.D. Severe Cerebro-spinal Symptoms produced by a fall at Foot-ball.

Browne, Lennox, Esq. On the Treatment of some Diseases affecting simultaneously the Voice, Speech, and Hearing.

Cooper, James, Esq. On some points relating to Cottage Hospitals.

Deas, P. Maury, M.D. Notes on an unusual Case of Epilepsy.

Drysdale, C. R., M.D. Tertiary Sore-throat.

Freer, Alfred, Esq. On the Evils of Medical Men undertaking the Duties of Nurses.

Goldie, George, L.R.C.P.Ed. On Ventilation; with Model and Apparatus.

Lee, R. J., M.D. Remarks on Hooping Cough, and its Treatment by the Inhalation of Carbolic Acid Vapour.

Little, W. J., M.D. 1. Latest Experiences on the Treatment of Congenital Club-foot of Infants. 2. The Varieties of Wry-neck, with some Observations on their Treatment.

Martyn, Samuel, M.D. Hospital Registration.

Nicolson, David, M.D. The Causes of Invaliding among Convicts in the Government Prisons of England.

Pemberton, Oliver, Esq. On Ligature of the Common Femoral Artery, and especially on Ligature by an Antiseptic Material.

Russell, Henry, M.D. The Expense of Ventilation and Warming as Sanitary Requirements.

Smith, Protheroe, M.D. Ovarian Dropsy; some points in its Pathology and Treatment by Ovariectomy.

Tait, Lawson, Esq. On the Existence of Capillaries in the Umbilical Cord.

Thomas, Llewelyn, M.D. The Causes and Results of Otorrhoea.

Torrance, Robert, Esq. On the Appearance of the Tongue in Health and in Disease.

Wanklyn, J. A., Esq. On the Mineral Constituents of Drinking Water.

Woakes, Edward, M.D. On the Existence of Correlated Vasomotor Nerve-Tracts.

Gentlemen desirous of reading papers, cases, or other communications, are requested to forward the titles to the General Secretary, or to one of the Secretaries of the Section in which the paper is to be read. All papers should be forwarded to one of the above named officers as early a date as possible.

No paper must exceed twenty minutes in reading, and no subsequent speech must exceed ten minutes. Speeches at the General Meeting must not exceed ten minutes each.

ANNUAL MUSEUM.

The Eighth Annual Museum of the British Medical Association will be held in the Practical Chemistry Class-room in the University on the 3rd, 4th, 5th, and 6th of August, 1875, and will be open from 10 A.M. to 6 P.M. The Committee appointed to take charge of the arrangements for this museum will be glad to receive for exhibition:

1. Latest Inventions in Medical, Surgical, and Obstetrical Instruments and appliances of all kinds.

2. New Drugs and their Preparations, and New Articles of Diet for Invalids.

3. General Pathological Specimens, with photographs, models, casts, drawings, etc., illustrating Disease.

4. Specimens and Preparations in connection with Injuries and Diseases of Bones and Joints. [It is desired to make this a special feature in the Exhibition.]

5. New Physiological Apparatus.

6. Microscopes and Microscopic Specimens, Pathological and General; New Chemicals and other Appliances used in Histological Research.

The following is a list of the Museum Committee. All communications to be addressed to the Hon. Secretaries:—Professor Turner, Dr. Angus Macdonald, Dr. Argyll Robertson, Dr. John Wylie, Dr. W. Gordon, Mr. Thomas Annandale, and Mr. A. B. Stirling. Dr. Charles E. Underhill, 8, Coates Crescent, and Dr. John Playfair, 25, Rutland Street, *Hon. Secretaries*.

NOTICE TO EXHIBITORS.—Application for space should be made as soon as possible, and the amount required mentioned. A written or printed description of all objects intended for exhibition must be forwarded for insertion in the Catalogue; and the Committee earnestly request all intending Exhibitors to bear in mind that it is impossible for their descriptions to be inserted unless sent in early—viz., not later than July 17th. All objects intended for exhibition must be delivered on or before July 27th. They must be addressed "Curator of Museum of British Medical Association, the University, Edinburgh."

N.B.—The Name of the Exhibitor should be written on the outside of each parcel, and a card bearing his name and address should be enclosed, to facilitate the return of the articles.

FRANCIS FOWKE, *General Secretary*.

36, Great Queen Street, June 26th, 1875.

METROPOLITAN COUNTIES BRANCH: ANNUAL MEETING.

THE twenty-third annual meeting of the Metropolitan Counties Branch was held at the Alexandra Palace, on Monday, June 28th; T. B. CURLING, Esq., F.R.S., and afterwards ROBERT BARNES, M.D., in the Chair.

New Members.—Mr. Loraine Weaver, of Clapham Road, was elected a member of the Association and Branch. Mr. J. W. Trotter of the Coldstream Guards; Mr. S. N. Morton, Royal London Ophthalmic Hospital; and Dr. W. Rhys Williams, Bethlem Hospital, were elected members of the Branch.

Report of Council.—Dr. HENRY, one of the Honorary Secretaries, read the following report.

The Council of the Metropolitan Counties Branch have much pleasure in presenting the twenty-third annual report. At the last annual meeting, the number of members on the list was 605. Since that time, 20 new members have joined the Branch, 16 have retired, and 9 have died; leaving the total number at the present time 600.

The members of the Branch who have died since the last annual meeting are; Dr. Francis E. Anstie, Dr. Thomas Ballard, Mr. Joseph Blackstone, Mr. John D. Hill, Mr. Angus Kennedy, Dr. Edwin Lankester, Sir James Ranald Martin, Mr. S. W. Moore, and Mr. Edwin Sercombe.

Your Council feel assured that the Branch fully shares in the feelings of regret which have been expressed at the premature death of Dr. Anstie, at a time when by his high attainments in medicine, his integrity of character, and his persevering energy, he had earned for himself a foremost place not only among the cultivators of medicine, but among those who regard the preservation of the health of the people as the highest function of the medical profession.

Dr. Edwin Lankester, late coroner for Central Middlesex, was, in the early years of this Branch, one of its most active members, and in 1857 was elected President for the year.

Sir James Ranald Martin, though for many years a member of the Branch, never took an active part in its proceedings; but he will be remembered as having honourably spent a long life in the furtherance of the interests of his profession and of the public health.

Dr. Thomas Ballard and Mr. Edwin Sercombe were well known and genial frequenters of our annual gatherings.

Mr. Samuel W. Moore has died at an early age, when he was giving promise of being a valuable contributor to the promotion of the important science of physiological chemistry. Your Council hoped in the course of the session to be able to announce a paper to be read by him at a general meeting of the Branch on the Action of Alcohol. This, however, they have been unable to do.

Three ordinary meetings of the Branch have been held. At one of these, held on February 19th, a paper on a Case of Cerebro-Spinal Paresis accompanied by intense neuralgia, was contributed by Dr. Lockhart Clarke; and at another, held on June 24th, Dr. Barnes read a paper on Some Physiologico-Pathological Phenomena of the Circulation in Pregnant Women.

At a meeting held on April 16th, a discussion on the subject of Legislation for Habitual Drunkards was opened by Mr. Carsten Holt-house, to whom the Branch owes its best thanks for his valuable comments on this important topic. The Branch, at the meeting referred to, passed the following resolutions:

"That the Committee of Council of the British Medical Association be requested to appoint a Special Committee to consider the advisability of legislative restrictions for habitual drunkards."

"That a petition in favour of legislation on this subject be signed by the President on behalf of the Branch."

The subject has also occupied a share of the attention of your Council; who, at a meeting held on May 28th, resolved—

"That a petition to Parliament on the subject of legislation for habitual drunkards be drawn up and circulated for signature among the members of the Branch; also that application be made to the Home Secretary to receive a deputation requesting the Government to consider the subject with a view to the introduction of a measure next session; and that the other Branches be invited to co-operate in this application."

Your Council desire to impress on their successors and on the Branch the importance of giving their most careful consideration to the means of ensuring legislative measures for the protection and curative treatment of the unhappy victims of indulgence in alcoholic liquors; an object the promotion of which is receiving the earnest co-operation of many of the leading members of the profession. The subject is one which is attended with some difficulty, and is not yet comprehended in all its bearings by the legislature or by the public.

Considering the great numerical strength of this Branch, and the number of eminent medical men comprised in it who can speak with authority in the matter, it is not unreasonable to suppose that this Branch may render valuable assistance in facilitating legislation. Your Council would recommend the appointment of a special Committee of members of the Branch, who should be entrusted with the duty of drawing up a report to be submitted to a general meeting of the Branch early next winter, and which should, among other things, deal with and answer the objections which may be urged against the interference of the legislature in the matter under consideration.

The subject of the Contagious Diseases Acts has been brought under the consideration of your Council; and a memorial to the Home Secretary in favour of their continuance has been issued to the members of the Branch, and, having received 305 signatures, has been forwarded to Mr. Cross. The Council are glad to be able to record that the action of Parliament regarding the Acts in question has been in accordance with the opinions of the majority of members of the Branch.

Your Council have had very great pleasure in observing the proof which has been recently afforded of the high esteem in which your late Secretary, Dr. A. P. Stewart, is held by his brethren not only in this Branch but also in the parent Association. It was the pleasing duty of your President, on the 14th instant, to present to Dr. Stewart the testimonial which had been raised, and which amounted in value to upwards of £500. With his characteristic generosity and self denial, Dr. Stewart would allow only a portion of this to be expended in the purchase of a personal testimonial in the form of a handsome dinner and breakfast service; the remainder, amounting to about £400, being placed in the hands of the Committee of Council of the Association for the foundation of a grant, to be named the "Stewart Grant", for the promotion of researches in epidemic diseases—a subject with which his name is intimately connected. The presentation took place, by the kindness of the President, at his private residence, and was attended by a large number of members of the Branch and by several of the leading members of the Association in the provinces. Your Council have cheerfully voted the sum of £20 from the funds of the Branch towards the testimonial; measuring the amount of the contribution much more by the limited resources at their disposal, than by the high sense which they entertain of Dr. Stewart's merits.

Mr. WILLIAM MARTIN proposed, Mr. JAMES HOGG seconded, and it was resolved—

"That the report of Council now read be received, adopted, and entered on the minutes."

Treasurer's Report.—Mr. DUNN, Treasurer, read the financial report. It showed that the receipts for the year amounted to £118:6:1 and the payments to £103:6:0, leaving a balance of £15:0:1. It was proposed by Mr. S. S. ALFORD, seconded by Dr. SAUNDERS, C.B., and resolved—"That the Treasurer's report be received, adopted, and entered on the minutes."

Election of Officers and Council.—A ballot having been taken, the following officers and Council for 1875-6 were found to be elected, *President:* Robert Barnes, M.D. *President-elect:* Jonathan Hutchinson, Esq. *Vice-Presidents:* Richard Quain, M.D., F.R.S.; Thomas B. Curling, Esq., F.R.S. *Treasurer:* Robert Dunn, Esq. *Secretaries:* Alex. Henry, M.D.; Robert Farquharson, M.D. *Ordinary Members of Council:* J. Armstrong, M.D. (Dartford); J. H. Aveling, M.D.; G. F. Blandford, M.D.; A. T. Brett, M.D. (Watford); T. Bridgwater, M.B. (Harrow); J. M. Burton, Esq. (Lee); J. Langdon H. Down, M.D.; J. M. Fothergill, M.D.; Henry Gervis, M.D.; G. A. Ibbetson, Esq.; W. Mac Cormac, Esq.; C. F. Maunder, Esq.; J. H. Paul, M.D.; R. Douglas Powell, M.D.; C. H. Rogers-Harrison, Esq.; C. Shrimpton, M.D.; A. P. Stewart, M.D.; E. H. Vinen, M.D.

Representatives in the General Council.—The following gentlemen were declared elected by a majority of votes as representatives of the Branch in the General Council of the parent Association: William Adams, Esq. (Henrietta Street); J. H. Aveling, M.D.; Robert Barnes, M.D.; H. C. Bastian, M.D., F.R.S.; G. W. Callender, Esq., F.R.S.; W. Fairlie Clarke, Esq.; J. T. Clover, Esq.; T. B. Curling, Esq., F.R.S.; J. Langdon Down, M.D.; Robert Dunn, Esq.; Arthur E. Durham, Esq.; J. M. Fothergill, M.D.; Wilson Fox, M.D., F.R.S.; S. O. Habershon, M.D.; George Harley, M.D., F.R.S.; Ernest Hart, Esq.; Alexander Henry, M.D.; Berkeley Hill, Esq.; T. Holmes, Esq.; Jonathan Hutchinson, Esq.; George Johnson, M.D., F.R.S.; Henry Lee, Esq.; C. F. J. Lord, Esq. (Hampstead); John Marshall, Esq., F.R.S.; H. Maudsley, M.D.; C. F. Maunder, Esq.; A. Meadows, M.D.; W. S. Playfair, M.D.; R. Quain, M.D., F.R.S.; Geo. Webster, M.D. (Dulwich).

Notes of Thanks.—It was proposed by Dr. FELCE, seconded by Mr. ROGERS HARRISON, and carried unanimously—

"That the cordial thanks of the meeting be given to the retiring President, T. B. Curling, Esq., F.R.S., for his able and courteous conduct in the chair and for the interest which he has shown in the welfare of the Branch."

It was proposed by Mr. ROGERS-HARRISON, seconded by Mr. MARTIN, and resolved unanimously—

"That the cordial thanks of this Branch be given to Robert Dunn, Esq., for his valuable services as Treasurer."

Habitual Drunkards.—It was resolved that the following gentlemen be appointed a Committee on the subject of legislation for habitual drunkards, with power to add to their number: The President and Secretaries; Mr. S. S. Alford; Dr. G. F. Blandford; Mr. C. Holt-house; Dr. H. Monro; Dr. A. P. Stewart; Dr. E. H. Vinen.

President's Address.—Dr. BARNES, on taking the chair, delivered an address, which was published at p. 33 of the JOURNAL for July 10th.

Dr. AVELING proposed, Dr. ALTHAUS seconded, and it was resolved—

"That the best thanks of the Branch to the President for his able address."

Dinner.—The members, to the number of about forty-five, afterwards dined together; Dr. BARNES in the chair.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, July 15th.

Medical Officers of the Army.—Dr. LUSH, in proceeding to call the attention to the position of the medical officers of the army with respect to honours, pay, and relative rank, expressed confidence of being able to show that the class in question had a real grievance, and that the support of this House was necessary in order that they might obtain redress. The question of pay he regarded as of minor importance, although in this, as in other respects, there was a grievance. In 1793, the pay of a surgeon in the army was precisely the same as at the present time—namely, 10s. a day, and, in consequence also of changes with respect to promotion and to the period of service which must elapse before the superior grades were reached, the position of the medical officers was now materially worse than in 1793. Moreover, the later regulations had had the effect of destroying the social position of the medical officers in their requirements. He greatly regretted that, under the provisions of a Royal Warrant, medical officers should have been severed from their regiments to which they were now only attached instead of actually belonging to them. The question of relative rank had been said to be one of mere superiority of quarters, but he believed that it was one of far more importance as affecting the social rank of the medical officers of the army. Of the 230 combatant officers who formed part of the Ashantee expedition, 78 received honours, promotions, or rewards, and of those a large proportion never left their ships; but only nine of the 81 medical officers attached to that expedition—that was to say, only one of nine—obtained a special recognition of his services. Not long ago, there was a great distribution of honours among military men, but out of 80 or 90 medical officers only one received the honour of K.C.B. With regard to absence on leave, a medical officer of the army was in a most invidious position compared with a combatant officer. Except in time of war, a combatant officer could obtain unlimited leave of absence, but a medical officer could not obtain leave of absence for more than sixty-one days in a year, and he had to provide a substitute. If he had sick-leave beyond six months, he was placed on half-pay, and his position in that respect was entirely different from that of a combatant officer. Again, the management of a great military hospital like Netley ought, he maintained, to be subject to the control of a medical rather than a combatant officer, and the former ought not, at all events, to be exposed to the annoyance there of being unable to order the slightest alterations to be made on his own authority. He might also point out that, while the Royal Warrant of 1873 gave medical officers the rank of field officers, the spirit of it had been so thoroughly turned against them that they were absolutely denied forage for their horses. He hoped, therefore, the Government would take the matter into their consideration, and provide that such prospects should be held out to medical men entering the army that appointments in it would be eagerly sought after by the pride of our medical colleges, thus securing a class of men on whom reliance could be placed in future contingencies. The hon. gentleman concluded by moving that, "in the opinion of this House, the position of the medical officers in the army, with respect to their honour, pay, and relative rank, is not in a satisfactory state, and that the revision thereof is desirable".—Sir W. BARTELOT regarded the question as a most important one, and affecting, as it did, a most de-

serving body of men, who had at all times discharged their duties most admirably. As to their rank, the honourable gentleman would have had a very different tale to tell if he were to speak of it as it stood when he entered the service, for there was no body of men who, in that respect, had been more cared for of late years than the surgeons of the army, seeing that a surgeon-general ranked as major-general. Upon that score, therefore, he did not think that they had much to complain of, while great injury had, he believed, been done them, so far as the position which they held in their regiments was concerned. The aspiration of the medical officers was that they should be considered part and parcel of the regiment, and that the regiment should be their home; but the regiment was their home no longer. Surely, it was a monstrous thing that a man should be called upon to find regimentals for a particular regiment, and then be transferred nobody knew when and nobody knew where. That was not so in former times, and he was of opinion that the honourable gentleman had made out that part of his case.—Mr. CAMPBELL-BANNERMAN said that the Warrant which dealt with the subject was not issued without full inquiry. A committee composed of the best officers available sat upon the whole question of medical organisation in the army, and they recommended that there should be a unification of the medical service and a consolidation into a staff service of what had hitherto been a regimental service. It must be borne in mind that, while it was necessary to consider the interests of the Army Medical Department, it was also necessary to consider the interests of the army itself. When a medical man was confined to a particular regiment, his experience must be small, and his acquaintance with the higher branches of his duties must be very limited. One advantage of the unified system was, that it gave medical officers wide experience; and another advantage was, that it enabled us to have the same system in peace that we had in war. The system introduced by the Warrant was, that the medical officer should serve five years in a regiment. It was not intended that they should be subjected to any expense for regimentals when transferred from one regiment to another, but that there should be an uniform for all medical officers. It had been said that medical men who had paid large sums for their positions had received no compensation when military men did. But the reason was, because the prices paid by medical officers were quite beyond the cognisance of the War Department. The other great object of the Warrant was, to assist in removing a block to promotion. His noble friend was very averse from fixing, as the medical gentlemen desired, a positive period when promotion should be made, and he thought it would satisfy them if he stated that it was the intention of the Secretary of State that promotion should be made after a certain period, without laying it down in explicit terms that that should in all cases occur. There was every desire on the part of the late Government to meet the wishes of the medical officers, and they were under the impression at the time the Warrant was issued that the general principle of it was agreeable to the medical officers. If they felt themselves aggrieved, he had no doubt the right honourable gentleman would, as far as was in his power, relieve them of any grievance of which they complained.—Mr. WARD had no doubt great discontent was felt upon this subject, and one of the grounds of that discontent was the removal of medical officers from their regiments and placing them on the staff. But the most important of all their grievances was in connection with promotion. In Lord Herbert's time, a medical officer was sure of promotion after serving seven years; now he must serve fifteen years. That was a great hardship, and there was only one remedy for it, by providing a compulsory retirement for the older officers after they reached a certain age. After all, the slowness of promotion was the great grievance; and he strongly urged Mr. Hardy to lessen that evil by fixing the age of retirement at sixty instead of sixty-five.—Mr. HARDY observed that the honourable member for Salisbury and the honourable member who had just spoken had taken up very different positions: the one dealing with the sentimental, and the other with the pecuniary aspect of the question. He (Mr. Hardy) would be the last man to ignore the merits of the medical officers of the army; but he did not think that, on the score of honours, they had much reason to complain. Indeed, he had never before that night heard a word of complaint on that subject. As to the question of rank, the concession asked for could not be granted without in some degree depriving the combatant officers of the position to which they believed themselves entitled. Moreover, it would disturb the sound rule which had always existed, that the military authority should deal with the discipline, and the medical authority with the health of the army. As for the proposal to make retirement at sixty compulsory, he believed it would give rise to so many cases of hardship as really to be productive of more harm than good. All those matters had to be carefully considered, and he could assure the honourable member for Salisbury that he was not losing sight of the subject. It was the fact, he believed,

that promotion was slowest in some of the best regiments in the country, and practically, he might add, medical officers had become now staff officers, would be treated as such, and would have their own uniform. As to relative rank, he could assure the honourable member that, although there were great difficulties in the way of altering the position which they had always held as juniors of their rank, yet that, believing it to be of the greatest importance that they should have suitable quarters, he had directed that such quarters should be assigned them. He hoped, under the circumstances, the honourable gentleman would not deem it to be his duty to press his motion to a division, but would rest satisfied with the assurance that he was looking into the question in the same temperate spirit as that in which it had been brought under his notice. We must have medical officers, and good medical officers, and, if we could not get them without change, that change should be made.—Dr. CAMERON thought the statement of the right honourable gentleman would give considerable satisfaction to those to whom it related. He might add that the death-rate among medical officers was very high—30 per 1,000—while that in the case of the combatant officers was only 15 per 1,000, and should suggest that a thorough alteration should be made in the present system with regard to granting sick-leave.—Dr. LUSH then withdrew his amendment, having expressed a hope that the changes to which the Secretary for War had alluded would speedily be carried into effect.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Court of Examiners on July 14th; and, when eligible, will be admitted to the pass-examination.

Messrs. W. M. Burgess, Richard Lyddon, T. E. Nicoll, A. G. P. Gipps, William Kay, F. A. Teevan, D'Arcy Sugden, A. S. Bradford, F. H. Craddock, A. G. Bernard, and Joshua Rhys (students of St. Bartholomew's Hospital); J. C. Gardner, C. C. Jewell, and C. C. Claremont (of University College); J. A. Masters, A. F. Stevens, and J. F. Dell (of Guy's Hospital); Charles Winterbottom and R. W. Collett (of St. George's Hospital); A. A. Wolff (of St. Thomas's Hospital); R. T. Richardson (of the London Hospital); and C. F. Goode (of St. Mary's Hospital).

The following gentlemen passed on July 15th.

Messrs. C. H. Hough (of Cambridge School); A. P. Cooper, E. Denning, E. C. Bentham, H. D. Cooper, W. T. Askey, and R. R. Norton (of University College); B. B. Fox, E. M. Wilson, and C. W. C. Fletcher (of St. George's Hospital); F. W. W. Goodall (of St. Bartholomew's Hospital); H. S. Michell, F. Wellocks, and Arthur Shipton (of King's College); D. E. Thomas, and R. H. Grimby (of St. Thomas's Hospital); J. Gabe, R. G. White, and Wm. Scott (of the London Hospital); T. F. J. Blaker (of Guy's Hospital); R. C. Revell, and Edward Semple (of the Middlesex Hospital); Wm. Foster (of the Westminster Hospital).

Eighty-three candidates out of the 163 examined, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their anatomical and physiological studies for three months.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on the 20th instant.

Messrs. R. H. A. Hunter, Dalston; H. Skipworth, Brigg, Lincolnshire; T. R. Jones, L.R.C.P.Lond., Walton, near Liverpool; A. C. J. Wilson, Manchester; D. L. Irvine, Newcastle-on-Tyne; G. E. Alford, Weston-super-Mare; J. C. Eames, M.B.Ed., Manchester; N. W. Wright, Ardwick; J. G. Tindle, Middlesborough; F. C. Palmer, Weston-super-Mare; J. McNaught, M.B. Edin., Wall, Northumberland; W. L. Winship, Newcastle; S. D. Clippingdale, Commercial Road; W. T. Hayward, L.K. & Q.C.P.I., Liverpool; A. H. Watkins, M.B.Ed., Nailsworth; C. A. Clinton, L.S.A., Chiselhurst; C. A. Daubeny, Yatton, Somerset.

Eight candidates who passed in Surgery at previous meetings of the Court, having subsequently obtained medical qualifications, were also admitted members of the College.

Messrs. B. Jumeaux, L.R.C.P.Ed., Stafford; W. Sykes, L.R.C.P.Ed., Sheffield; G. H. Peevor, L.R.C.P.Lond., Maida Hill; E. F. Thomas, L.R.C.P.Ed., Weston-super-Mare; A. H. Blake, L.S.A., Castle Street East, W.; G. G. Sparrow, L.R.C.P.Ed., Southsea; W. Vernon, L.R.C.P.Ed., Newcastle-on-Tyne; C. C. Smith, L.S.A., Redditch.

The following gentlemen were admitted members on the 21st instant.

Messrs. C. J. Symonds, St. John's, New Brunswick; J. B. H. Lumby, Birmingham; W. H. Briggs, Stroud, Gloucestershire; E. J. Crouch, L.S.A., Horton Street, Kensington; A. W. F. Street, Barnet, by Lincolnshire; J. A. Ormerod, B.A.Oxon., Oxford; G. L. Latour, Lambeth; L. J. Hobson, Ainger Terrace, N.W.; J. J. Gawith, London; C. J. C. Mitchell, Bedford; T. Richards, Cardiff.

One candidate passed in Surgery, and, when qualified in Medicine, will be admitted a member of the College.—Seven candidates were referred to their hospital studies for a period of six months.

The following gentlemen having passed in Surgery at previous meetings of the Court, and having since obtained medical qualifications, were also admitted members.

Messrs. T. E. C. Hood, L.R.C.P.Lond., Bletchingly; J. E. Clayton, L.R.C.P.L., Leeds; E. W. Haines, L.R.C.P.L., Tavistock Place.

Twelve candidates were referred to their hospital studies for a period of six months.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 15th, 1875.

Chadwick, Alfred, Heywood, near Manchester
Crowdy, Frederic Hamilton, Newfoundland
Fell, Thomas Kennedy, Ulverstone, Lancashire
Fussell, Ernest, Sherborne, Dorset
Lilley, George Herbert, Ware, Herts
Smith, Charles Callow, York Road, Lambeth

The following gentlemen also on the same day passed their primary professional examination.

Brown, Alexander Stuart, St. Mary's Hospital
De Caux, Frederic, King's College
Goulder, Frank Samuel, University College
Osborne, John Henry, University College
Richardson, Thomas William, London Hospital
Sutten, Thomas Seagrave, Middlesex Hospital
Thompson, Edmund John, University College
Weller, John, London Hospital

MEDICAL VACANCIES.

The following vacancies are announced:—

ARMY MEDICAL DEPARTMENT—Surgeons. Examination on August 6th and following days.

BOURNEMOUTH GENERAL DISPENSARY—Resident Medical Officer and Secretary.

PURY UNION—Medical Officer for the Railliffe District.

CHELTSEY UNION—Medical Officer for the Chubbam District.

GREAT NORTHERN HOSPITAL—House-Surgeon. Salary, 60 guineas per annum, with board and lodging. Applications on or before the 20th instant.—Ophthalmic Surgeon. Applications on or before August 6th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton—Resident Clinical Assistants. Applications on or before August 2nd.

INDIAN MEDICAL SERVICE—Ten Surgeons. Examination on August 5th and following days.

LEEK UNION—Medical Officer for the Norton District.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE—Demonstrator of Anatomy. Salary, £100 per annum, and other emoluments. Applications on or before the 31st instant.

LYMINGTON UNION—Medical Officer for the Hordle, Lymington, and Milford Parishes.

MARLBOROUGH UNION—Medical Officer for the Second District. Salary, £50 per annum, and fees. Applications on or before July 31st.

MIDLAND COUNTIES HOSPITAL FOR CHRONIC AND INCURABLE DISEASES, Leamington—House-Surgeon. Salary, Fifty Guineas per annum, increasing £20 per annum up to £110. Applications on or before the 20th inst.

NORTHERN LONDON CONSUMPTION HOSPITAL—Two Physicians. Applications on or before August 5th.

NORWICH DISPENSARY—Salary, £120 per annum, with unfurnished residence and apartments.

ORMSKIRK UNION—Medical Officer for the Second District.

OUNDE UNION—Medical Officer for the Weldon District. Salary, £60 per annum, and fees. Applications on or before August 4th.

ROYAL CORNWALL INFIRMARY—House-Surgeon, Secretary, and Dispenser. Salary to commence at £120 per annum. Applications on or before the 31st instant.

ROYAL SURREY COUNTY HOSPITAL—House-Surgeon. Salary, £75 per annum, with board, residence, and washing. Applications on or before July 31st.

ROYSTON UNION—Medical Officer for No. 5 District. Applications on or before September 6th.

ST. IVES UNION—Medical Officer for the Warboys District.

TIVERTON UNION—Medical Officer and Public Vaccinator for the Western District. Salary, £70 per annum. Applications on or before August 9th.

VICTORIA HOSPITAL FOR SICK CHILDREN, Chelsea. House-Surgeon and Registrar. Salary, £50 per annum, with board and lodging. Applications on or before the 20th instant.

WESTMINSTER HOSPITAL—House-Surgeon. Applications on or before the 27th instant.

WORKSOP DISPENSARY—Resident Surgeon. Salary, £100 per annum, with furnished apartments, coals, gas, and attendance. Applications on or before the 30th instant.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTHS.

DUCKWORTH.—On July 16th, at 11, Grafton Street, Piccadilly, the wife of *Dyce Duckworth, M.D., of a son.

OVENS.—On July 18th, at Cahir, co. Tipperary, the wife of J. C. Ovens, Esq., F.R.C.S.I., Surgeon-Major 5th Dragoon Guards, of a son.

MARRIAGE.

GAMGEE CLARK.—On July 22nd, at Stamford Hill Congregational Church, by the Rev. Alexander Raleigh, D.D., Arthur Gamgee, M.D., F.R.S., Brackenhury Professor of Physiology in the Owens College, Manchester, to Mary Louisa, second daughter of James P. Clark, Esq., of London and Montreal. No cards.

OPERATION DAYS AT THE HOSPITALS.

MONDAY Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

TUESDAY Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY .. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.

THURSDAY St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.

SATURDAY St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M.—Royal Free, 9 A.M. and 2 P.M.

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

AUTHORS desiring reprints of their articles published in the *JOURNAL*, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

MEDICAL PRACTICE IN AMERICA.

SIR,—Could any of your readers kindly refer me to any sources of information about general medical practice in the United States of America, particularly on those points respecting which an intending emigrant would naturally be most anxious; such as, for instance—(1) Whether men holding English diplomas are allowed to practise there; and if so, in what estimation such diplomas are held? (2) The status in society of the general medical practitioner in the States? (3) Whether the profession is overstocked, particularly in the Western States; and whether a man, liking the institutions of the country, desirous of emigrating, not afraid of hard work, and not expecting too much at first, would have a fair chance of advancing himself? Any information on these points would be very thankfully received.—I am, dear sir, yours obediently.

H. G. D.

July 13th, 1875.

A FELLOW BY EXAMINATION.—During the past collegiate year, forty-six Fellows of the Royal College of Surgeons died, and only twenty-eight new Fellows have replaced them—viz., eighteen by examination and ten by election.

BOARD FOR IMBECILE PATIENTS.

SIR,—I am induced to write to ask you whether you think any of my brother Associates could or would help me under the following circumstances? I am a member of the British Medical Association, and have been so from nearly the first publication; have had three years of trying illness, and, being 70 years of age, am left in very weakly condition. Of course, you know what long illness does for a medical man; that his practice soon leaves him, and, consequently, that entails every discomfort imaginable. As I am not able to attend midwifery to any extent, I have been trying to obtain an imbecile or two. I have one who has been with me now three years, but could take two more; I therefore ask the members of our Association if they will bear me in mind, should any opening arise, to further my views; and as it has spread so extensively since the little seed began to germinate in the country, I hope there may be some one found who could give a helping hand by recommendation.

Apologising for taking up your valuable space, I remain, sir, yours very truly,
A. MATTHEWS, Surgeon, etc.

1, Cliff Road, Dovercourt, Essex, July 20th, 1875.

P.S.—I am now in tolerable health, and able to accomplish what I undertake, having a wife and two daughters. This being a sea-side place (very healthy), I should be pleased to have any one requiring change of air.

OMEGA (Birmingham).—Had you perused our advertising columns, you would have seen the dates of the "primary" and "pass" examinations; you are now too late. Mr. Spencer Smith remains a member of the Court of Examiners; and, as neither Sir James Paget, nor the senior Vice-President, Mr. Hewett, consents to act on the Court, Mr. Birkett, the junior Vice-President, fills the new office of Chairman of it.

FLATULENT DYSPEPSIA.

SIR,—In the letter from me, which appeared in the *JOURNAL* for the 10th instant, "nitrate of potash" should have been printed "citrate of potash." W. L.

M.D. (Royal Navy).—We understand that a representative of your service will be invited to take the chair in succession to Mr. Curling, who has consented to act as chairman next year. Write to the honorary secretary, Mr. W. Allingham, F.R.C.S.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

ROYAL COMMISSIONERS.

SIR,—In your last number you have very opportunely called attention to the absence of Professor Huxley from the sittings of the Royal Commission on Vivisection, at which (since he was no doubt specially appointed as the representative of scientific physiological inquiry) his attendance is peculiarly important. Judging from a former occasion, this seems to be a way which that gentleman has; for instance, he was a member of the Royal Commission on the Contagious Diseases Acts in 1871, and his signature is appended to its report, although his name is conspicuous by its absence from every one of the forty-five sittings of that Commission for the examination of witnesses. Surely, unless gentlemen, however able, are prepared to devote themselves diligently and conscientiously to the investigation of important public questions such as these, they ought to decline to serve on Royal Commissions, and so make room for others, who take a different view of the responsibility properly attaching to the position.—I am, sir, your obedient servant,

SCRUTATOR.

H. M. (Guy's).—Yes; Mr. Spencer Smith, of St. Mary's Hospital, retains his seat as a member of the Court of Examiners, of which Mr. J. Birkett, of Guy's, is chairman; the president, Sir J. Paget, declining to be a member of the Court.

MEDICAL TITLES.

SIR,—For the information of those who have written so fully upon the question of "Medical Titles", allow me to inform them that it has been authoritatively decided by our judges, that "if a man be registered he may call himself what he pleases". In support of my statement, I beg leave to subjoin the two following cases, and remain, sir, your obedient servant,
L. R. C. P. LOND.

"Court of Common Pleas, Westminster, May 28th, 1860.—Sittings in Banco, before Lord Chief Justice Erle, Mr. Justice Williams, and Mr. Justice Byles.—Pedgriff (appellant) v. Chevallier (respondent).—This was an appeal case against a decision of justices on an information. The appellant, Frederick Woodcock Pedgriff, was convicted at the Halesworth (Suffolk) Petty Sessions in the penalty of £10 and costs for falsely pretending to be a surgeon, contrary to the Medical Act 21st and 22nd Vic., cap. 90. Mr. Lush, Q.C. (now Mr. Justice Lush), for appellant, contended that it was no offence to practise as a surgeon; that the law remained as before, that any one could practise as a surgeon; but that now, by the Medical Act, no practitioner could bring an action to recover his fees, or be eligible to certain public appointments, unless registered under the Act. The Act does not compel a surgeon to be registered; it only deprives him of the right of suing for his fees, and of certain privileges if he do not register. The Court said that the statute was of extremely wide importance, but the conviction was upon very scanty facts. There was nothing to show that the appellant was not in practice as a surgeon before the Medical Act passed, or that he had not a diploma or other qualification so as to give him a right to use the title of 'surgeon'. The proposition that every person who calls himself a 'surgeon' without being on the *Medical Register* was liable, could not be sustained. Conviction quashed."

"Court of Exchequer, November 14th, 1860.—Sittings in Banco, before the Lord Chief Baron, Mr. Baron Bramwell, Mr. Baron Channell, and Mr. Baron Wilde.—Ellis v. Kelly.—This was a case stated under the 20th and 21st Vic., cap. 43. An information was preferred against the defendant, a surgeon at Pinner, for having, on the 2nd November, 1860, pretended to be, and using the title of 'Doctor of Medicine', thereby implying that he was registered under the Act 21 and 22 Vic., cap. 90. It was proved that the defendant had for years past affixed on the outer gate of his residence a brass plate, on which was engraved 'Dr. Kelly'. The defendant was registered in the last *Medical Register* as a Member of the Royal College of Surgeons and a Licentiate of the Society of Apothecaries. The complainant swore that he had heard him call himself 'Dr. Kelly'. The justices, upon hearing the information, dismissed the case, with costs, against the complainant. The questions stated for the opinion of the Court were—1. Whether the Medical Registration Act, 21 and 22 Vic., cap. 90, prohibits the taking and using the title of 'Doctor of Medicine' by any medical man in England, unless the said title be duly registered according to the provisions of the Act? 2. Whether, if the Court should be of opinion that the Act prohibits the assuming of such title, the defendant, under the circumstances, can be held to have done so 'wilfully and falsely' within the meaning of the 40th section? The Lord Chief Baron; if a man be registered, he may call himself what he pleases.—Their lordships were of opinion that the decision of the justices should be confirmed, and granted the costs of the appeal."

VACCINATION.

D. M. S.—A second application should have been made to the vaccination officer, referring to the applicant's address, as given in the *Medical Register*, and stating that he was the same person. This would have been followed by the transmission to him of a supply of vaccine lymph. We do not think it desirable that any one except the vaccinator, or some one acting with his consent, should take lymph from the arm of a vaccinated child. Such a course would be liable to be attended with much inconvenience.

AUSTRALIA FOR INVALIDS.

SIR,—Would you kindly permit me, through the columns of your paper, to convey the information to the physicians who favour the scheme of "the tour to Australia for invalids", that the party will be conducted to Melbourne and back by one of the splendid line of steamers which now run from port to port in about forty-four days, and not in a vessel specially chartered for the purpose? The society of others besides that of invalids will therefore be available, and the voyage out and home may be looked forward to as a very enjoyable part of the tour. May I also add that, as the fee for the trip will include every item of expense, the outlay may be calculated upon to a pound?—I am, sir, yours obediently,

THE ORGANISER OF THE EXPEDITION.
50, Lincoln's Inn Fields, W.C., July 19th, 1875.

INVERSION OF THE GREAT TOE.

SIR,—Can yourself or any reader of the *JOURNAL* kindly inform me where I can obtain an instrument I saw described some time ago (I think in the *JOURNAL*), for remedying inversion of the great toe and bunion?—I am, etc.,
TOM HEWITT, M.D.

* * Mr. Miller, instrument-maker, Heming's Row.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

CORONERS AND THEIR JURIES.

SIR, I think it would be well if not only Dr. Hardwicke, but other coroners, were warned that they incur the risk of action, or indictments for libel, if they make injurious accusations of those not judicially before them; and that the fact of their being coroners, or that the opinions expressed are held sincerely, or even that they are correct, would be no protection to them from the unpleasant and costly consequences. It would not, I think, be wise for Dr. Andrews, for example, to sue Dr. Hardwicke for his libellous imputation, for it might be supposed he thought no sane man could believe so absurd an accusation; but it might be beneficial to teach a coroner that his business is to conduct inquiries as to the cause of death in cases needing such inquiry, and that he has no right, as coroner, to pass judgment upon a practice adopted by those who must know far more of the cases than he does, and that he ought to treat members of his profession, as well as others, with decent civility. It is very proper for him, as for other men, to feel righteous indignation against proved cruelty and wrong; but before giving public expression to such feeling, it is prudent to be sure that it is proved, and that he is the proper judge.

I should be sorry to be hard on Dr. Hardwicke, and have no doubt he will learn by experience to be wiser and less impulsive; moreover, he has done no more than follow a growing and bad custom of coroners and their juries, some of whom seem to think it their duty and their right to censure those who, they fancy, have not been quite free from blame, and often do so for no just reason, or for reasons of which they are neither authorised to decide nor competent to judge; their censure being in every sense of the term highly impertinent—a practice that can hardly be too strongly condemned, especially when it is injurious to the professional reputation of any one who is not present to defend himself. It is to be hoped that the just indignation excited will check the repetition of such wrong; but if not, other and sterner methods must be tried, for checked it must be, if a coroner is not to continue an annoying and injurious nuisance.—I am, etc., H. H. P.

DR. CAMPBELL.—From the last return to Parliament of the receipts and expenditure of the General Medical Council, it appears that the former amounted to £4,349 2s. 10d. for the English branch alone.

WHO CAN SIGN CERTIFICATES?

SIR,—Would you kindly inform me in your next issue if a death certificate, filled up in the usual form thus, "as having attended, and last saw the patient, etc.," by a registered practitioner who did not attend the case (his unqualified assistant having had the sole management of it), is not a false one? and, if so, is there any legal offence committed in signing such a certificate?—Yours truly,

ENQUIRER.

* * The 20th section of the Births and Deaths Registration Act (1874) enacts that: "In case of the death of any person who has been attended during his last illness by a registered medical practitioner, that practitioner shall sign and give the same person," etc. This certificate can only, therefore, be required when the registered practitioner has been in attendance at any time during the last illness of the deceased. The Act, however, does not go on to say that under other circumstances certificates shall not be given, although this may be taken to be the spirit of the Act; and it appears to us that no practitioner, whether qualified, although unregistered, or entirely unqualified, commits a legal offence by giving a certificate of the cause of death. It is clearly undesirable and contrary to the spirit of the Act, although we believe no legal offence, for registered practitioners to give certificates in cases that have been entirely attended by their unqualified assistants; and, so far as their entry in the Death Register is concerned, we see no way to exclude them that would not be open to graver objection than the present system. The following is an extract from a special memorandum issued to registrars by the Registrar-General when the new Act came into operation on the 1st January last, which bears upon Enquirer's question. "A registered practitioner cannot depute his unregistered assistant to sign on his behalf certificates of the cause of death when he himself has been in attendance; but it will be for him to determine in any particular case attended by his assistant whether or not he can properly take upon himself the responsibility of giving a certificate. On receiving a certificate purporting to be under the hand of a registered practitioner, it is no part of the registrar's duty (except he has reason for believing the signature to be a forgery) to raise the question whether the case was at any time attended by such practitioner. The responsibility for the truth of the statements certified rests exclusively upon the certifying practitioner, who is presumed to be the best judge as to whether he is in a position to give the certificate or not." There is good reason for believing that many unqualified practitioners practise as the nominal assistants only of qualified practitioners, and the custom of granting certificates under the circumstances referred to by Enquirer is a direct encouragement to the objectionable system.

DR. O'ROURKE.—The income of the Irish College of Surgeons amounted, according to the last annual report, to £5,360 0s. 0d., and the expenditure to £4,496 14s. 0d., leaving a balance to the good of £953 6s. 1d. The expenses of the library amounted to £427 17s. 10d., and those of the museum to £460 2s.

MATERNAL IMPRESSIONS.

MRS. M., suffering from the last stage of phthisis, shows upon her upper lip an irregular blue patch, having the size and shape of a piece of pickled cabbage. Her mother states that, when pregnant, she was suddenly frightened by a jar of pickled cabbage falling off a shelf, a piece of the cabbage alighting upon her upper lip. The room being dark at the time, and the pickle cold and wet, the shock was somewhat great. When the daughter was born, the impression showed itself in the manner described. The daughter being recently attended by me in her confinement, desired to know if *her* child was marked by a mouse upon its arm. Upon examining the infant, a patch showed itself, resembling a mouse's back, and covered with fine downy hair. It appears that during the daughter's pregnancy a mouse ran across her bare arm, in the same spot as the mark appeared in the child. The daughter was much alarmed, and the ultimate consequence of the shock evinced itself in the infant, as related. Ed. J. ADAMS, L.R.C.P.E.
86, Approach Road, Victoria Park, June 1875.

A HOSPITAL SURGEON.—Each member of the Council and Court of Examiners of the College of Surgeons is required to pay a fee of twenty guineas respectively, on admission, to the treasurer.

NOTICES OF Births, Deaths, Marriages, and Appointments, intended for insertion in the *BRITISH MEDICAL JOURNAL*, should arrive at the Office not later than 10 A.M. on Thursday.

SUPERSTITION.

A **RESPECTABLE** working man, whose wife I had been attending for some severe lumbis received in an epileptic fit, called upon me one evening to tell me he had now the means of curing his wife completely of epilepsy. He had gone to some old woman, whose prescription was as follows. "A young frog must be caught before daybreak, on a spring morning, one of its hind legs pulled off while alive, the detached limb to be dried in the sun, and worn suspended round the neck of the patient." He only told me so much after considerable hesitation, and on my promising not to injure the old hag's business by employing it. He carefully carried out the above instruction. But, need I add, his wife is still an epileptic. A MESSRS.

COLLEGIATE INVESTMENTS. The Council of the College of Surgeons may well be congratulated on the judicious investment of some of its funds in the acquisition of freehold property, which has hitherto yielded so well. The rents from letting of chambers in the houses adjoining the College have produced during the past year the handsome sum of £1,104 10s. 6d., to which is now to be added, by purchase, the freehold house No. 38, Lincoln's Inn Fields, for about £7,400. The College now has the fine block represented by Nos. 37, 38, 39, 40, 41, 42, and 43, Lincoln's Inn Fields, which is of great increasing value.

DR. MALCOLM.—From the annual report of the Irish College of Surgeons, it appears that from April 1874 to April 1875, the receipts amounted to £2,000 0s. 0d., and the expenditure to £4,472 13s. 6d., leaving a balance at the bottom of £2,053 6s. 1d. Of the thirty-seven meetings of the Council, only the Vice-President, Mr. Edward Hamilton, attended all.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Bristol Daily Post; The Daily Bristol Times and Mirror; The Derby and Cheshire Reporter; The Lincolnshire Herald; The Glasgow Herald; The Sunderland Daily Echo; The Carnarvon and Denbigh Herald; The Manchester Guardian; The European Review; The Hackney and Kingsland Gazette; The Worcestershire Chronicle; The Birmingham Daily Post; The Brighton Daily News; The Sussex Daily News; The Glasgow Herald; The Cork Examiner; The Southampton Free Cork Daily Herald; The Southampton Times and Hampshire Express; The Hampshire Advertiser; The Birmingham Morning News; The Chester Courant; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. J. Matthews Duncan, Edinburgh; Dr. George Johnson, London; Dr. J. Warburton Begbie, Edinburgh; Dr. H. Macnaughten Jones, Dublin; Dr. Henry Lawson, London; Dr. A. Mackintosh, Chesterfield; Dr. Arthur Leared, London; Dr. W. Dobie, Chester; Mr. E. Malins, Birmingham; Dr. T. W. Grimshaw, Dublin; Dr. J. Batty Tuke, Edinburgh; Messrs. C. and F. Keeley, London; Mr. David Newman, Glasgow; Dr. Charters, Glasgow; Dr. Robert Croy, London; Mr. E. Nettleship, London; M.D.; Dr. J. Braxton Hicks, London; Dr. Cousins, Southsea; Mr. E. T. Hall, Chelsea; Mr. H. T. Heath, Dublin; Mr. J. J. Byrne, Manchester; Dr. T. Keith, Edinburgh; Dr. C. Parsons, Dover; Mr. J. Thorp, London; Mr. C. Webber, London; Dr. Steele, Liverpool; Dr. J. Browne, Londonderry; Dr. J. Lawrie, Glasgow; Dr. Ryder, London; Dr. Philipson, Newcastle-on-Tyne; Mr. A. White, Liverpool; Dr. Shettle, Reading; Dr. C. Underhill, Edinburgh; Mr. W. Procter, York; Dr. Arthur, Henley-in-Arden; Dr. C. Harrison, Lincoln; Mr. M. A. Wood, Ledbury; Mr. Mitchell Wilson, Chatteris; Dr. D. Campbell Black, Glasgow; Dr. J. Broom, Sheffield; Dr. Wade, Birmingham; Mr. J. Merriman, London; Dr. H. D. Dixon, Manchester; Mr. D. M. Sugden, Stirling; Dr. Yelloweas, Glasgow; Mr. R. H. Nicholson, Hull; Dr. A. Fraser, Aberdeen; Dr. Wolfe, Glasgow; Mr. R. M. Craven, Southport; Mr. C. H. W. Parkinson, Wimborne; Mr. C. E. Hoar, Maidstone; Dr. Ferrier, London; Mr. E. C. Board, Clifton; The Registrar-General of Ireland; Dr. Edis, London; The Secretary of Apothecaries' Hall; Mr. T. M. Stone, London; The Registrar-General of England; Our Paris Correspondent; Dr. J. W. Langmore, London; Dr. Waters, Chester; Dr. Hughlings Jackson, London; Mr. William Adams, London; Dr. Bishop, Edinburgh; Dr. Coats, Glasgow; Dr. A. Ogston, Aberdeen; Mr. Burdett, Greenwich; Dr. Forthgill, London; Mr. Lawrence, Chesham; Mr. Hamilton Cartwright, London; Dr. G. Griffith, London; Dr. J. G. McKendrick, Edinburgh; Mr. S. Whitford, London; Dr. A. Rabagliati, Bradford; Mr. W. B. White, Edinburgh; Dr. Alfred Shewen, London; Dr. G. Worthington, Oxford; Mr. R. Harrison, Liverpool; the Registrar of the Royal College of Physicians; Dr. S. W. Smith, Pershore; Mr. Henry Sewill, London; Dr. D. Goyder, Bradford; Mr. R. Woodall, Birmingham; Mr. Purdon, Hamilton; Mr. E. J. Spitta, Clapham; Dr. Glynn, Liverpool; Mr. W. S. Dalglish, Edinburgh; Mr. Soper, London; Dr. W. Munro, Cupar Fife; Dr. J. Kirk Duncanson, Edinburgh; Dr. E. Phayter, Toronto; Mr. G. Field, London; Dr. Haining, Chester; Dr. Samelson, Manchester; Mr. M. Hill, Bootle; Mr. A. Matthews, Dovercourt; Mr. C. Steele, Clifton; Dr. E. D. Mapother, Dublin; Rev. Dr. Haughton, Dublin; Mr. E. Owen, London; Dr. Swayne, Clifton; Dr. J. J. Morples, Dublin; Dr. Smart, Haslar; Miss Alice Vickery, London; Dr. John Roosa, New York; Mr. Donnelly, Dublin; Mr. Collins, Herne Bay; Mr. Philip Jones, Enfield; Mr. J. Porter, London; Dr. Rickards, Birmingham; Dr. Baylis, Seven Oaks; Dr. Tilbury Fox, London; Dr. J. W. Moore, Dublin; Mr. S. Wood, Shrewsbury; Mr. E. Nettleship, London; Dr. Boyd, London; Dr. M. Thompson, Newport; Our Dublin Correspondent; Dr. F. Simms, London; Dr. A. Wynn Williams, London; Mr. J. Cunningham, Edinburgh; etc.

EDINBURGH.

THE grey metropolis of the north, which this year has the opportunity of offering the hand of hospitality to the members of the British Medical Association, is beyond question a queen of cities. The attractions of Edinburgh are many, and they are varied. She has something to interest, to entertain, and to instruct students of every phase of history, archæology, and all departments of science; and to the lover of the picturesque and the view-hunter her resources are unlimited. Her citizens might almost be excused if they, conscious of the supreme attractions of their city, should fall into the grievous error of slightly regarding the visit of strangers; just as the reigning beauties of society, sometimes to their own great loss, are haughty, cold, careless, and repellent. Time was, when the city had no good reputation beyond the country for the comfortable and courteous entertainment of such as were not "a drap's blind" to Scotchmen. In the middle of the fourteenth century, the French Embassy, which came to Edinburgh to try to induce David II to join issue against the common English enemy, found the people "envious of the honour and profit of everyone besides themselves, and perpetually jealous of losing the means they had". No accommodation suitable for the luxurious Frenchmen was found or sought, no comfortable houses, no soft beds, and no walls hung with tapestry; and we are told "it required all the prudence of the French commander to restrain their impatience for leaving so miserable a country". But times changed, and the inhabitants of Edinburgh changed with them; and the splendour of the public entertainments given in the Scottish capital in the early part of the sixteenth century is the marvel of people who reflect on the bareness and poverty of the country, while private hospitality grew with the growth of the city, till it became hard to say whether Edinburgh was most attractive for the society it afforded, or for the natural and architectural beauties it possessed.

For centuries the history of Scotland was epitomised in the experiences of Edinburgh; and to the present day, although her western rival, the city of St. Mungo, has far outstripped the capital in population, wealth, and commerce, Edinburgh is still the centre of whatever of the ancient spirit of the red lion lingers in the north. She remains, in fact, the capital of Scotland, though a capital long shorn of its leading glories. Edinburgh is yet the seat of the Supreme Courts of Scotland, short of the House of Lords; and, thanks to her great Tory peer, the Duke of Buccleuch, that ancient and treaty-ratified arrangement is not to be so lightly departed from as the parents of Judicature Acts at first hoped. And then yearly, with the east winds of May, has she not the nearest approach to royal presence and regal state for a full fortnight, in the person of Her Majesty's Lord High Commissioner to the General Assembly of the Kirk of Scotland? The Assemblies themselves—for there are two, each claiming to be the true kirk—are, to nine-tenths of the Scottish people, of vastly greater consequence, and more truly imperial, than the Lords and Commons sitting far away in the Halls of Westminster. If these circumstances are not enough to vindicate the place of Edinburgh as a capital town, her inhabitants can point to the further fact that the modern Athens is at once a city and county combined; that alone among magisterial dignitaries, her Lord Provost is *ex officio* styled Right Honourable; and that he is the Lord Lieutenant of the county of the city of Edinburgh, with the power to appoint deputy lieutenants and justices of the peace within the limits of his jurisdiction. The man who will dare to regard Edinburgh as a provincial town makes a sad mistake.

When Edinburgh first began to be, and why it is, Edinburgh, we may leave to the investigations of those antiquarians who know all about such things. A temerarious jingle is applied to it by a small neighbour burgh, which, if the assertions of the rhyme be true, must be at present down on its luck.

"Musselburgh was a burgh when Edinburgh was none;
Musselburgh 'ill be a burgh when Edinburgh's gone."

Without disputing the claims of Musselburgh, Edinburgh has certainly sufficient antiquity to satisfy the pride of any reasonable Scot. Every footstep of the long ridge which creeps upward from the ancient palace of Holyrood, through Canongate and High Street, till it ends in the abrupt castle rock frowning out over the west, is steeped in historical reminiscence, and associated with dark and blood-stained deeds. The most ancient houses which line the way from the palace to the

castle were, not very long ago, the residences of the best families in Edinburgh, and in the middle ages they were the homes of the proud nobility of Scotland. The long narrow closes which run down each shed of the ridge, now smelling of unparalleled squalor, filth, misery, and degradation, were whilom the scenes of the gayest, brightest, and most exalted society of Scotland. Through what vicissitudes of fortune has the ancient Canongate come, when its palaces are now the nightly refuge of the pariahs of Edinburgh, as is the present condition of Queensberry Lodge, in which, according to the guide book, "Lady Catherine Hyde, the sprightly Duchess of Charles the third Duke, patronised the poet Gay".

For long ages Edinburgh was a small town, with its inhabitants huddled closely under the much needed and appreciated shelter of the castle. Visitors from "owre the border" occasionally made their appearance in the neighbourhood of the city, and their visits then were neither invited nor welcomed. On account of this facility of access, Scottish monarchs considered it desirable to keep their court at Perth, and their principal residence at Scone, interposing the Forth between their royal presence and the unwelcome calls of southern intruders. The shelter of the castle was not an unmixed advantage to the rising city. Occasionally, instead of being the protector of the citizens, it behaved as their tyrant; and, as it became more and more the key of domination in Scotland, its possession was equally contended for by rival factions at home, or by the wary and active enemy south of the Tweed. Thus by fair fighting or by foul treason, by intrigue, or by treaty, the castle passed from time to time into almost as many different hands as Erie bonds do at the present day; and with each change of master there was a changed attitude towards the militant citizens of Edinburgh. The persevering townsmen appear to have become well accustomed to this kind of thing; and bit by bit, under the protection or the frowns of the castle rock, the city extended its borders. The castle we know of first as a royal residence by the fact that Queen Margaret, the few days' widow of the slain Malcolm Canmore, died in it in 1093; and thereafter it became more and more a protective residence of those who wore the dangerous and uncertain crown of Scotland. As Edinburgh stretched down the long ridge, another burgh, begun under the shadow and sacred protection of the Abbey of Holyrood, crept upwards to meet it, till, in process of time, the Canongate and Edinburgh coalesced, and actually became one. That "sair sanct for the croon", David the first, of most pious memory, founded—among many other religious houses—the Abbey of Holyrood House; and as the high and mighty prince, James the first of England and sixth of Scotland, knew well, he endowed it and them with a most liberal hand. Among the numerous sources of wealth bestowed by the pious monarch on Holyrood, were "tithes of the whales and sea monsters due to me from the river Avon to Colbrinds-path". Can it be that there is any connection between this grant and the fact that, from that time down to the present day, the Firth of Forth remains a recognised calving station by the "whales and sea monsters" of the northern seas? The Abbey of Holyrood House, with its rich endowments, soon grew into the most opulent and magnificent establishment in Scotland; and by degrees it was adopted as a habitual residence of Scottish monarchs. In it, Edward Baliol held a Parliament in 1333, at which it was resolved to surrender the independence of the Scottish crown to Edward III, a proceeding which caused much turmoil of the accustomed description throughout the little but bellicose kingdom.

Next to the Castle and Holyrood, the Cathedral of St. Giles is the most important ancient and historical edifice of Edinburgh. Not that much of the tripartite kirk, now known as St. Giles, can lay claim to any remote antiquity, for nothing of the present building is older than the time of James IV, while externally, in large part, it dates from 1829, and Scottish patriots are at the present moment severely exercised for funds to complete a thorough internal retransformation which they have well begun. Nevertheless, the church of St. Giles has been, and that on its present site, from the earliest days of Edinburgh as a town worth mentioning. The sainted Giles was, we are told, a Greek of the sixth century, who came to Edinburgh, and became abbot and ultimately patron saint of the city. A precious and prized relic of the saint, an arm-bone to wit, was secured with great trouble, and, in 1452, bequeathed to the church, where it was enshrined in silver, and kept as the most precious treasure of the establishment till changed times came. After the Reformation, the relic lost its peculiar value; but, notwithstanding its enormous depreciation in market price, the president and thrifty magistrates sold the idolatrous emblem to the highest bidder; and who knows that the radius of St. Giles may not yet be in the safe keeping of some faithful son of the Church waiting for the coming wave of ritualism and reliquary devotion? In 1519, Gawain Douglas, the translator of *The Æneid* into Scotch verse, became provost of the church. It was against the learn-

of this son that his father, the Earl of Angus, rails so bitterly in *Macbeth*—

"Thanks to St. Botolph, son of mine,
Save to a wain, ne'er could pen a line

St. Giles played an important part in the history of Scotland, and in the vicissitudes of the established religion of the country in post-reformation times it occupied the foremost place. In 1558, the reformed religion had obtained so strong a hold on the populace, that the image of St. Giles was taken from the church and pitched into the north loch, and therewith arose the commotion which, two years later, led to John Knox—he "who never feared the face of man"—being placed minister in the church of St. Giles. At the back of the cathedral in Parliament Square, where formerly was the kirkyard of St. Giles, is a small square block of stone, with the letters I K, marking the resting place of the great reformer, and this is the only monument Edinburgh possesses of Scotland's best benefactor. In the High Kirk of St. Giles, James VI took solemn leave of his Scottish people before setting out on his journey to mount the throne of England. When Charles I made his ill-advised attempt at religious reformation by insisting on liturgical services in the Scottish Church, St. Giles again came to the front, led by Jenny Geddes, her redoubtable stool, and her pithy speech, "Out, out, does the fause loon mean to say his black mass at my lug?" The "stony" Sunday, to which Jenny's speech and stool-throwing were the introduction, was a day long remembered in Edinburgh; and is not the stool, to this day, a prized relic in the museum of Scottish antiquities within two or three hundred yards of the coronal spire of St. Giles?

Among the numerous train that accompanied the Scottish Solomon on his journey southward, to share with him the enlarged sphere of influence to which he went, was a highly respectable and shrewd citizen of Edinburgh, George Heriot. Heriot was a man who transplanted well, and who thrived exceedingly in the new soil and situation of London, but he never forgot the city of his nativity. The educational hospital, for the establishment of which he bequeathed the greater part of his fortune, has grown plethorically wealthy; and on his example an epidemic of hospital foundation and endowment set in with such violence that, at the present day, it has become one of the most difficult local questions to find how these educational endowments may be best administered and disposed of, without demoralising every citizen of Edinburgh who has a son or daughter to feed and educate. The hospital buildings such as Heriot's, Donaldson's, and Fettes's, which have been erected in connection with these endowments, are among the most magnificent architectural ornaments of the city.

The prosperity of Edinburgh was not seriously affected by the removal, first, of the Court from Holyrood, nor, next, by the signature of the treaty of union in the summer bower of Moray House and "the end of the auld sang", which dissolved the Scottish Parliament for ever. The city continued to grow in size and population; but for a long time its increase was vertical, and the houses were piled up into the skies like modern Babels, six, seven, and eight storeys in height. But there is a limit to the piling up of flats even in Edinburgh; and the city began to feel as uncomfortable as a lobster about to cast its shell. Little by little it burst out beyond the old city wall; but the flood came with the throwing out of the huge North Bridge over the North Loch valley more than a century ago. An exodus of the better class of citizens immediately took place, and the new town sprang into square and substantial solidity with magical rapidity. The change of residence was the beginning of a great social revolution in Edinburgh; a state of society almost unique had grown up in the closely packed courts and closes of the old town of Edinburgh, which deserved almost to be recognised as a distinct phase of civilisation. It is difficult at the present day to conceive how, in the midst of smells which sent their reputation far abroad, and which were actually carried no mean distance on the breeze, and under sanitary conditions at which we now shudder, a social order grew up, and a literature was evolved, to which the Scottish people now point with well justified pride. The change from the pent-up High Street to the spacious squares and airy streets of the new town gradually broke down the old social order, and the habits of the leading citizens came to be modelled on the example of the wider outside world. Among the earliest to move to the new town was David Hume, who left James's Court, near the top of the High Street, and settled in what was subsequently named St. David Street. "They hae ca'd mony a better man than me a saunt", was the sarcasm with which he soothed the perturbed spirit of his Abigail when she announced that the painters at the street-corner were taking, as she thought, unwarrantable liberties with the honoured name of her master.

At no period in the history of Edinburgh was society more brilliant and captivating than about the beginning of this century, as the new

town was in progress of filling up. Late in 1802 appeared the first number of the *Edinburgh Review*, an event which, according to Lord Cockburn, "elevated the public and literary position of Edinburgh to an extent which no one not living intelligently then can be made to comprehend." Francis Jeffrey, Francis Horner, and Henry Brougham were at that time young advocates, and they, in conjunction with Sydney Smith, projected this remarkable periodical. The start which literary enterprise and production obtained at that time in Edinburgh was, in large measure, due to the prudent boldness and skill of Archibald Constable, who was the first publisher of the blue and yellow. About the same time, the *Minstrelsy of the Scottish Border* appeared, without attracting any marked attention; but, three years later, the Wizard of the North revealed himself in his true light by the publication of the *Lay of the Last Minstrel*. What need have we to recall the unparalleled excitement maintained as, in later years, one after another, appeared the series of romances by the mysterious author of *Waverley*? The establishment of *Blackwood's Magazine* and the founding of the great publishing house of Blackwood was another era in the progress of Edinburgh as a great literary centre. Simply to name the men who adorned the literary society of Edinburgh in the early part of the century would be to present a catalogue too formidable for our limits. And how can we allude to the polemical giants who were reared in the Church, and who waxed strong amid the fierce dissensions which finally culminated in wrenching the Kirk of Scotland asunder, and in the birth of the Free Kirk under the parental care of the majestic Chalmers? The great non-intrusionists and their opponents the leading "moderates" now rest quietly from their labours, and a generation has grown up which scarcely knows the meaning of these names.

As a centre of literary activity and enterprise, Edinburgh has continued to hold its own against the all-absorbing maw of London. No publishing firm in the kingdom has a higher or better deserved reputation than belongs to Blackwood; and the shrewdness and business aptitude of the late patriarchal Adam Black secured for his firm and successors the most valuable literary property in the kingdom. Who may compute the quantities in which the *Waverley Novels* have been sent out by the Blacks to every corner of the world where the English language is understood? And, at the present moment, the firm of A. and C. Black is engaged in the issue of a new edition of the *Encyclopædia Britannica*, a work which places them in the foremost rank of British publishers, and on which, it is understood, the best talent, scientific and literary, that the country now possesses is engaged. The British Medical Association wishes continued health and prosperity to the city of Edinburgh.

THE UNIVERSITY OF EDINBURGH.

THE University of Edinburgh, though the youngest of the Scottish universities, is now the largest and the most flourishing, whether we look to the staff of its professors or to the number of its students and graduates. At the present time, its senate consists of thirty-six professors, while that of Glasgow comprises twenty-seven, that of Aberdeen twenty-two, and that of St. Andrew's only thirteen. In the session 1873-4, there attended the University of St. Andrew's 140 students; those of Aberdeen numbered 624; those of Glasgow 1333, and those of Edinburgh 1930. In the present session, the number of matriculated students at Edinburgh has risen to 2,076, of whom 792 are in the Faculty of Arts, 900 in the Faculty of Medicine, 318 in the Faculty of Law, and 66 in the Faculty of Theology. Whether this pre-eminence of the Metropolitan University be due to the fact of its being situated in the metropolis, or to other causes, it were hard to say; but it is important to remember, in this connection, that the origin of the University of Edinburgh was coeval with the Scottish Reformation, and that throughout its career it has been subject to popular influences and to popular management in a way and to an extent unknown till recent times in the other Scottish universities, and still unknown in the universities of England. Its three elder sisters in Scotland were founded, as all the older seats of learning were, by Papal Bull. It was established by Royal Charter, and was carefully nursed by royalty during its infancy. Far more, however, than to royal patronage it owed its steady growth and continued prosperity to its close connection with the municipality of the city. These two facts in combination are probably sufficient to account for the distinctive character and the high position of the Edinburgh University; to wit, its post-Reformation origin and its civic government. No one who is even slightly acquainted with the history of Scotland in the sixteenth century will deem this collocation of causes unnatural. That was the time of the Renaissance in Scotland, when men's minds were wonderfully quickened in the direction of intellectual activity, as well as of ecclesiastical and

political freedom. Scotland owes much to her reformers on the side of thought and learning. Her indebtedness to them for her public school system is a commonplace of history. Her indebtedness to them for what was long her only popular university has not been so generally acknowledged; but, though less direct, it is not on that account the less certain. To trace the gradual growth of an institution which had such an origin, and which has attained such pre-eminence, cannot but be interesting to the friends of learning and science.

It may seem strange, after what has been said, but it is nevertheless true, that the erection of a college in Edinburgh was first suggested and promoted by a zealous churchman, who, had he known the turn matters were to take, would probably not have been so liberal. In 1558, Robert Reid, Bishop of Orkney, bequeathed to the municipality of Edinburgh the sum of 8,000 merks Scots for the establishment of a college. This disposition of the bishop's savings seems to have been little palatable to the Church; for his executor, the Abbot of Kinloss, kept possession of the money as long as he reasonably could. The abbot was so far successful, that twenty-four years elapsed before the municipality obtained possession of the bequest. But the civic authorities were bold enough to discount their expectations; for, in 1563, they purchased for one thousand pounds Scots a portion of the lands in the famous Kirk o'Field, on which the present University buildings stand. In 1566, Queen Mary encouraged their faith and their zeal by bestowing on the projected University certain Church properties—of what amount is not stated—which had been confiscated to the Crown. A sad interest attaches to this disposition; for it was in the following year (1567) that the very site of the future college was made for ever famous as the scene of the murder of her second husband, Henry, Lord Darnley, by James Hepburn, Earl of Bothwell, who ere long became her third. In 1579, the citizens resolved that the work should be begun; but they were prevented by episcopal influence, exercised in behalf of the Universities of St. Andrew's and Aberdeen. Meantime, the power of the bishops was declining; and, two years later, the citizens, encouraged chiefly by the Rev. James Lawson, to whom the completion of the High School in 1579 was mainly due, began the great undertaking.

Their design did not contemplate, in the first instance at least, the rearing of a new and regular pile of buildings. That might come in time. What they were most anxious for was, that the work of teaching should be begun at once in such buildings as they could procure. Beside the Kirk of Field, there stood a fine old house, which had belonged to the Hamiltons. During the iron rule of the regent Morton, the estates of the Hamiltons had been forfeited to the Crown. The young King James had dismissed Morton three years before, and had begun to rule in person. The vacant house of the Hamiltons was, therefore, given to the Town Council and magistrates, to be turned into a college. The middle of the northern side of the present quadrangle marks its site. Near it were the houses on the lands purchased by the town council in 1563. The work of repairing and adapting all these buildings was at once begun, and for the next two centuries, they, with additions made from time to time, formed the home of the University.

While this work was in progress, the interest of the young king was enlisted in behalf of the new institution. In 1582, he granted a charter, authorising the founding of the University by the provost, bailies, and Town Council, who, with the advice of the city ministers, were to appoint the professors. The charter prohibited all persons but those appointed or permitted by the Town Council from teaching within the city. It was ratified by Act of Parliament in 1621.

Early in 1583, Mr. Robert Rollock, who had acquired a great reputation as professor of Humanity at St. Andrew's, was invited to become first regent of the new University; and, in October of that year, he began to teach in the hall of Hamilton House. A single class, with a single teacher, meeting in a confiscated mansion in the suburbs: such was the beginning of the great University of Edinburgh. The number of students in this class is not recorded; but there is reason to believe that it was large. Rollock's biographer mentions that his fame as a teacher was so wide, that multitudes flocked from all parts of the kingdom to attend his lectures. He lectured on Philosophy; but he soon found many of his students so badly grounded in Latin, that they could not profit by his prelections. He, therefore, asked the patrons to appoint an assistant especially to teach those who were backward in the learned tongues. He recommended for the office Mr. Duncan Nairne, who by-and-by became second regent of the college. The curriculum extended over four years, and the custom was for each regent to carry forward his own set of students from the first year to the fourth, teaching them new subjects each year, until he had prepared them for "laureation". As each year brought up a new set of students, a new regent had to be appointed to teach them, until the

staff of four, corresponding with the years in the course, was complete. This point was reached in 1586: but a fifth regent was then appointed, and Rollock was made principal and professor of Theology. The regular staff remained at this number for many years, and the plan of each regent advancing with his own class continued to be followed even after several professors of special subjects had been appointed. This plan characterises the first period in the history of the University.

It is well known that a Scottish University is simply a collection of day classes, and makes no provision for the board or lodging of its students. This was not always the case. The University of Edinburgh, when first opened, and for some time thereafter, lodged and boarded some at least of its students. Those who occupied rooms in college were required to pay rent for them; but it does not appear that fees were charged for tuition. The salaries of the regents were paid by the town. The social character of Scottish university life at this early period is further shown in the fact that the regents and the students went collectively to church, the eastern gallery of the High Church being especially allotted to them by the town council. Judging by the numbers who annually proceeded to graduation, the whole attendance at the University at this time appears to have been from 100 to 140.

The earliest picture which these particulars enable us to call up of the University of Edinburgh is suggestive rather of a college or hall in one of the English universities than of the Scottish universities of the present time. There are quaint solid-looking houses straggling here and there: Hamilton House in the north, the house of the provost of Kirk of Field (the principal's residence) in the south, and that of the prebendaries in the east. There are gardens and shady pleasaunces favourable to meditation; and an air of seclusion is given to the whole by the high wall with which, after the plague of 1585, the careful patrons caused the precincts to be surrounded. As the college grew and prospered, and more accommodation for lecture-rooms was required, the resident students were gradually driven out, and the institution became what it is at present, a collection of class-rooms, used only during the day.

The first addition to the staff was made in the interests of law. In 1590, a chair of Law was endowed jointly by the lords of session, the Faculty of Advocates, the Writers to the signet, and the Town Council. The first professor, however, for some reason unexplained, lectured on Humanity (the Latin language and literature), instead of law. Hence it has come about that, to this day, the Humanity chair is in the gift of these bodies, with the exception that, since 1858, the Court of Curators has taken the place of the town council. At first, the professorship of Humanity seems to have been held as a stepping-stone to a regency, and afterwards the two offices were frequently held jointly.

The accession of James to the English throne deprived the University of the smiles of royalty. When the king revisited Scotland in 1617, he bestowed special attention on his favourite college. He was gratified to find that, during his absence, a public hall, a divinity school, and other rooms, had been added to the buildings. He was present at, and took part in, a learned disputation, and was pleased afterwards to display his own wit in praising that of the combatants. In token of his favour and good-will, he bestowed on it, by letter from Paisley, before he left the country—not a new endowment—but the name and title of the "College of King James".

A chair of Divinity, endowed by the provost of Edinburgh, was founded in 1620. The chair of Hebrew was added in 1642—the year of the outbreak of the civil war. The University made little progress during the troublous times that followed; but its work continued to be done steadily and calmly by able men. Cromwell endowed the University with £200 sterling *per annum*. William III bestowed on it an annuity of £300, part of which was given in support of a chair of Divinity and Church History, founded in 1692. These three chairs formed the entire equipment of the Faculty of Theology till the establishment of the chair of Biblical Criticism in 1846.

The Faculty of Law next claims attention. We have seen the miscarriage of the endowment designed for a chair of Law in 1590. The first regular law chair—that of Public Law—was founded in 1707, the year of the Treaty of Union. The chair of Civil Law was established jointly by the Faculty of Advocates and the town council in 1710; that of History in the same way in 1719; and that of the law of Scotland by the same parties in 1722. No addition was made to the Faculty till 1807, when the chair of Medical Jurisprudence was founded. The chair of Conveyancing, completing the Faculty as it now exists, was added in 1825.

The second great epoch in the history of the University is marked by the systematic organisation of the Faculty of Arts in 1708. Ever since the foundation of the University, Philosophy, which included physical as well as mental and ethical science, had been taught by the

four regents under the plan of rotation already described. A separate professor of Humanity had been appointed in 1597, and a separate professor of Mathematics in 1674. But, in 1708, the Town Council issued or ratified a new set of regulations for the teaching of Greek and Philosophy. These regulations assigned a special department to each regent or professor. Latin and mathematics were already separate subjects. Now, Greek, logic, and metaphysics, moral philosophy and natural philosophy, were put on the same footing. Instead of each of the four regents teaching all these subjects in succession, one of them was told off to teach each of the subjects exclusively. Thus the Faculty of Arts was thoroughly organised; and, from this application to learning of the principle of the division of labour, the University very soon derived, and has ever since continued to derive, the greatest benefit. From this time, we may date the occupancy of the several chairs by men of eminence, each distinguished in his own department in a higher degree than could have been looked for when one man was expected to teach all subjects equally well. To this arrangement, we owe especially the pre-eminence which the University has ever since held as a school of philosophy under the direction of such men as Adam Ferguson, Dugald Stewart, Thomas Brown, and Sir William Hamilton; and as a school of physics under men like Playfair, Sir John Leslie, and James Forbes. The other chairs in the Faculty of Arts have been added more recently, to meet the growing requirements of modern times. The chair of Rhetoric and English Literature was added in 1762; that of Practical Astronomy in 1786; that of Agriculture in 1790; that of the Theory of Music in 1839; that of Sanskrit in 1862; that of Engineering in 1868; and, finally, those of Geology and Commercial and Political Economy in 1871.

The fame of the Faculty of Medicine, which now forms the most important feature in the character of the University, dates also from the early part of the eighteenth century. Before the time to which we are referring, five chairs now included in the Medical Faculty had already been instituted; those, namely, of Botany, Institutes of Medicine, Practice of Physic, Anatomy,* and Chemistry; but very little use of the training thus available had been made by medical practitioners. The teachers were still in Scotland, as in most other countries, the only available surgeons; and the regular practitioners were either empirics, who formed the majority, or men who had been educated abroad, who formed a small and melancholy minority of the craft. The great change began in 1720, when Alexander Monro became professor of Anatomy in the University of Edinburgh. He had effective forerunners in the field of reform in Sir Andrew Balfour, who founded the Royal College of Physicians in 1685, and in his able coadjutors, Dr. Archibald Pitcairne and Sir Robert Sibbald; and he was much indebted to the encouragement he received from his father, John Monro, who, after serving an apprenticeship as surgeon-apothecary with King William in Flanders, had settled in Edinburgh as a medical practitioner in 1697. Perceiving and fostering the admirable parts of his only son, he sent him to complete his education in London, Paris, and Leyden; and he returned to Edinburgh in 1719, so complete a master of his profession that, though only 22 years of age, the whole of the members of the Royal College of Physicians, headed by their president, assembled to hear him lecture. The impetus which he gave to the scientific study of medicine was immense. The medical curriculum was very soon reduced to a system. Additional professorships were instituted in the Faculty in 1724. The movement for founding the Royal Infirmary as a clinical school began in 1725, and the University entered on that career which has made it famous as a medical school over the civilised world. The chair of midwifery was instituted in 1726; and the reputation of the University as a great school of medicine was maintained by the great Cullen, by the Gregories, and by Joseph Black, till the commencement of the present century. The chair of Natural History, of which Edward Forbes is the brightest ornament, dates from 1767; that of *Materia Medica* dates from 1768; that of Clinical Surgery from 1803; those of Surgery and General Pathology from 1831.

It is not wonderful that, long before the last-named date was reached, the old University had burst its bounds. In 1760, the *Senatus Academicus* included eighteen professors; and the old buildings in the Kirk of Field were wholly inadequate to accommodate so thriving an institution. To secure fortune, the town council resolved to take the tide of prosperity at the flood. A scheme was set on foot for erecting a home for the University which should be worthy of its fame and its

name. This movement began in 1763; but the outbreak of the American war caused it to be suspended for several years. With the peace came a revival of prosperity. Public spirit was reawakened, and a subscription was set on foot. Considerable sums having been obtained, part of the old buildings was pulled down, and the foundation-stone of the present magnificent pile was laid by Lord Napier, as Grand Master of Scotland, on November 16th, 1789. The architect was Robert Adam, by whom the Register-house was also designed. The Town Council seems to have been more zealous than discreet in entering on so expensive an undertaking. Probably it overestimated the resources of the country. Before the design was half completed, the work had to be stopped for want of funds. The north side alone was completed. The west side and the east front were little more than begun. The old buildings, including the Kirk of Field House, stood for some years longer on the site of the present library. Thus matters continued—old and new buildings standing side by side—for twenty years longer. In 1815, however, the claims and the needs of the University were pressed on Government by some of the Scottish members, and a grant of £10,000 a year for seven years was voted to complete the buildings. Operations were resumed in the following year, under the direction of W. H. Playfair, who adhered closely to Adam's exterior design, but who altered greatly the interior arrangements. The four sides of the quadrilateral, which formed the original plan, are now complete; but the building still lacks the great dome over the east front, which formed so striking a feature of Adam's design. The buildings, as has been said, form a regular parallelogram with a spacious quadrangle in the inside. The entrance is by three wide gateways in the east front. The gateways are surmounted by a handsome portico, supported by Doric columns twenty-six feet high, each formed of a single stone. The inscription on the entablature records the institution of "the College of King James" in 1582, and the commencement of the new buildings in 1789, during the principality of William Robertson. "The stupendous proportions," says Chambers, "of this magnificent front are seen to great disadvantage, on account of the closeness of the street to the walls; and, the more the edifice is examined, it excites a deeper and deeper regret that it does not occupy the centre of some spacious park." The north side is now finely opened up, a broad and handsome street (Chambers Street) having superseded the narrow and dingy lanes by which till lately it was skirted. One could wish, however, that the architectural features of this side were more worthy of exposure; that, for instance, something like the massive portico in the east broke the dull monotony of the northward wall.

Of the additions begun in 1815, the chief part is occupied by the University library. This library originated in a gift of three hundred volumes to the magistrates, for the use of the citizens of Edinburgh, by Clement Little, advocate and commissary. This gift was made in 1580, before the college was founded; and an apartment was prepared for it in the church-yard of St. Giles (now the Parliament Square). As soon as the college was opened, Little's library was removed thither, and formed the nucleus of one of the finest collections in the United Kingdom. It has been enriched by private munificence and by public liberality. It was one of the libraries which, under an Act of Queen Anne, received a copy of every book entered at Stationers' Hall; but, some years ago, that often inconvenient privilege was compounded for by the acceptance of a money grant. Drummond of Hawthornden, the famous poet, bequeathed his library to the University, and thus enriched it with many rare specimens of early Scottish literature. Drummond's friend Principal Adamson was also a generous donor. The latest accession to the wealth of the library is of great value. It consists of the collection of Shakespearean literature formed at great cost by J. O. Halliwell, and given by him to the University in 1872. The visitor would do well to spend a few minutes over the case in the library hall, in which are displayed a very fine copy of the second folio edition (1632), and many copies of the original editions of the single plays in quarto. In an adjoining case he will find an interesting collection of illuminated manuscripts, among them several missals of the fifteenth century, a French manuscript of *La Sainte Bible* on vellum, written in 1314, and a Greek manuscript of the Four Gospels, written in the twelfth century. The library now contains 137,000 printed volumes, and about 700 volumes of manuscripts, many of them of great interest and value. The library hall, in which most of the books are preserved, is one of the most magnificent rooms in Scotland. It is 198 feet long by 50 feet wide. The bookcases stand at right-angles to the walls, between the windows, and terminate in massive pilasters, which support the arched roof. In front of these pilasters stand busts of famous professors: Alexander Monro and William Cullen, John Leslie and John Playfair, Dugald Stewart and William Hamilton, James Young Simpson and James Syme, and many more. In the library, as well as in the senate hall and the court-room, there are some valuable portraits of

* The anatomical collection of the University began with a skeleton of a Frenchman, brought from Paris by Dr. Michael Young, and presented by him to the University in 1671. So entirely was the University given up to literature at that time, that this skeleton, hung up in the library and covered with a white sheet, was a source of mysterious terror to the whole corporation, professors, students, and all. So much we gather from an old MS. catalogue of the library, of date 1722, in which the skeleton is entered among the *res ad opes*.

principals, professors, and benefactors of the university : of Knox, Buchanan, George Heriot, and Napier of Merchiston ; of Principal Robertson, Adam Ferguson, and John Playfair, all by Raeburn ; of Thomas Brown and James Thomson, the poet ; of John Lee and John Wilson ; of Sir David Baxter and Sir Roderick Murchison. A statue of Sir David Brewster stands at the west end of the quadrangle.

The present constitution of the University as a corporation dates only from the year 1858. The causes which led to the passing of the Act, which relates to all the Scottish universities, need not be specified here. It is enough to say that it was the result of an agitation for university reform which had extended over many years, and that it relates not only to the government of the University but also to the regulation of the course of study and of degrees. Its chief effect, as regards the University of Edinburgh, was to deprive the Town Council of the patronage of seventeen chairs, and of their management of the University. The former, the patronage, was transferred to seven curators, four of whom are elected by the town council and three by the University Court. The latter, the management, was transferred to the University, which is now a self-governing body. The corporation consists of the chancellor, the rector, the principal, the professors, and the registered graduates and alumni. Since 1868, when the last Reform Act was passed, the University, jointly with St. Andrew's, has sent a representative to Parliament.

The governing power of the University lies with the University Court, the *Senatus Academicus*, and the General Council. The chancellor is the nominal head of the University, and he is president of the General Council. He is also the fountain of honour, as all degrees are conferred either by him or in his name. But his chief function, like that of a constitutional monarch, consists in his giving his sanction to the laws passed by the University Court. In that court, however, he is represented by his assessor. The University Court is really the supreme power in the administration. It is a representative body of eight members, two of whom, the rector and his assessor, represent the matriculated students ; other two of whom represent the senate ; two the general council or graduates ; and two the town council of Edinburgh. The senate superintends the teaching and discipline of the University, and administers its revenues ; but in all these regards the court superintends the senate. The court makes changes in the internal arrangements ; the court fixes the rate of class-fees and other charges ; the court has power (with the approval of Her Majesty in Council) to censure, suspend, retire, or deprive of office an inefficient principal or professor.

The General Council consists primarily of registered graduates, but the chancellor and the members of the court and senate for the time being are members of it. At the present time it numbers about 3,700 members. Its sole function, besides electing the chancellor, and an assessor to the Court, lies in "making representations" to the Court on matters affecting the wellbeing of the University. The Act, it is true, provides that all improvements proposed by the court should be "submitted to the general council for their consideration" ; but this rule is generally honoured in the breach. The council is the popular element in the university constitution ; but it has no power, except the power of talking, and as most of its members have grown tired of that, its meetings (twice a year) have become a very dull farce. The same is true of the general councils of the other Universities ; and the injustice of the case is felt so keenly, that steps are being taken to endeavour to secure for these bodies some direct and actual influence in university affairs.

The effect of the Act of 1858, as a whole, has been to increase very greatly the efficiency and the prosperity of the University. The increase in the attendance of students is the best indication of this. For many years before 1858, the attendance was much lower than it had been in the early part of the century. In 1819 the number of students on the roll was 2,160, in 1830 it was 2,186, but in 1840 it fell to 1,298, and it did not rise much above that during the next decade and a half. Since 1858 the attendance has been steadily increasing : last year it was 1,930, this year it is 2,076 ; there is, therefore, every reasonable hope that the maximum of 1830 will, ere long, be surpassed. The number of graduates has also increased. This is especially noticeable in the Faculty of Arts, in which, before the passing of the Act, graduation had come to be the rare exception. Sometimes the annual list showed fewer than a dozen ; and the Senate congratulated itself if it presented anything approaching a score. Now, the annual number of graduates averages between 60 and 70. The number of chairs has also increased. Five new chairs (three of which are in operation) have been founded or announced since 1858. The large extent to which assistant-professors have been introduced has further increased the number of working classes.

This has brought up again the question of accommodation. The fact

is, that the University has once more burst its bounds : not only so, but accommodation and appliances that were suitable enough half a century ago, are now wholly inadequate. It was by the free use he made of practical demonstrations and clinical work that Alexander Monro gave its first great impetus to the medical school of Edinburgh. It is the modern practice in all great universities to adopt the same method in teaching such subjects as physics, chemistry, and natural history ; to make less use of the lecture-room and more of the laboratory ; to appeal less to the ear, and more to the eye and the hand. But for this kind of work there is no adequate accommodation in the present buildings. A scheme has therefore been started for erecting an entirely new school, with class-rooms, theatres, laboratories, and museums, for the medical Faculty of the University. The site secured is at the Meadows, near the new Royal Infirmary. Of the cost of the new buildings, for which plans have been prepared and approved, the sum of £100,000 is required from the public, and of this sum £77,000 has already been subscribed. When the whole has been obtained, Parliament will be appealed to for aid.

Since 1858, the benefactions to the University have also greatly increased. Since that year, Fellowships and Scholarships of the aggregate annual value of £3,400 have been established. Of these, eight are classical, six are philosophical, twelve are mathematical and physical, and two are theological. There are over one hundred bursaries in the Faculty of Arts, of the annual value of £2,000 ; there are twenty-four bursaries in the Faculty of Divinity, four in that of Medicine, and three in that of Law.

The degrees conferred by the university are Master of Arts (M.A.), Bachelor of Medicine (M.B.), Master in Surgery (C.M.), Doctor of Medicine (M.D.), Bachelor of Laws (LL.B.), Doctor of Laws (LL.D.), Bachelor of Divinity (B.D.), Doctor of Divinity (D.D.), Bachelor of Science (B.Sc.), and Doctor of Science (D.Sc.). The University also grants certificates in arts to women, and local examination certificates to school boys and girls. Of the above, the LL.D. and the D.D. degrees are purely honorary. The others are bestowed after examination. The arts curriculum, without entrance examination, occupies four years. If an entrance examination be passed, it may be completed in three years. In the former case the minimum cost of the curriculum, including fees for degree examinations, is £38 17s. ; in the latter case it is £28 7s. The total minimum cost of attending the medical curriculum (five summer and four winter sessions) and of taking the M.B. degree is £120 13s. For the C.M. diploma there is an additional fee of £5 5s. The minimum for taking the M.D. degree is £141 3s.

THE ROYAL COLLEGES, MEDICAL INSTITUTIONS, DEBATING SOCIETIES, ETC., OF EDINBURGH.

At a short distance from the University, stands the Royal College of Surgeons, one of the most classical buildings in Edinburgh. The first charter granted to the practitioners of the "surgeane craft" is dated July 1st, 1505, eight years prior to the battle of Flodden ; it provided, amongst other things, for the study of anatomy, and established a monopoly for the surgeons of the manufacture of "aquavite". We must refer our readers to the admirable historical sketch by Dr. Gairdner, senior, for a full account of the rise and progress of the Royal College of Surgeons, and for the part this ancient and important body has taken in developing the Medical School of Edinburgh, and promoting the establishment of the Royal Infirmary. This sketch was published in the *Edinburgh Medical Journal* for 1860. The museum of "Surgeons' Hall" is one of the most extensive in the kingdom, and possesses many unique objects of interest. Under the care of the curator, Dr. Bell Pettigrew, it is daily adding to its treasures, and the careful arrangement and order shown in every department reflects the highest credit on this well-known anatomist, and on the liberality of the College. At the rear of the building, stand the anatomical rooms, chemical laboratory, class-rooms, and private museums of most of the teachers of the extra-academical school of medicine and surgery. (The large number of teachers necessitates the juniors lecturing in private class-rooms apart from the main buildings.) This school is not under the control of the College, and, in fact, holds no corporate capacity, being simply an association of private lecturers. The courses of lectures, however, qualify for University degrees and for licenses granted by all other bodies. There is a movement on foot for the procuring of a charter of incorporation.

The Royal College of Physicians of Edinburgh has its Hall in Queen Street, in the New Town. Its first charter of incorporation was obtained from Charles II, and the great seal was appended to it on St. Andrew's Day, 1681. This body has always been foremost in promoting the welfare of the many charitable institutions of the city. Within the last

few years, its donations for medical purposes have been munificent; amongst others, may be mentioned a thousand guineas to the new University buildings. Outwardly, the Physicians' Hall is purely classical in design, and in its internal arrangements sumptuous. Its library is full to overflowing, and the museum of drugs rich and varied. The British Medical Association will have an opportunity of judging how this influential corporation exercises its hospitality at the ensuing meeting, a virtue for which it has been ever famed.

Edinburgh possesses several dispensaries, the Royal, the New Town, two for Diseases of the Eye, one for Diseases of the Ear, and a Dental dispensary, all conducted on the most liberal principles. Nor is it wanting in professional debating societies. The Medico-Chirurgical and Obstetrical Societies meet regularly during nine months of the year, and animated discussions evince the interest taken by the profession in the prosecution of the purely scientific aspects of the subject. By these societies ample provision is made for the expenditure of the scientific energy of the profession in Edinburgh; and for the occasional discussion of such subjects of general social and professional organisation as from time to time have been discussed with advantage in the Metropolitan Counties Branch; it would be well for the Edinburgh members to form a Branch, which should meet once a year, appoint office-bearers and representative members. At such meetings one or more of the leading questions of the day might form the subject of address by the president, and be subsequently discussed. The importance of this step will, we trust, be urged on the profession in Edinburgh and Glasgow at the approaching meeting.

Mention should not be omitted of the Royal Medical Society, instituted in 1737. This Society is composed mainly of students, and forms a most important adjunct to the system of education.

ANATOMICAL SCHOOL OF EDINBURGH.

THIS dates back to the year 1694. In October of that year, Alexander Monteith, a surgeon of high reputation, and the Corporation of Surgeons, independently of each other, sought for and obtained from the Town Council a grant of subjects for dissection. In this way, therefore, two rival classes of anatomy were started in Edinburgh. The contest, however, was unequal, seeing that, in addition to the influence gained by numbers, the corporation had the advantage of a more plentiful supply of subjects; consequently, the efforts of Monteith were not crowned with success, and in three years he gave up his undertaking and retired from the teaching of anatomy.

Until 1705, the Corporation of Surgeons never seem to have appointed any one man whose exclusive duty it was to teach anatomy. They depended entirely on such of their number as were willing to undertake the office. This arrangement, as we might expect, gave rise to many inconveniences; and in that year, therefore, they nominated Robert Elliot as sole teacher, and as such he became entitled to all emoluments proceeding from the class. At the same time, the Town Council appointed him Professor of Anatomy to the University, granting a yearly income of £15. He died in 1714, and in his place Adam Drummond was called to the chair; but, owing to the requirements of the extensive surgical practice in which he was engaged, he was unable to give so much attention to teaching, as the chair required, and consequently MacGill, a young surgeon with a strong inclination towards anatomical research, was appointed joint professor.

We are now approaching a period when the Anatomical School of Edinburgh was placed on a sure and lasting foundation. Hitherto the efforts in this direction had been desultory, and hardly what we could call successful. The real foundation should date from the appointment of Dr. Alexander Monro to the professorship, and it is this man that we should always recognise as the father of the school.

Alexander Monro was the son of John Monro, a surgeon in the army, and afterwards a practitioner in Edinburgh. It was the great desire of his father that an efficient medical school should be established in Edinburgh, and his son early evincing an eagerness to obtain anatomical knowledge, he trained him specially as a teacher of anatomy. Having obtained all the anatomical knowledge he could acquire in Edinburgh, young Monro proceeded to London and studied with great zeal his favourite science under Cheselden. He then went to Paris; but before doing so he sent home to his father certain anatomical preparations, executed by himself, and these were so much admired by Drummond, that he intimated to Mr. Monro that should his son continue as he was doing, he would give up his share of the professorship on his return to Edinburgh. From Paris he went to Leyden and studied under Boerhaave. He returned to Edinburgh in 1720, and both Drummond and MacGill, looking simply to the advantage to be gained by the anatomi-

cal school, resigned the chair of Anatomy in his favour. At this time he was twenty-two years of age.

We must now look to the causes which led to the removal of the anatomical school from the theatre in Surgeons' Hall to the University. This took place five years after the induction of Monro, and the leading cause was an attack made upon the Surgeons' Hall by a mob infuriated by an attempt on the part of some of the students to rob the graveyards, in order to obtain subjects for dissection. It was with difficulty that the anatomical preparations, used by Monro for teaching, were saved from destruction; and this alarmed him so much that he craved and obtained permission to hold his class in a theatre within the walls of the University.

Monro died in 1767. He was a man with a wonderful genius for anatomy, a splendid lecturer, and possessed of great administrative power. Moreover, kind and courteous to the students, and always anxious to help them in after life, he was a great favourite. No wonder, then, that the school prospered under his masterly direction; his course of lectures embraced surgery as well as anatomy, and he generally concluded the session with a few lectures on physiology. Before describing the individual bones, he pointed out their uses and structure, and in demonstrating the various organs of the human body he illustrated his lectures, both by recent dissections and by dissections of the lower animals. He was succeeded by his youngest son, Alexander, who had previously in the year 1757 been appointed joint professor. He had received a very thorough training in anatomy, both at home and abroad, and whilst studying in Berlin under Meckel he had become acquainted with all the newest methods of anatomical research. Profiting by this, and possessing a great faculty of rendering his lectures clear and forcible, he not only maintained the reputation of his father's chair, but soon raised it to be amongst the first in Europe. His method of instruction was similar to that of his father, but, in addition, he used the microscope to demonstrate to his class the minuter structure of the various organs. He also gave lectures on Comparative Anatomy, and it was during his incumbency that the supplementary course of "anatomical demonstrations" was instituted, a method of instruction most popular amongst the students, and still continued in the University, and which has also been adopted by a great number of other anatomical schools.

Alexander Monro *tertius* was appointed joint professor with, and successor to, his father in 1798, but he did not become sole professor until 1808, when his father retired. Following so eminent a professor, Monro *tertius* had no easy task before him in maintaining the honour of the school. Moreover, he had formidable rivals to compete with in the extramural school, and he not being a popular teacher, the numbers attending the class declined. He was a quaint eccentric man, possessed of considerable ability, but evidently with no taste for the subject he professed.

Here it should be mentioned, that up to this time there had been no chair of Surgery apart from that of Anatomy. It was called the Chair of Anatomy and Surgery, and Monro the second had always strenuously resisted all attempts to effect a separation. In 1831 John Wm. Turner was appointed Regius Professor of Surgery, but Monro *tertius* still retained the title of Professor of Anatomy and Surgery, and every Saturday taught an operative class of surgery. It was not until 1845, when he retired, that the complete separation was effected.

John Goodsir obtained the chair after Monro *tertius*, and, he being a man of an entirely different mould, the chair of Anatomy, under his guidance, soon recovered what it had lost during the incumbency of his predecessor. Tall, gaunt, and stern in appearance, he taught anatomy with an earnestness that inspired his students with both awe and admiration. He possessed a great genius for anatomical research, and this, united with a most unflagging industry, soon gained for him a position which was equalled by few anatomists of his day. Moreover, he exercised a wonderful influence upon the minds of his students, the impress of which is to be seen in the various writings of these pupils.

He was succeeded in 1867 by the present professor, Wm. Turner, under whom the School of Anatomy in the University has steadily increased until it is now the largest in Europe. Looking back upon the list of professors who have filled the chair of Anatomy since 1720, it is a curious fact to observe that each acted before his appointment as assistant to his predecessor. This fact suggests the idea that, as each must have received considerable experience from his predecessor, this experience has accumulated, and has in part at least caused the great success which has always attended the teaching of anatomy in the University.

As the prosperity of a school and the efficiency of its teaching can to a certain extent be estimated by the number of students attending, it may be interesting to give a few extracts from the class-rolls. Monro *primus* began with 57 pupils, but gradually his class increased so as to give a yearly average attendance of about 113. His largest class was

somewhere about 190. *Monro secundus* had an average yearly attendance of nearly 300; indeed, his class in 1783 reached 436. During the reign of *Monro tertius* the numbers attending the class fell off, but not so much as might be expected. This was owing to the fact that candidates for graduation were more or less compelled to take out his class at least once, as the extramural classes did not qualify at that time for the University examination. Passing to the incumbency of Goodsir, we find that he began with a class of 275. In 1852-53 the roll shows an attendance of 368. The following winter, his health having broken down, he was compelled to go abroad, and in his absence Dr. Struthers (now professor of Anatomy in Aberdeen) acted as his substitute, and taught in the University not only Professor Goodsir's class but his own; and the classes thus combined amounted to 442. In 1858, a Royal Commission was appointed to inquire into the condition of Scotch Universities. This commission issued new regulations, requiring that each student before being admitted into the Faculty of Medicine should pass a stringent entrance examination. These regulations came into force in 1861, and their immediate effect was to cause a considerable falling off in the attendance upon the medical classes. The anatomical class, which in the year previous, 1860, numbered 354, now participated in the diminution. In 1866-67, the last year of Goodsir's incumbency, the class had diminished to 223. Professor Turner commenced his first winter course with an attendance of 256. The number, however, has steadily increased, until now the Anatomical School of the University of Edinburgh occupies the proud position of being the largest in Europe. Last winter session, viz., 1874-75, the class numbered 470.

We must now retrace our steps and show briefly the history of the EXTRAMURAL Anatomical School. The first lecturer in this school was John Bell. When a student under the second *Monro*, he was much impressed with the fact that the bearings of anatomy upon surgery were not sufficiently recognised in the teaching of that time. Accordingly, having qualified himself for the position and encouraged by the great number of students that yearly repaired to Edinburgh for their medical education, he commenced a course of lectures in 1788 upon Surgical Anatomy. He was assisted in his teaching by his brother Charles (afterwards Sir Charles Bell), the former conducting the surgical, and the latter the anatomical department; and when John gave up the class his brother carried it on himself for four years longer, and then left for London. Before this, however, the well known anatomist Barclay had commenced to lecture, illustrating his course with frequent references to the anatomy of the lower animals. At first, he was not successful, but after the departure of Bell for London and the death of *Monro secundus*, his class was very largely attended. In 1808, Dr. John Gordon appeared on the field, and in his lectures he taught Anatomy and Physiology conjointly. The direct successor of Barclay was the famous Dr. Knox. He was a most fascinating man in private, and, carrying this fascination into the lecture-room, he soon attracted a very large class around him. Into his lectures he introduced much extraneous matter, and he never failed to awake within the student an enthusiasm for the subject which he taught. Besides Knox, however, there were several other lecturers at this time. Amongst these we may mention John Lizars, afterwards succeeded by his brother Alexander, also Sharpey, Handyside, Allen Thomson, the latter taking Lizars' place when he removed to Aberdeen. In a short time, Allen Thomson was called to the Chair of Physiology in Edinburgh; and then, after a time, to the Chair of Anatomy in Glasgow. He has thus occupied a chair in three Scotch schools. Mercer took the place of Handyside, who gave up Anatomy to follow out Surgery. When Knox retired, Dr. Handyside again commenced to teach anatomy, being joined in his undertaking by Dr. Lonsdale and Mr. Spence (before this, Demonstrator of Anatomy with *Monro tertius*, and now Professor of Surgery). Considerable success attended this class; but, after a time, it was broken up by Dr. Handyside resuming practice, Mr. Spence commencing a course of Surgery, and Dr. Lonsdale leaving Edinburgh for the sake of his health. Dr. Struthers took their place; and, on his obtaining the Chair of Anatomy in Aberdeen, Dr. Handyside a second time returned to Anatomy, and he still continues to lecture with success in one of the class-rooms belonging to the Royal College of Surgeons.

Method of Instruction adopted in the Anatomical Department of the Edinburgh University.—During the Winter Session, the teaching staff consists (in addition to the professor) of two graduates, who act as permanent demonstrators, a junior demonstrator, also a graduate, and holding his appointment for the session only, and two undergraduates, generally third- or fourth-year students, who act as assistant-demonstrators. The professor delivers a course of lectures upon Systematic Anatomy, and illustrates these with a large collection of specimens of the osteology, both of the human subject and of the lower animals, by recent dissections, and by numerous preparations and diagrams. A very prominent feature in this course is a certain number of lectures

devoted entirely to the description of the microscopic characters of the various textures of the body, and demonstrations of these under the microscope. In connection with this course of lectures, tutorial demonstrations upon Osteology are given to the junior members of the class four days a week during the earlier part of the session. In the afternoon, an additional course of lectures is delivered upon Regional Anatomy. The Professor and Senior Demonstrator conduct this class conjointly. A recent dissection is placed before the students, and the various structures in their relationships to each other are demonstrated to the class. In the dissecting-rooms, the teaching is carried on by the various demonstrators under the superintendence of the Professor.

During the Summer Session, the staff is reduced to two demonstrators and a junior demonstrator; and the dissecting is carried on as in winter, with this difference, that the number of students attending is very much smaller. In the forenoon, a course of lectures is delivered by the Professor and Senior Demonstrator conjointly; the Professor generally lecturing upon Comparative Anatomy, and laying before the students the results of his own original observations; whilst the Senior Demonstrator demonstrates to the students a recent dissection, laying stress upon the bearings of anatomy to medicine and surgery.

Method adopted in Preparing the Subjects for Dissection.—Every body, on being received, is at once injected with Stirling's Preservative Fluid, the quantity thrown in depending upon the condition of the body. A paint injection may be employed immediately after this; but it is better to allow the body to lie for twelve hours, and then throw into the vessels a coloured lard injection, and this latter is the method adopted in the University. The "preservative fluid" is a most valuable preparation. It has been employed in Edinburgh for more than thirteen years, and the change that it has wrought in the dissecting-room atmosphere is marvellous, and can only be appreciated by entering first the Edinburgh dissecting-room, and then the rooms of some school in which its uses are not known. It apparently has not only the power of preventing, but also to a certain extent of correcting, putrefaction, when not very far advanced. Its action is rapid and almost instantaneous; and on injecting a body green from putrefaction, we can trace the course of the fluid through the minute vessels by the fading away of the green and the restoration of the skin to its natural colour. To any one who frequents the dissecting-room, it is well known that putrid mucus, blood, and fluids of the body, give rise to the most offensive odours. A little of the fluid sprinkled on such immediately removes the odour; and then it is useful not only for the injection of the bodies, but also for sprinkling over any offensive smelling part, or any putrid fluids that may have been spilt on the floor.

THE MUSEUMS IN EDINBURGH.

THE museums in Edinburgh bearing upon medical science are, strictly speaking, only two in number; viz., the Anatomical Museum of the University, and the Museum of the Royal College of Surgeons: but certain others, such as the Museum of Science and Art, the Phrenological Museum, and the Antiquarian Museum, are not without a considerable amount of interest to the profession.

The Museum of the University.—This occupies the ground-flat of the anatomical department. It was founded in the year 1800, by Dr. Alexander *Monro secundus*, who presented to the University his own collection of anatomical preparations, with that of his father. About sixty years later, the museum was further added to by Sir David *Monro*, who presented to it a large number of anatomical preparations which had belonged to his father, Dr. *Monro tertius*. Professor Goodsir, whilst curator, reorganised the collection and created the Museum of Comparative Anatomy; and, on his death, his private collection was purchased by the University. For the last eight years, it has been under the charge of Professor Turner, and rapid strides have been made in its extension. The great drawback to its further increase is the want of space; great numbers of fine specimens being stowed away in corners, and thus overlooked by the visitor; but this will shortly be remedied in the new buildings designed for the University Medical School. On entering the Museum, the first and smallest division is found to contain a small ethnological collection of crania and casts, some of historical interest, such as the skulls of Peppé, the murderer; of Haggart, the burglar; of George Buchanan, the Scotch historian; and of Martin Sobieski; also the skeletons of Burke and "Bowed" Joseph, the leader of the meal-riots in Edinburgh. In the second division we come upon the original nucleus of the Museum—the collection of anatomical preparations presented by *Monro* the second. Amongst these may be seen dissections of the lymphatic vessels of the leg after their injection with mercury—specimens prepared by Allen Burns, and valued greatly by the *Monros*, who obtained them at the

expense of no little money and trouble; also corroded injection of the kidney, and arterial preparations of the head and neck. Here, also, are a number of comparative anatomy specimens added to the museum by Goodsir. The third and main division is occupied by pathological and comparative anatomy specimens; the former being arranged around the walls, whilst the latter are placed on stands arranged in parallel rows along the floor. Here are to be found fine injections of the various organs of birds, reptiles, and fishes, and also dissections of the electrical organs of fishes—all by Goodsir. Very worthy of attention, also, are the series of preparations of the muscular fibres of the heart, and also injected and dissected specimens showing the blood-vessels and nerves of the heart, by Pettigrew. In the preparation of these latter, the great difficulty to overcome was to discover some injecting material which would stand heat, seeing that it was necessary to boil the heart before proceeding with the dissection. At the suggestion of Mr. A. B. Stirling, Dr. Pettigrew employed a mixture of water, flour, and vermilion, which, on the heart being plunged into hot water, immediately formed a solid flour-paste. The success which attended this expedient is at once recognised by an examination of the preparations. Occupying a table by itself, is a very beautiful collection of injections, by Mr. Stirling, of the uterus and placenta of various animals, including the horse, sheep, whale, etc., added to the museum by Professor Turner. Amongst these may be recognised the preparations with which Professor Turner illustrated his lectures to the Royal College of Surgeons in London in June last.

A small private museum belonging to Professor Spence, and very rich in specimens of surgical pathology, must be mentioned. It also contains some very beautiful arterial dissections executed by himself, one showing the arteries of the hand being particularly fine.

Museum of the Royal College of Surgeons.—This is a very handsome building of Grecian architecture, situated in Nicolson Street, a little to the south of the University. It was designed by Mr. W. H. Playfair, and erected in 1833. Behind the Museum are a number of lecture-rooms belonging to the Corporation of Surgeons, and occupied by some of the extramural teachers. This is, perhaps, the most extensive museum of the kind in Scotland, and it contains a very large and valuable collection of anatomical and pathological preparations. For the nucleus of this Museum, the College of Surgeons is indebted to Dr. Barclay and Sir Charles Bell; the former having bequeathed his private collection upon the condition that it should always bear his name; whilst the Bell collection was purchased by the College. In the first apartment, the first object which arrests our attention is the bust of Dr. Barclay, and surrounding this is his collection, which chiefly consists of comparative anatomy specimens, such as the skeletons of the different varieties of horse, of the walrus, seal, and narwhal. Occupying the centre of this room is the very beautiful skeleton of an adult Indian elephant, presented by Sir George Ballingall, and mounted on the neck of this animal is the skeleton of its driver—a Hindoo, who was hanged at Masulipatam for theft. Here also is a very beautiful dissection of the arteries of the leg, showing the anastomoses by which the circulation is carried on after ligation of the femoral artery. In the second room is placed the Bell collection; the specimens of human anatomy in a healthy condition being arranged on the left side, and the specimens of comparative anatomy on the right, whilst suspended from the walls are some fine oil-paintings, by Sir Charles Bell, of gunshot-wounds, etc. At the extremity of this room, is a table, on which we notice two dissections by Sir William Fergusson: one of the arterial system of the foot, very beautifully executed, and the other a modest looking little specimen showing the nerves of the face, and equally fine. On the same table are two specimens of corroded infection of the heart and its great vessels, and of the kidney, well worthy of notice. The galleries, which contain a rich collection of pathological specimens, are divided into compartments, each of which is distinguished by a number. In No. 36 are a series of preparations of the upper and lower maxillæ and of the teeth, with their nervous supply. These were chiefly prepared by Professor Goodsir when he acted as assistant to Dr. Nasmyth, and were presented by the latter to the Museum. Both surgical and internal pathology are well represented in these galleries. Last of all, we must mention a room which is devoted to obstetrics, and which is filled with specimens and models bearing upon the subject. The Museum is under the care of Dr. Pettigrew.

The Museum of Science and Art.—This is a very large building, situated in Chambers Street behind the University. Its architecture is essentially Venetian in its type, and the uniformity of the grey-stone with which it is built is very much relieved by columns and pilasters of red stone. It was designed by Captain Fowke, and erected at the expense of the Government. It was opened by the Duke of Edinburgh in 1861. Only one-third part of the building, as indicated in the design, was then completed. Another portion, however, has

been recently added. The only department of this Museum of professional interest is the natural history division; and this, owing to the recent extension of the building, is at present in the process of being rearranged. The greater portion of this collection was formed by the exertions of Professor Jameson. In 1854, it was transferred by the Town Council, at that time patrons of the University, to Government, who removed it to its present quarters. On the ground floor of the hall devoted to natural history, are placed the skeletons and stuffed specimens of mammalia; in the first gallery, is a very extensive collection of birds, numbering nearly 10,000, also shells; in the highest gallery, are the Reptilia, Pisces, and Insectes. The object which obtrudes itself most upon our attention—and deservedly so—is the skeleton of a whale suspended from the roof, seventy-nine feet in length, which was prepared by Dr. Knox and his pupils, and presented to the Museum by the Town Council of Edinburgh. This is a very beautiful specimen, the finest in the country, and it is seen to greatest advantage from the first gallery.

Phrenological Museum.—This Museum is situated in Surgeons' Square, and contains many interesting specimens. A new building for a new museum is in process of being erected in Chambers Street, immediately to the west of the Watt Institution and School of Arts. The museum belongs to and is maintained by the trustees of the late Wm. Ramsay Henderson, who died in the year 1832, leaving the residue of his estate "for the advancement and diffusion of the science of phrenology and the practical application thereof." The accumulated funds amount to about £9,000. The museum contains a large number of human crania and busts, also a large part of the collection of Dr. Spurzheim. The national skulls showing the peculiarities of race are particularly interesting, and many of the specimens are very valuable, rare, and curious.

The Antiquarian Museum, in Princes Street, may simply be mentioned. It contains a great number of Egyptian and other foreign and British antiquities; also, a number of very ancient crania, etc.

THE MEDICAL CHARITIES OF EDINBURGH.

FEW cities of its size are so amply supplied with medical charities as is Edinburgh; and, perhaps, in no other city have the charities contributed so much towards the advancement of science and the training of efficient practitioners. Amongst the multitude of our professional brethren whom Edinburgh hopes to welcome in the early days of August, there must be not a few who look back to the experiences there attained as having constituted the foundations of their professional success. Many will be glad once more to visit the old infirmary before its grand career is terminated; and many will seek for the site of Minto House, where they learnt what surgery could do as practised by the great master.

There will be those whose thoughts will go back to Liston, to Alison, to Simpson, and to Bennett, who will gratefully remember the impetus received, the principles grasped, and the practice witnessed whilst following these eminent teachers. There will be many who will seek the familiar corner where Goodsir ruled, or where Jamieson so long prelected; and where Edward Forbes, for too short a time, delighted his auditory. Many a heart will warm to see the venerable President of the Association, still in fullest vigour, although for more than half a century one of the most popular professors in the University. That garden party beyond the Water of Leith will to many recall the early morning walks and the delightful Saturday excursions with which to generations of Edinburgh students the name of Balfour is associated; to them it will be a sincere pleasure to be welcomed by the Professor, who seems still as fit to breast Ben Ledi, or to penetrate Ben Tilt, as he was in the days of his famous encounter with the old Duke of Atholl, of which his eloquent colleague Maclagan has sung. To many it will give satisfaction to see the Orator in Surgery little changed from what he was when working with John Reid at the vagus; and many will rejoice to see Lister, Begbie, and Matthews Duncan, honoured in the school for which they have done so much.

We purpose to give some sketch of the medical charities: and first amongst them ranks (see fig. 1)

THE ROYAL INFIRMARY.—We cannot better sketch the history of this noble institution than by quoting the words of Dr. E. Willis Way of Adelaide, who, in his inaugural address as President of the Royal Medical Society in 1871, thus spoke:

"The want of some public institution in which the poor might have their ailments attended to, and their sufferings alleviated, must have been strongly felt by persons endowed with charitable and benevolent feelings; but it was not till the year 1721 that an appeal was published, pointing out the need of such a charity, and the benefits that

would accrue from its foundation. Little success, however, attended this benevolent project, and it was laid aside, happily only temporarily, for, in 1725, we find the Royal College of Physicians—be it said to the honour of that body—again bringing the matter before the public. At that time the Scottish Fishery Company was about to be dissolved, and the College of Physicians, obtaining from them a considerable portion of their stock for the purpose of founding an infirmary for the sick, at once started a subscription, heading the list themselves, at the same time engaging to attend the patients without any remuneration. The College of Surgeons joined most heartily in the undertaking. The subscriptions flowed in freely, and, as a further inducement for people to give, it was made a condition that the sum of

you will find this inscription, written by the historian Robertson,—‘George Drummond, to whom this country is indebted for all the benefits which it derives from the Royal Infirmary’.

“George Drummond was particularly energetic in the foundation of the institution; he subscribed largely himself, and laboured unceasingly to induce others to do the same. But this was not all; we find him actively engaged in superintending the building operations. In Bower’s *History of the University of Edinburgh*, I find the following, which I consider worth extracting: ‘Messrs. Drummond and Monro were appointed the “building committee”. The money contributed, and with which the work was begun, was soon expended, but perhaps the alacrity and hearty co-operation with which this laudable enterprise was carried on, is with-

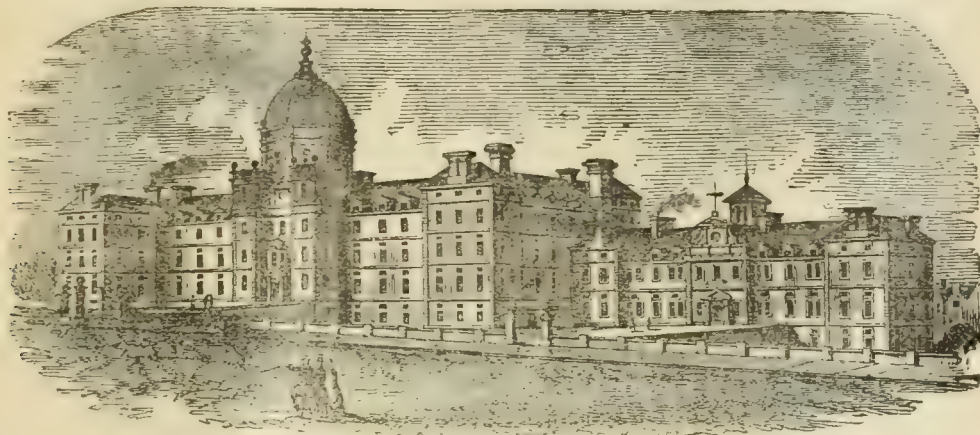


Fig. 1.—THE ROYAL INFIRMARY.

£2,000 should be raised before a certain day; but, owing to the zeal and activity displayed by those engaged in promoting this noble work, that sum was exceeded long before the time. A meeting of the subscribers was now called by the College of Physicians, and the contributors thus assembled nominated twelve of their number to further the object under consideration, and to prepare a plan for the erection of an infirmary. A petition was also laid before the Assembly of the Church of Scotland, asking that subscriptions might be collected in all its churches, and, according to Maitland, in his *History of Edinburgh*, ‘the contribution was earnestly and strenuously recommended by the Assembly in their Act of the 11th May, 1728, and a copy thereof sent to the incumbents of the several parishes throughout Scotland; yet such was the amazing indolence, laziness, and obduration of the said incumbents, to their eternal reproach, that though this great and pious design was calculated for the relief and benefit of the greatest and most moving objects upon earth, few of them concerned themselves in this truly good and Christian work’.

“Notwithstanding this want of sympathy on the part of the clergy, money was sent from all quarters, and in 1728 another meeting of the contributors was called, at which it was determined to open at once a temporary hospital. Accordingly, a small house was taken and prepared for the reception of patients; and, at the end of one year, I find the total number of patients admitted amounted to 35, of whom 19 were cured, 5 were dismissed in process of cure, 5 discharged as incurable or for irregularities, and 5 remained in the house, there being only one death. Whether a *post mortem* examination was made on this case or not, I have no means of ascertaining; but it is to be hoped that the most was made of this solitary opportunity of acquiring practical pathological information. The working of this temporary hospital seems to have given great satisfaction—the low death-rate in the first year possibly contributing towards it; and the funds in hand went on increasing till, in the year 1738, they amounted to £5,000, when the foundation-stone of the eastern end of the building now known as the Medical House was laid. Two years previously a royal charter was granted, since which time the institution has been known as the ‘Royal Infirmary of Edinburgh’. The first intention of the contributors was to erect only the eastern half of the building; but the encouragement they had received induced them, on the completion of this portion (which was opened to patients in 1741), to proceed at once with the building of the remainder, and accordingly the whole house was completed in 1745. There are two names which are inseparably connected with the birth and infancy of our Infirmary. You must all have noticed, in the vestibule of the Infirmary, a bust, and below it

out a parallel in the history of any charitable foundation. Materials for the building of every description were contributed in small quantities by those who had it not in their power to advance money; and even the common workmen rivalled each other in frequently giving their labour gratis; and, instead of repining, cheerfully submitted to the inconvenience they suffered from their wages being sometimes not regularly paid, such confidence had they, in common with all ranks, in the talent, integrity, and generosity of these two gentlemen. They uniformly paid the workmen themselves, and permitted no avocation whatever to interfere with what they esteemed so imperious a duty; and their presence, combined with their engaging manners to all employed about the work, had the effect of accelerating its progress in the most remarkable manner.’

“Drummond’s great coadjutor was the famous Alexander Monro *primus*. We shall speak afterwards of this illustrious man.

“When the hospital was open for the reception of patients, the managers very wisely—foreseeing the advantages to be derived from the admission of the students to the practice of the hospital, not merely for the purpose of improving their education, but as a substantial means of increasing the revenue of the institution—permitted them free access on the payment of moderate fees; and, it was not very long after, that the system of clinical lectures was introduced. The honour of this advance in medical teaching appears to be due to Dr. John Rutherford (the grandfather, through his daughter Anne Rutherford, of Sir Walter Scott), who was at that time Professor of the Practice of Physic. The history of our Society informs us that, before this, he had encouraged his pupils to bring patients to him on Saturday, when, after inquiring into their complaints, he prescribed for them in the presence of his class. Appreciating the success that resulted from this method of instruction, he suggested to the managers that they should allow him to give clinical lectures in the Infirmary; and they not only approved of the suggestion, but placed two of their wards at his disposal, for such cases as might prove interesting and instructive from a clinical point of view. This was the origin of our ‘clinical wards’ and ‘clinical lectures’, which, therefore, date from 1748. The next year, the managers extended the privilege of giving these lectures to the other medical professors; and it was then that Monro introduced this mode of teaching into the surgical department. Monro laboured most zealously to forward the education of his pupils, and the fame of this University is, in great measure, due to his energy in the cause of science. We have already seen how actively he was engaged in the building of the Infirmary; we now not only find him, as the Professor of Anatomy, teaching with the greatest success, and thus attracting to

this University students from all parts of the world, but we also see him, though engaged as a professor, as a manager, as a surgeon, as a clinical lecturer, yet finding time to unfold to his hearers the treasures of his pathological experience. We are told that he personally attended the opening of every body, and not only dictated an accurate report of the dissection, but, with nice discrimination, contrasted the diseased and sound state of every organ.

"You must pardon me if I introduce to your notice another great man, intimately connected with the Infirmary in the capacity of a clinical professor. I allude to William Cullen. You will remember that, in the year 1748, permission was granted to the medical professors to deliver clinical lectures, but only Monro and Rutherford appear to have availed themselves of the privilege. But, as soon as Cullen was appointed Professor of Chemistry, he began also to deliver a clinical course, and he soon acquired a great reputation in this branch of medical teaching. He also appears to have taken an unusual interest in his pupils, employing every means to become personally acquainted with them, and, in many cases, acting towards them with the greatest kindness. Dr. Aiken, a pupil of Cullen's, remarks: 'He was cordially attentive to their interests, admitted them freely to his house, conversed with them on the most familiar terms, solved their doubts and difficulties, gave them the use of his library, and in every way treated them with the respect of a friend and the regard of a parent.' I must not omit another point, which ought to induce us to respect his memory, and that is,—it was he who introduced the generous principle of refusing to take fees from students for attendance in their illnesses: he would never receive a fee in such a case, and his example has ever since been followed by his successors.

"During the first few years of the existence of the Infirmary, the number of beds occupied amounted to about forty, but, as funds accumulated, this number was increased soon afterwards to sixty, and in 1770 to eighty; besides which, beds were allotted to soldiers, who were paid for by the Government, and to servant-girls, for whom a ward—now known as No. XII—had been furnished by a public subscription in 1755, thus making altogether about a hundred and thirty or a hundred and forty beds. Three or four years later, the other wards were furnished, and the number of beds then occupied was about two hundred. In the earlier days, the resident medical staff consisted of one clerk. Amongst other duties, he had to take reports of the cases. This was done in a journal which used to be moved about the wards on castors during the visit of the physician. The method of case-taking was peculiar, and is well reported in a letter quoted by Maitland. It says: 'Each page of the journal was divided into seventeen columns, containing a diary of the cases of the several patients, and various appearances of their distempers while under cure, the names whereof are placed at the heads of the several columns, as followeth: The 1st contains the dates of the year, month, and day; the 2nd, the number of the bed wherein the patient lies; 3rd, operation of the medicines; 4th, intervening symptoms; 5th, pulse; 6th, thirst; 7th, appetite; 8th, spittle; 9th, tongue; 10th, sweat; 11th, urine; 12th, feces; 13th, ordinary symptoms; 14th, supervening symptoms; 15th, food; 16th drink; 17th, medicines.'

"There was also a ledger, in which every case had one or more pages allotted to it. In this the clerk had to enter an exact description of the patient's case, dictated to him by the physician, and to this to add the daily reports taken in the journal. The students used to hear and see all the cases examined by the physician; but, in addition to this, 'once a week the whole practice of the hospital is read leisurely by the clerk to the whole of the students in the operating-room, to give them an opportunity of taking notes of every cure they think worth while; and, further, he hath orders to give them full copies of every cure they call for, upon their paying a trifle for writing it out for them'. So that the office of clerk, or what we now dignify by the name of resident-physician, in those days appears to have been no sinecure.

"Here is an old regulation affecting the students. 'Students who attend the physicians during their prescriptions are to study a composed and decent carriage; are not then to stroll about in the wards, converse together, stand upon benches, beds, or do anything that may be disturbing to the physician, clerk, or patients.'

"It appears that the matron, in the absence of the surgeon, was instructed to admit patients; a regulation which, in these days of female doctors, might probably, in the event of a vacancy, cause a medical education to be a recommendation.

"I find that it was in the year 1751 that the first ordinary physicians were appointed; these were Dr. David Clerk and Dr. Colin Drummond, and each of these received a salary of £30 per annum, a sum afterwards increased to £70, for their services. Before this, the Fellows of the Royal College of Physicians in rotation had regularly

visited the medical cases, except those in the clinical wards. About fourteen years later, four ordinary surgeons were similarly appointed to have entire charge of the surgical department, which was confined to the wards on the third floor. The ward now known as No. XVIII was then the operating theatre. The wards on the second and third floors were devoted to medical cases; and, in the attic, was a small one for females, called the 'salivating ward', the use of which is too obvious to demand explanation; and another was used as a maternity hospital."

We cannot resist borrowing from the charming "Hospital Outlines", in the current *Cornhill*, one of the sonnets which so truthfully describe the surgical department of the Infirmary, as it is seen to-day.

A SONNET.

"His brow spreads large and quiet, and his eye
Is deep and bright, with steady looks that still
Soft lines of tranquillity through his face fulfill;

His face at once benign, and proud, and shy.

"If envy sear, if ignominy deary,

His faultless patience, his unyielding will,
Beautiful gentleness, his splendid skill,
Innumerable gratuities reply.

"His wise, rare smile is sweet with certainties,

And seems in all his patients to compel
A love and faith that failure cannot quell.

"They hold him for another Heracles,
Warring with Custom, Prejudice, Disease,
As once the son of Zeus with Death and Hell."

Other scenes portrayed in the sonnets are descriptive of the old High School where Syme once sat as a schoolboy, and afterwards taught as clinical professor. In "the surgeon", our readers will at once recognise the present not less distinguished occupant of Syme's chair.

The old infirmary contains about 600 beds. In 1874, 4,693 cases were treated in the house, and at least an equal number as out-patients. The daily average of in-patients was 417; and the year's expenditure was £22,072.

Before five years have elapsed, the old infirmary will have been abandoned. Is it too much to hope that the glories of the Edinburgh school in coming generations may as much surpass the glories of the past as the hospital now in course of erection surpasses that we are about to leave?

THE NEW INFIRMARY.—To the eminent architect we are indebted for the following description of the arrangement of the new building, which is to cost about £200,000.

The infirmary buildings are in three divisions or compartments. The section on the north consists of the surgical hospital; that on the south of the medical hospital; and in the centre, between the two, the administrative building is situated.

The surgical hospital consists of a central building and six pavilions.

Pavilions.—The pavilions are situated, four on the north and two on the south side of a connecting corridor, which is twelve feet wide, having at the extreme ends two great staircases for access to the two outer pavilions; the intermediate are approached by similar staircases. The pavilions have three ward floors. Those to the south, owing to the fall of ground, have an additional floor on the basement, used in the east pavilion as dispenser's apartments, etc.; and in the west as a dormitory for women servants.

Wards.—The wards, which are 75 feet long, 28 feet wide, and 15 feet from floor to ceiling, contain each fourteen beds, and have in connection with them a private ward for two beds, doctor's rooms, sister's room, ward-kitchen, bath-room; and convalescent-room, also a hoist for patients, a lift for food, and a dust and dirty linen shoot. At the outer end of each ward are two towers, the one containing water-closets, urinal, and housemaid's closet, and the other bath-room and lavatory. Between the two north pavilions on the east side is a students' hall; and in a similar position on the west is the female accident ward; the male accident ward being in the north end of the eastmost pavilion—first ward floor. The first ward floors of the two south pavilions are set apart for ophthalmic wards, and have operating-rooms, etc., attached.

Nurses.—Over each pavilion are provided dormitories or cubicles for one head nurse, three day nurses, three night nurses, two special nurses, and four nurses' assistants, also nurses' sitting-room, bath-room, water-closet, etc.

Class-rooms.—These are situated on the south side of the corridor behind inner pavilions. The lower storeys of east classroom are occupied by dental department, examination-rooms, and servants' dormitories; the storeys under the west classroom being occupied by engineer's house, steward's bedroom, and servants' dormitories.

The central building contains, on the first ward floor, registrar's room and clerk's offices; on the principal floor, entrance-hall, board-room, and consulting-room, and special wards for cases and a reserved ward for sick students on the upper floor. The back part of the central

building is occupied by the superintendent's and treasurer's rooms and steward's office, and connects the surgical hospital with the administrative buildings.

Administrative Department.—This originally formed part of George Watson's Hospital (an educational establishment), which has been altered and modified to suit the administrative purposes of the new infirmary.

In the centre block is the operating theatre, which is conveniently situated in connection with the corridor of the surgical hospital.

The main kitchen is also contained in this block, with scullery, servants' halls, etc., in connection, which is quite central for the whole building.

The east wing contains, on the ground floor, male and female patients' reception-rooms, examination-rooms, etc.; and, on the principal floor, the dining-room, hall, and apartments of the resident medical gentlemen.

The west wing contains, on the ground floor, the matron's business-room and sitting-room, store-rooms and linen store, nurses' kitchen and dining-room, and superintendent of house's business-room. On the principal floor, are the chapel (entering from the main corridor), the lady superintendent's business-room, sitting-room, and bedroom, etc., and the probationer nurses' sitting-room. The upper floor contains the pro-

MEDICAL HOSPITAL.				
Male and	} 6 Ordinary wards, 21 beds each	-	-	252
Female		} 6 Private " 2 " "	-	-	24
				276
Surgical Hospital		-	-	295 beds
Medical Hospital		-	-	276 "
Total		-	-	571 "

Pathological Department.—In the north-west corner of the ground is the pathological department, containing theatre, demonstration room, mortuary, mortuary chapel, etc.

In connection with the same range of buildings, are the mattress store, joiners' shop, etc. To the south are situated the washing-house, laundry, drying-room, boiler, and engine-houses.

Heating.—The boilers at the engine-house supply the steam for heating coils in the staircases and hot-water tanks for extracting vitiated air from the wards. The heating of the wards is entirely from open fire-places.

The style of architecture adopted is the Scotch baronial. The annexed woodcut represents the south façade looking upon Lauriston.



Fig. 2.—THE NEW INFIRMARY.

bationer nurses' sick-room and dormitories in connection with the superintendent of nurses' sitting-room and bedroom.

The south side of the administrative building is taken up by the laboratory and dispensary, with drug-stores, etc., on the basement.

The medical hospital consists of four pavilions running south from a connecting corridor, which is joined to the administrative department by a curved corridor, from which there is direct access to the principal entrance of the infirmary as well as to a side carriage entrance facing east, accessible from Teviot Row and the Meadow Walk.

Pavilions.—The medical wards are 111 feet long, by 28 feet wide, and 15 feet from floor to ceiling; each ward containing 21 beds, having in connection private wards with two beds, towers with water-closets, etc., doctor's-room, etc., arranged similarly to those in the surgical hospital. The arrangement of nurses is also similar to that in the surgical hospital. The pavilions have three ward-floors and a large convalescent room on the basement at the south end of each.

Class-rooms.—There are two class-rooms on the north side of the corridor, with consulting-rooms.

Abstract of Number of Beds in Hospital.
SURGICAL HOSPITAL

Male wards (7 ordinary, 14 beds each; 1 accident, 6 beds; 1 ophthalmic, 10 beds; 7 private, 2 beds each; 1 private ophthalmic, 2 beds)	130
Female wards (same as male, with 1 additional ordinary, 1 additional private, and 1 private ophthalmic with 1 bed)	147
Special wards (4 with 2 beds each; and two students' wards with 5 beds each)	18
Total number of beds in Surgical Hospital	295

THE CONVALESCENT HOUSE is pleasantly situated on rising ground at Corstorphine, about three miles from the city. It was opened in 1867 for patients from the Royal Infirmary, Edinburgh. It has fifty beds, which are under the charge of the junior assistant-surgeon to the infirmary. The house, of which we give a representation (see next page), is strikingly clean and neat, and from its front windows there is a magnificent view of the Pentland Hills.

THE CHALMERS' HOSPITAL.—George Chalmers, an Edinburgh plumber, bequeathed about £30,000 in 1836, for the erection and endowment of an hospital for the sick and hurt. The Dean and Faculty of Advocates are the trustees of the charity. They erected an elegant building in Lauriston Place, which was opened for patients early in 1864. It contains forty beds, sixteen of which have been set apart for patients who can afford to pay a moderate board (3s. per diem). The staff consists of a physician, a surgeon, and a house-surgeon, 283 in-patients and 2,384 out-patients were treated in 1874.

THE EDINBURGH ROYAL MATERNITY HOSPITAL is the somewhat languishing representative of a very old charity. Before there was a regular teacher of midwifery in the medical school, there were beds set apart for lying-in women in the Royal Infirmary. The first Professor of Midwifery in the University, Hamilton, set going a special hospital, which, in accordance with tradition, was called, as even the present place sometimes is, the lying-in ward. While Hamilton survived, the hospital was nominally managed by a committee, but really by himself. The board of managers met in his house, and it was virtually the Professor. Since Hamilton's death, the slow and unsuccessful management has been somewhat more open, but the next and late Professor was also nearly supreme. The institution has been moved about again and again, and, like a rolling stone, it has gathered no moss. At present, it is very inconveniently situated, occupying a small house in St. John Street, and having very little accommodation for its few inmates. Great

attempts have been made, and with some success, to improve the management and inspire zeal for the charity in the public mind; but these attempts have, as yet, not had much result. When the Association next meets in the metropolis of Scotland, we hope there will be a becoming building and a prosperous working charity to which visitors may be invited.

with the dispensary, religious services for the benefit of the poor patients are regularly conducted in the Magdalen Chapel, which is a curious relic of the sixteenth century, belonging to the corporation of Hammermen. Along with the adjoining property, it passed from their hands to the directors of the Protestant Institute of Scotland on May



Fig. 3.—THE CONVALESCENT HOUSE.

THE ROYAL EDINBURGH HOSPITAL FOR SICK CHILDREN has had an unsullied career of prosperity during the fifteen years of its existence. It now occupies the house and grounds of Meadowside, at the foot of Lauriston Lane, near the new Royal Infirmary. The institution is in all respects worthy of the visits and attention of the profession. It accommodates from 70 to 80 patients, who are about equally divided between the two sides—medical and fever. The wards are beautifully arranged, carefully kept, and present a spectacle which charms all new comers. Several hundreds of patients are passed through the wards yearly, and several thousands are annually prescribed for in the dispensary of the institution. Two physicians are on duty at a time in the intern department, there being four in all, and there is a resident medical officer. The dispensary is attended to daily by an extra-physician, and of these there are two, who have a paid assistant occupied in visiting patients at their homes. The well deserved success of this charity is owing to the fairness, thoroughness, and zeal of its managers, who have been well supported by the medical staff. Like the other successful medical charities of Edinburgh, it affords evidence that, if the work proposed be carefully and well done, so as to maintain the confidence of the subscribers, money will be given without stint for its continuance; and, like the other medical charities of Edinburgh, it has almost nothing to depend upon but the voluntary subscriptions of the benevolent.

THE HOME FOR CRIPPLE CHILDREN was established a few years ago, at 9, Salisbury Place, for children under the age of twelve years, suffering from hip-joint disease and spinal affections. It contains twenty beds.

THE EDINBURGH HOSPITAL FOR INCURABLES, at 8, Salisbury Place, has recently been enlarged, so that it now contains twenty-four beds.

THE ROYAL DISPENSARY AND VACCINE INSTITUTION, at 21, West Richmond Street, was established in 1776.

THE NEW TOWN DISPENSARY, at 17, Thistle Street, was instituted in 1815.

Each has a large medical staff, and many thousands of patients annually.

THE MEDICAL MISSIONARY TRAINING INSTITUTION AND DISPENSARY belong to the Edinburgh Medical Missionary Society, which was formed in 1841 under the presidency of Dr. John Abercrombie. It has missions in India, Japan, and Nazareth, and has furnished legally qualified medical missionaries to all the different Missionary Societies. Fourteen students are at present connected with the Society, preparing themselves for medical mission work. These young men belong to the various evangelical denominations, and are drawn from all parts of the United Kingdom, the Continent, Africa, and India. They reside in the Miller Memorial Home, 56, George Square, which was purchased to commemorate the late Professor Miller of Edinburgh. The dispensary, 39, Cowgate, was incorporated with the Society in 1859. It has a staff consisting of half a dozen honorary medical officers, a house-surgeon, the students of the institution, and several nurses who labour amongst the poor of the Cowgate and neighbourhood. In connection

with the dispensary, religious services for the benefit of the poor patients are regularly conducted in the Magdalen Chapel, which is a curious relic of the sixteenth century, belonging to the corporation of Hammermen. Along with the adjoining property, it passed from their hands to the directors of the Protestant Institute of Scotland on May 14th, 1858, and is now occupied by the Medical Missionary Society as a training institution and dispensary. The house at the rear is occupied partly by the nurses and partly as consulting and waiting-rooms for the patients, while the rooms in the Cowgate are used as a laboratory and dwelling for the house-surgeon. This portion is under the same roof, and is of the same age as the chapel. Above the gateway are the arms of the Hammermen and the date—1553. The tower, embattled, terminates in a spire, and is visible from George IV Bridge; it contains one of the finest toned bells in the city; its date is 1632. A high-backed chair carved in bold relief, and dated 1708, is now used as a pulpit. At the top of one stained glass window are the arms of Mary of Guise, who was Queen Regent at the time when the chapel was built. In the middle of the chapel still stands the table on which the body of the Earl of Argyll was laid after his execution, June 30th, 1685, to wait till it should be conveyed to the family burial-place at Kilmun. Here, too, were held several General Assemblies of the Church of Scotland. Visitors will be welcome to see the chapel, etc.; but they will find the present establishment quite unequal to the work to be done, and they will not regret to hear that the directors are about to erect, at a cost of £10,000, a handsome and commodious building opposite the Industrial Museum in Chambers Street, to be called the Livingstone Medical Missionary Memorial, in memory of the great African explorer, who was a member of the Society. The Medical Mission Dispensary and Training Institution at 5, St. John Street is carried on with similar objects in view. All these dispensaries do useful work in the homes of the people by means of visits by medical students, who are "taking dispensary practice". The dispensaries also share with the Maternity Hospital in the attendance upon obstetrical cases. The dispensaries are all open daily to the poor.

THE EYE INFIRMARY OF EDINBURGH, at 6, Cambridge Street, was instituted in 1834. It has two surgeons, and it is open daily. An ear dispensary has recently been opened at the same place by a member of the staff. Patients are seen twice a week. The Eye Dispensary of Edinburgh at 54, Cockburn Street, was instituted in 1822. It has three surgeons and a dispenser. It is open three days a week. An ear dispensary was established at the same place in 1857. It is open twice a week, and it has four surgeons. The Edinburgh Dental Dispensary at 38, Cockburn Street has been in active operation from 9 to 10 A.M. daily for some years. The leading dentists of the city attend in rotation.

CRAIGLOCKHART POOR-HOUSE, belonging to the city parish, is about half a mile beyond Morningside, and CRAIGLEITH POOR-HOUSE, belonging to the St. Cuthbert's and Canongate Combination, beyond Fettes College, are both magnificent piles, and have several large and airy infirmary wards for the sick and feeble paupers. There are also PAROCHIAL DISPENSARIES within the city connected with these institutions.

THE ROYAL EDINBURGH ASYLUM FOR THE INSANE at Morningside was founded in 1809, chiefly by the efforts of members of the medical profession; the late Dr. Duncan and the Royal College of Physicians being its most active supporters. Its object was the proper treatment of the insane and the advance of medical science. It has

been enlarged at different times, until it now contains over seven hundred patients. These are of all classes of society, who pay from £400 a year down to £27. The pauper patients from Edinburgh are sent thither by an arrangement with its managers. There are three chief departments: that for the higher classes including two villas and two pavilions situated in their own grounds, and containing about eighty patients; that for the middle classes, containing about one hundred; and that for patients at the lowest rates of board and paupers. There are about fifty acres of ground round the asylum, laid out in ornamental grounds and farm. There is a *clinique* in connection with the Medical School once a week during the winter session, and twice a week in summer.

THE SCOTTISH NATIONAL INSTITUTION FOR THE EDUCATION OF IMBECILE CHILDREN at Larbert, Stirlingshire, is worthy of a visit. It contains one hundred beds, and is under able medical superintendence. It is about twenty miles from Edinburgh, on the way to Stirling.

COLUMBIA LODGE, Liberton, about two miles south of the city, is a small private establishment for imbeciles. It is pleasantly situated, and may be visited by members of the Association.

The psychological physician will find that the district is rich in asylums. Saughton Hall, Roslin, Musselburgh, etc., may be instanced.

THE EDINBURGH TRAINING INSTITUTION FOR SICK NURSES has a home at 125, Princes Street.

THE SCOTTISH NURSING INSTITUTION has a home at 25, Gilmore Place.

LEITH HOSPITAL AND DISPENSARY.—In 1788, a branch of the Humane Society of London was constituted in Leith, under the designation of the Edinburgh and Leith Humane Society. In 1815, a dispensary was established for the poor. These two institutions were united in 1825. A casualty hospital was established in 1837. In 1846, these institutions were combined with the existing one. The old building, as a permanent hospital in Leith, was completed in July 1851, and contained thirty-four beds. New wards, containing thirty-six additional beds, were opened on April 2nd, 1875. They were erected by funds provided by a legacy left by the late Thomas W. Ramsay, Esq. The total number of indoor patients during the year 1875 was 330. The cases prescribed for at the hospital as outdoor patients during 1874 were 5,957. The cases treated at patients' homes during 1874 were 1866.

THE PIONEERS OF MEDICAL SCIENCE IN EDINBURGH.

FOR many years Edinburgh has enjoyed great celebrity as the seat of a school which has produced not a few of the pioneers of medical science. There is no department in the circle of the sciences related to medicine which is not indebted to one or more men who have been teachers in the Edinburgh medical school. Such, however, have not merely been teachers—great as that vocation is—but they have been deep thinkers, who have advanced the bounds of knowledge themselves, and stimulated others to do likewise. Anatomists, physiologists, chemists, physicians, surgeons, have spent their lives in the pursuit of science in Edinburgh, and from it they have given to the world the fruits of their inquiries, many of which have been productive of great results. The names of many of these men are familiar to every student of medical literature, while others are nearly forgotten. Some are still recognised authorities, and are quoted by lecturers and writers; but others, sometimes of greater merit, have not succeeded in so transmitting their fame. In the present age, with its weekly and monthly addition of new papers in the various journals; with its elaborate new monographs appearing in the transactions of the various learned societies; with its text-books, encyclopædias, and registers of scientific discovery—all claiming to be read, the student finds little time to study the past and to inquire what was done for science by the men who worked forty or fifty years ago. A man now-a-days is regarded as ignorant if he be not familiar with the last number of Pflüger's *Archives*, but he is tolerated and even applauded although he knows nothing of the labours of Whytt or Charles Bell. This state of things is no doubt transitional. It favours superficiality and narrowness of view, and therefore it cannot endure. It takes from us veneration for the labours of the past, without which there can be no true work for the future. It may interest, in view of the approaching meeting, to lay before the members of the Association, a few observations regarding some of the medical men of Edinburgh who have left their mark on science. During the first week in August, we shall be on the scene of the labours of such men as Cullen,

Thomson, Black, Monro, and Goodsir; we shall, perhaps, be in the very class-rooms where some of these men lectured; and we shall have pointed out to us the houses in which they lived and spent many laborious hours.

First of all, then, we have as representative *anatomists*, the Monros, John Bell, Robert Knox, and John Goodsir. As early as 1805, provision was made for dissection in Edinburgh. Until 1720, when the first Monro was appointed Professor of Anatomy in the University, dissection was conducted in a desultory manner. At that date, the Town Council gave the title of Professor of Anatomy; and, a few years later, 1726, other professors were added, and a medical faculty was instituted in the University. Monro was a great teacher. We are informed by Struthers (the historian of the Edinburgh Anatomical School), that his lectures were illustrated by dissections of the human body, and also of the bodies of quadrupeds, birds, and fishes. He also treated generally of the diseases of organs, and showed surgical operations on the dead body. In 1726, Monro published his great work on the *Human Bones*, a book which helped to give fame to the Edinburgh School. The second Monro succeeded his father in 1754 at the early age of twenty-one. After studying on the continent for a few years, he returned to Edinburgh in 1758, and commenced his duties as professor. He took a long time in maturing his work, and it was not until he had taught for twenty-five years, and was fifty years of age, that he began to publish the series of papers on which his reputation as an anatomist rests. These were chiefly his work on *The Structure and Functions of the Nervous System*, the *Structure and Physiology of Fishes*, and on *The Brain, the Eye, and the Ear*. He died in 1817, in his eighty-fifth year. Monro *secundus* was a man of great versatility of talent, and was in his day equally eminent as an anatomist, a teacher, a physician, and a man of society.

The next great anatomist who claims our attention is John Bell. He it was who first taught in a systematic way what is now termed surgical anatomy. He was also the first to introduce practical dissection. To quote his own words, "In Dr. Monro's class [*secundus*], unless there be a fortunate succession of bloody murders, not three subjects are dissected in a year. On the remains of a subject fished up from the bottom of a tub of spirits, are demonstrated those delicate nerves which are to be avoided or divided in our operations; and these are demonstrated once at a distance of one hundred feet! nerves and arteries which the surgeon has to dissect, at the perils of his patient's life." John Bell was the leading operating and consulting surgeon of his time in Edinburgh. A bold and dexterous operator, his thorough knowledge of anatomy had led him to undertake and execute operations at that time unknown. His greatest works are, *The Anatomy of the Human Body*, first published between 1793 and 1802, with later editions, in which he was aided by his brother Charles Bell, and *Principles of Surgery*, published between 1800 and 1808. The first of these works is written in a style singularly elegant and attractive, and very different from the dry-as-dust anatomical treatises students are expected to read at the present day.

Robert Knox flourished as an anatomist in the extra-academical school during the incompetence of the third Monro. The brilliancy of his lectures, his wonderful command of felicitous language, his power of apt illustration, so skilfully used as to attract even the most listless student, are in the memory of men still living; and we have heard from one who attended these lectures that, on an occasion, when Knox had been more than usually eloquent, the students rose to their feet *en masse* and cheered him to the echo. Knox, according to Struthers, introduced a new aspect of anatomy. His forte was, not in showing the relation of anatomy to surgery, as had been done by John Bell, but in bringing the facts of comparative anatomy to bear on those of human anatomy. He was really a morphologist; and, had the means at his command been greater, no doubt he would have been a great comparative anatomist. It would be painful to allude to those incidents which caused Knox to leave Edinburgh, or to those peculiarities of character which compelled him in his later years to earn his bread as a general practitioner in a London suburb. Knox was truly a man of genius; no doubt, like many such, somewhat erratic in his path through the world; and his end in obscurity and comparative neglect is a sad commentary on the prospect of worldly success held out to those who may chance to differ from others in their notions of respectability.

The last anatomist we will name is John Goodsir, a man, from some points of view, taller intellectually than any who ever occupied an Edinburgh chair. It will be conceded, at all events, that he was the greatest anatomist Edinburgh has ever produced. His lectures on the Dignity of the Human Body, his contributions to comparative anatomy, the profound views enunciated in his papers on the Morphological Relations of the Nervous System, on the Morphological Con-

stitution of the Skeleton of the Vertebrate Head, and on the Morphological Constitution of Limbs; his well-known writings on pathology, which are the foundation of much of modern pathology; his discovery of the true nature of the function of secretion, and many other papers, all testify to the great mental grasp of the man. No teacher was more revered by his students. Though often obscure in his utterances, still there was an aspect of earnestness about him, which not only repressed carelessness, but commanded respect. Those who never saw the man, should visit his bust in the University Library, the Walhalla of the great men of the University. They will see a titanic head, indicating high intellectual development; the only head at all like it is that of Thomas Carlyle—in size, outline, and massive ruggedness. A glance at it will indicate to them what it was to listen to that man when the countenance lighted up and the eyes sparkled, often with a quiet humour, as he pointed out the physiological significance of a process, or of facet on a bone, or of any other apparently trifling anatomical arrangement. Some who read these lines may remember, also, how he opened up his stores of knowledge, and discoursed quietly on momentous physiological and psychical questions to those who loved to linger around the lecture table after the others had gone. Few men had a greater power of influencing others to pursue scientific work in the true spirit. To be near him, still more to be associated with him, was impossible, without receiving something of his inspiration.

We have now to consider the chief physiologists: Whytt, Charles Bell, and Fletcher, may be taken as representatives. The Chair of Institutes of Medicine has existed in the University since 1726. The course given from this chair has always been understood to mean physiology, although the exact field traversed has varied according to the predilections of the lecturers. John Allen was the first to give a separate course of lectures on physiology out of the University. This he did from 1794 to 1799. This is John Allen, of whom Lord Cockburn writes as follows: "Allen was the very first of our private lecturers; physiology being his favourite department. I have heard Dr. John Gordon, a judge on such a matter of the highest authority, say that Allen's single lecture on the circulation of the blood contained as much truth and view as could be extracted by an intelligent reader from all the books in Europe on that subject." (Lord Cockburn's *Memorials of his Time*, p. 177.)

Robert Whytt was one of the most distinguished occupants of the physiological chair, and he left a permanent mark on physiology. A complete volume of his works was published in 1768. Early in life, he was dissatisfied with the common theories of respiration and the heart's motion; and he accordingly began an investigation on animal movements, which resulted in his famous essay on the vital and other involuntary motions of animals. This work still merits the attention of all physiologists; the latter part of it, especially, contains an account of many well-devised experiments. Whytt's other works of physiological interest, are *An Inquiry into the Causes which promote the Circulation of the Fluids in the very Small Vessels of Animals*, and *Observations on Sensibility and Irritability*. Whytt was one of the most powerful supporters of the doctrine of a *sensorium commune*, which included brain, spinal cord, and nerves: a view rather in favour at the present day. Whytt held that the "sentient principle" is really nothing but a mode of physiological force united with the nervous centre, susceptible of being excited by impressions brought to the centre by afferent nervous fibres, or of communicating motor force to the efferent nervous fibres which proceed to contractile structures. He denied that this sentient principle involved consciousness; and he speaks of the cord "perceiving without sensation". In the days of Whytt, the idea that the grey matter of the brain or cord was the exclusive origin of force did not prevail, and hence he could not explain why an "impression from an external part to one point of the nervous centre should have its effect reflected into an efferent nerve arising at a distant point of the same centre". There can be no doubt that Whytt prepared the way for a physiological explanation of the phenomena of reflex action. His views were followed up by Unzer, and still more by Prochaska, who stated that reflex action had its seat in the common sensorium or cerebro-spinal axis. It was reserved, however, for the genius of Marshall Hall to prove that each segment of the spinal cord and medulla has a separate power of acting as a reflex centre, possessing a distinct arrangement of afferent and efferent nerves.

Whytt had a great controversy with the illustrious Haller as to the dependence or non-dependence of irritability, now usually called contractility, on nerves. Whytt held the former view, Haller the latter. Time has shown that in this matter Haller was right; and it is now generally taught that contractility may exist independently of any influence derived from nerves. It is a notable fact, also, that Whytt was the first to state that the ultimate fibrils of nerves pass unbranched from

their origin to their termination. A statement of what Whytt did for physiology was given to the Royal Society of Edinburgh on the 7th of April, 1862, by the late learned Dr. William Sellar.

Sir Charles Bell was eminent in his day as an anatomist, a surgeon, an artist, and a physiologist; such a combination of qualities, to his truly lovable character as a man, renders him one of the most attractive in the gallery of our Edinburgh worthies. Trained to anatomy and surgery by his keen and polemical brother John; gifted with great artistic power, a fastidious and yet rapid operator, and a thoughtful and eminently suggestive lecturer; still it is chiefly as a physiologist that Charles Bell's name will descend to posterity. Two works in particular will ever be remembered: first, his researches on the nervous system, published in the *Philosophical Transactions* for 1821, but the first part of which was printed in 1810-11; and second, *The Anatomy of Expression in Painting*, published in 1806, with a second edition in 1841. It is difficult for us at this date to imagine the confusion that existed previous to the time of Bell, not only as to the special functions of the cerebro-spinal nerves, but even as to the meaning of the terms nerves of sensation and nerves of motion. No wonder, then, that he felt himself elated by so grand a conception as a true physiological classification of the nerves. How touching and natural is the following incident narrated by Lady Bell in her *Recollections*. "I must recall one memorable evening, We had a cottage at Hampstead. He drove to Haverstock Hill, and walked on. He came in breathless, and sat down, saying, 'Oh May! I have discovered what will immortalise me'. He placed a sheet of paper on the table, and sketched on it what he afterwards called 'the classification of the nerves'." After an arduous but on the whole successful career in London, the Chair of Surgery in Edinburgh was offered to Bell in 1836. His opinion was, "London is a place to live in, but not to die in"; and he resolved to come to Edinburgh. Here he did not earn the professional success he deserved, but honours came thickly upon him. On the Continent, he was spoken of as greater than Harvey. It is narrated that one day Roux dismissed his class without a lecture, saying, "C'est assez, Messieurs, vous avez vu Charles Bell". He died at Hallow Park, near Worcester, on Thursday, April 28th, 1842, in his 68th year; and he lies under the yew tree in the peaceful churchyard of Hallow. As he began and ended his professional life in Edinburgh, we are proud to include him among our celebrities. (See Biographical Notice by Sir John McNeill, G.C.B., *Transactions of the Royal Society of Edinburgh*, vol. xv, p. 397.)

The next physiologist of note connected with the Edinburgh school is one whose name is now nearly forgotten. John Fletcher was the eldest son of a respectable London merchant. He commenced his medical studies at Edinburgh in 1812, and graduated in 1816. He lectured on physiology in the Argyll Square Medical School in 1828-9, and latterly also on medical jurisprudence. Although one of the best classical scholars of his day, his claim to distinction is founded on his work *Rudiments of Physiology*, in three parts—a work now seldom read, but abounding in profound views regarding life and organisation. Any one who will take the trouble to read his work will find in it the germs of not a few modern speculations which have brought fame to those who have put them forth, perhaps by unconscious cerebration, as their own. The learning and mental grasp displayed in the book are remarkable; and, had not the author been cut down at the early age of forty-five, science would no doubt have been enriched by other productions. An account of many of Fletcher's views will be found in an able work entitled *The Protoplasmic Theory of Life*, by John Drysdale, M.D., London, 1874.

But Edinburgh has produced many other physiologists, such as Allen Thomson, the present distinguished Professor of Anatomy in the University of Glasgow, renowned for his researches on embryology; Martin Barry, also a great writer on embryology; John Reid, one of the most skilful experimentalists and clear thinkers that ever lived, a man whose experimental researches on the physiology of nerves will ever remain as models of how such work ought to be done and recorded; and John Hughes Bennett, who, in addition to a distinguished career as a great teacher of clinical medicine and of physiology, is the author of the molecular theory of organisation, which will sooner or later be recognised as a valuable theory regarding the constitution and development of living organic matter, when the cellular theory, as at present stated, will be found inapplicable to the new facts daily revealed by scientific microscopical research. Such hypotheses are valuable as aids to future inquiry; but, like all such, they serve only for a time.

Chemists.—Turning from physiology to chemistry, we are at once confronted by the names of Black, Hope, and Wm. Gregory. Space will not permit us to do more than merely refer to some of the achievements of the first of these distinguished men. In 1851, Joseph Black wrote as his graduation thesis a paper on the Nature of the Causticity of Lime

and the Alkalies, which he showed to be owing to the absence of the carbonic acid (called by him fixed air) present in limestone, and in what are now called the carbonates of the alkalis. This was his first contribution to chemical science, and may be regarded as a great addition to chemical theory and to the chemistry of gases. Between 1759 and 1763, he gradually worked out the theory of "latent heat", on which his fame chiefly rests, and which was a stepping-stone to the discovery of the work-power of steam by his pupil and class assistant James Watt. William Gregory made many valuable contributions to organic chemistry. He was an eminent teacher, and was remarkable for his power of exposition and of condensation. Towards the end of his life, he became an ardent worker with the microscope, and his habits of laborious and systematic investigation resulted in numerous memoirs on the *Dialomaceæ*.

The *naturalists* next claim our attention. The first of these is Robert Jameson, who filled the chair of natural history from 1804 to 1854. A pupil of the celebrated Werner of Freyberg, he founded the Wernerian Society of Edinburgh; and in 1819, along with Sir David Brewster, he started the *Edinburgh Philosophical Journal*, and in 1826 the *Edinburgh New Philosophical Journal*, which he edited till his death. Great as a mineralogist, he published valuable works on this department of science, and he laid the foundation of the Natural History Museum of the University of Edinburgh, now part of the Industrial Museum. He died at a ripe old age, and full of honour.

His immediate successor was the talented Edward Forbes, who died, however, after delivering only one course of lectures. Forbes, like Sir Chas. Bell, was an artist, and his great delight was to amuse his friends by drawing for them grotesque sketches and caricatures. In a short life, he accomplished an enormous amount of scientific work. His book on the *British Star-Fishes* is still a standard work on the subject; and, even for those who are not naturalists, the little star-fishes dancing on the sands, which form the tail-pieces of the chapters, cannot fail in being objects of humorous interest. He was almost the first also who entertained philosophical views regarding the distribution of marine animals both as regards area of surface and depth. Forbes' memoir, written partly by George Wilson and partly by Archibald Leikie, will show what manner of man he was; and visitors should not forget to look at his bust in the University library, showing a beautiful Grecian profile and finely formed head. His life was in many respects a sad one. After reading it, one puts down the book with a feeling of incompleteness. His career conveys the same idea as the sight of a broken column, and without the deep hope of a something beyond all this, the feeling is sad indeed. He lies in the Dean Cemetery beside his friend John Goodsir. Forbes, in a manner, may be said to have discovered the great anatomist, and encouraged him to pursue science. Friendly in their lives, in death they are not divided. The dust of the anatomist and of the naturalist mix together.

Another distinguished man belonged to the same group, Harry Goodsir, the ill-fated naturalist of the Arctic expedition under Sir John Franklin. Forbes was succeeded by Allman, whose high scientific position as a writer on the morphology of the *hydrozoa* and on other departments of the zoology of the invertebrata is known to all. Some who read this may remember his eloquence as a lecturer, and many have appreciated his estimate of the knowledge of natural history which may be reasonably expected from a candidate for a medical degree. Outside the precincts of the University, Edinburgh has furnished notable naturalists. Sir John Dalzell and Charles Peach have both contributed much to this department of science.

Such is a slight sketch of the leading anatomists, physiologists, chemists, and naturalists who have flourished in Edinburgh. They all belong to that great company who by genius, industry, and experiment have discovered truths in science, and have thus advanced human knowledge. A study of their lives shows that there is no royal road to scientific discovery. Nothing worth preserving is hit upon by chance. True plodding, well directed effort, on the other hand, cannot fail to discover something new to the human mind in the operations of nature.

THE MEDICAL CELEBRITIES OF EDINBURGH.

WITHIN the limits of a short article, it is impossible to notice all the distinguished men connected with Edinburgh who have contributed to the advancement of the theory and practice of the healing art. From the foundation of the University to the present time, one generation of great physicians, surgeons, and obstetricians has succeeded another. When we allow the mind to wander back into the history of the progress of medicine during the last hundred years, the names of Cullen, the two Duncans, Craigmie, Abercrombie, and James Beggie, as physicians; of Liston, Lizars, James Miller, and Syme, as surgeons; and

of Hamilton and Simpson as obstetricians,—start into view as the great men of the day. Each of these did good work in his time, and has earned a place in the temple of fame. As time rolls on, and the art of healing passes into new stages of development, the marks of their individual work may become effaced; but a consideration of what they accomplished will not be omitted by the historian of the progress of medicine and surgery.

Of all these, the one who probably merits most attention is William Cullen. Born in 1710 at Hamilton, he studied at the Universities of Glasgow and Edinburgh; and, in 1735, he settled in practice in his native town. In 1740, he removed to Glasgow, took the degree of M.D. at the University, and became a practitioner in that city. He early began to lecture, and it appears he gave prelections on the theory and practice of medicine, on botany, on *materia medica*, and also on chemistry. It is said that Cullen lectured on botany in Latin; but, in the other departments, he spoke the English language, a great innovation at that time. In 1751, he became professor of Medicine in the University of Glasgow, and, four years later (1755), he was elected by the town council of Edinburgh to be joint professor of Chemistry with Professor Plummer. In 1757, he shared the duties of lecturing on clinical medicine with Dr. Rutherford, the professor of Botany and Medicine of the time. His careful training in botany and chemistry—sciences of observation and experiment—no doubt prepared him for the great work of classification and arrangement he had to do. Prior to Cullen's time, diseases were classified in an arbitrary manner, and the works of the older writers were filled with scholastic verbiage, which rendered them almost useless. His clear and systematic mind soon began to reduce this state of things to order. In 1777, he published two works: *First Series of the Practice of Physic, and Institutions of Medicine*; in 1785, his *Synopsis Nosologicæ Methodicæ*; and, in 1789, a *Treatise of the Materia Medica*. These works are all characterised by clearness of language, strong common sense views of difficult questions, and an impatience of baseless theories and false facts. He showed also the high quality of being able to state the truth, though opposed to his own views, with fairness and impartiality, and he gave credit to the opinions of others. Famous as a writer and a lecturer, he also became the great physician of his time. A few weeks before his death, in his seventy-seventh year, finding himself unable, from age and infirmities, any longer to discharge the duties of the office, he resigned his chair. Immediately honours flowed in upon him, both from home and abroad. He died on February 5th, 1790. The chief features of Cullen's intellect were clearness, accuracy, ability to reason and deduce inferences rightly, originality of thought, and, above all, the power of bringing to a focus on any difficult question of pathology or therapeutics all the knowledge he possessed. He was also one of the first who distinctly recognised the great importance of regarding psychological questions from a physiological point of view. The time in which he lived was one famous for great men. Then David Hume wrote his speculative disquisitions, and announced his practical views of human well-being; Reid brought his patient mind to bear on philosophy, and Adam Smith founded the science of political economy. We learn from his biographer (Dr. Thomson) that "in this circle Cullen lived as professor and scientific physician; and, while he was everywhere known in the latter character, he was not less remarkable as a member of that assemblage of accomplished persons, by whom, during the eighteenth century, the small capital of Scotland became the centre of whatever was ornamental and useful in literature and in science."

The two Duncans and Craigmie were also distinguished physicians. They were all men of remarkable energy and power of work, and wrote treatises which were the authorities of their day, but are now forgotten. It cannot be said that their names are associated with any special era in the development of medical thought and practice. There is one fact, however, which must be stated, as reflecting honour on the first Duncan; namely, that he was the editor of the first medical journal (so far as we know) ever published in Edinburgh. We have now before us a volume entitled *Medical and Philosophical Commentaries by a Society in Edinburgh*, vol. 1, part 1, bearing date 1773, dedicated to Dr. William Robertson, the historian of Scotland and of Charles V, and announcing, at the end of the introduction, that "those who incline to favour us with any materials may transmit them to the book-sellers for whom this work is published; or to Dr. Andrew Duncan, physician in Edinburgh, who is secretary to our Society". On referring to this volume, our surprise is not at what the writers of that day did not know, but at how much they appear to have known. If anyone will take the trouble to examine the papers in this volume, they will find statements, both physiological and pathological, which are generally supposed to originate with later times.

We now come to Abercrombie, whose name, apart from the luster shed on it by his medical writings, will long be remembered in Edin-

burgh as that of one of the best of men. John Abercrombie was born on October 10th, 1781. His father was a clergyman of the Established Church of Scotland, in Aberdeen. He graduated at the University of Edinburgh on June 4th, 1803. After studying for a short time in London, he took a house in Nicholson Street, Edinburgh, and began practice as a general practitioner. For seven years, he devoted much time to the poor, as one of the physicians to the Royal Public Dispensary. He soon gathered around him a band of zealous pupils, to whom he allotted districts in the city, while he superintended all. He thus found for himself a rich field of observation, and accumulated those stores of knowledge which afterwards formed the basis of his future fame, eminence, and skill, as a practical physician. In 1821, on the death of Dr. Gregory, he became a candidate for the chair of Medicine in the University, and failed. Dr. Gregory's death caused numerous changes in the University of Edinburgh: Home, then professor of *Materia Medica*, succeeded him in the chair of Medicine; Duncan, then professor of Medical Jurisprudence, was transferred to *Materia Medica*; while Duncan's place was filled by Robert Christison, now the distinguished president-elect of the Association. About this time, Abercrombie became a consulting physician, a position which he enjoyed until his death, which took place on November 14th, 1844. His famous work on the *Diseases of the Brain and Spinal Cord* appeared in 1828. Immediately thereafter he published another standard work, entitled *A Treatise on the Diseases of the Abdominal Viscera*. Whilst busily engaged in medical practice, Abercrombie found time to write his well known work on the *Intellectual Powers and the Investigation of Truth*, which appeared in 1830; and, in 1833, his *Philosophy of the Moral Feelings*. Of a deeply religious turn of mind, he wrote many valuable tracts, the best known of which perhaps is his *Elements of Sacred Truths for the Young*. The concluding paragraph of the introduction of this little work shows this aspect of Abercrombie's character. "Should the work, on which the author has thus entered, be found useful as a manual, he will esteem it the highest distinction that can be conferred on him. By the favour of the public, his former writings on various subjects have gained a most extensive circulation, and have received the most gratifying marks of approval. The ambition that now remains to him is to have his name associated with those solemn and sacred hours, when the Christian parent calls around him the children of his heart, and—feeling all the uncertainty of life which is passing over them—seeks to raise their minds to a life that is never to end." In 1835, he was elected Lord Rector of Marischal College in Aberdeen, and delivered an inaugural address long remembered, and afterwards published under the name of *Culture and Discipline of the Mind*. He was buried in the West Churchyard amidst universal regrets. "Abercrombie's mind was eminently practical, a trait which shone forth conspicuously on all his writings, alike on medicine, morals, and religion. He scrutinised facts with singular jealousy; and we have heard it well remarked by a physician that 'what Abercrombie recognised as facts must be facts.'" (From an obituary notice initialed *J. R. C.* [John Rose Cormack?] in the *Edinburgh Monthly Medical Journal* for December 1844.

Space compels us only to allude to James Begbie, author of *Contributions to Practical Medicine*, the father of Dr. Warburton Begbie, who is to deliver the Address on Medicine at the approaching meeting. Dr. James Begbie was a man in many respects comparable to Abercrombie. Though he wrote much less, still what he did write was so good as at once to become part of the literature of the profession worthy of preservation. He was the model of a courteous, skilful, highly cultured physician, the friend alike of his patients and of every member of the profession who called in his assistance. He possessed great quickness in seizing hold of the salient features of the case on which he had to give an opinion, and the rapidity and accuracy of his diagnosis was often remarkable.

When we turn to the *surgeons* who have added to the renown of Edinburgh, we find so many illustrious names as to make it difficult to select one for special remark. After Benjamin Bell, John Bell, and Sir Charles Bell, to whom we have referred in another article, the first name on our list is that of Robert Liston, the most dexterous operator of this country, or, perhaps, of any country. His natural talents fitted him for great distinction in this department of the profession. Not only was his knowledge of anatomy precise, and his manual dexterity and power of co-ordination of movements great, but his mechanical knowledge and readiness of resource, even in the most trying circumstances, showed him to be, in a sense, a born operator. With the exception, however, of his work on the *Surgical Anatomy of Cruval Hernia*, and his papers on Lithotomy and Lithotrity, Liston has not added much to the literature of his profession. He was great while he lived, and he will be remembered chiefly as a great operator. The name of Liston naturally suggests that of Lizars, also a distinguished

surgeon in his day, and of William Fergusson, who has in London won for himself so great a name. Associated with the name of Liston, also, we think of James Miller, the immediate predecessor of the present distinguished occupant of the surgical chair in the University, Professor James Spence. Miller was in many respects a remarkable man. Gifted with a natural eloquence which was fitted to command the attention of crowded assemblages, he was an able expounder of the principles of surgery. His power of ready language was a snare, for, trusting to it, his systematic prelections were sometimes deficient in conciseness and accuracy; but no one could listen without being struck with the wealth of illustration and the rich flow of humour which permeated all his lectures. Interesting himself in many of the social questions of his time, his position, natural ability, earnestness and honesty of character, and strongly expressed opinion, made James Miller a great power while he lived.

The surgeon of whom Edinburgh is especially proud is James Syme. His death is so recent, his achievements are still so vividly traced in the records of surgery, and his life is so intimately associated with that of so many still living, as to make it unnecessary to do more than to point him out as one of our greatest men. For an estimate of his character we would refer to the last chapter of *Memorials of Professor Syme*, by Dr. Robert Paterson of Leith. He says: "He found surgery in many respects unworthy of its position, whether as a science or an art; he left it both scientifically and practically corrected and improved. He found it based in many instances on false reasoning, which resulted in erroneous conclusions. He corrected many of these, and thus brought about more satisfactory results. In this course he was sometimes a pioneer, pointing the way, as it were, to what might be accomplished in surgery, as in his description of the treatment of 'callous ulcers' and the theory of the treatment of incised wounds which has now been so generally adopted. He exhibited his conservative tendencies in the saving of limbs and other parts, by adopting methods which had been introduced and recommended by others, but which had fallen into disrepute, as was prominently illustrated in his revival of the operation for excision of joints, now so largely practised. The same remarks apply to his adoption of Chopart's operation at the tarsus, which he afterwards modified; but seeing that his own improvement often ended in a defective stump, he was not long in proposing that new operation which bears his name, viz., amputation at the ankle-joint." . . . "His power of conveying knowledge to others, in a concise and practical form, was hardly more conspicuous than the attention and devotion of his students, and the love with which he inspired them. As a clinical teacher of surgery, he stood unrivalled." . . . "His connection with the University of Edinburgh was always to him a matter of pride; and when the history of it in those days comes to be fully written, probably no higher names will be found in its pages than those of Syme and his contemporaries—Alison, Christison, Goodsir, and Simpson. Nevertheless, the monumentum are perennius to our great clinical teacher will be his unrivalled surgical achievements, in the performance of which he displayed all the great elements of character so sententiously expressed by his old and attached friend Dr. John Brown, when inscribing his *Locke and Sydenham* to his old master—*verax, capax, perspicax, sagax, effcax, tenax*." James Syme was born at No. 56, Princes Street, Edinburgh, on 7th November, 1799, and died on 26th June, 1870. He is interred in the Burial Ground of St. John's Episcopal Chapel. All who visit Edinburgh who wish to fix on the memory the sagacity, power, and firmness portrayed in the face of Syme, should visit his bust by William Brodie, in the Library Hall of the University.

Edinburgh has produced many distinguished *obstetricians*, notably Hamilton and Simpson. The work done by the latter was more than most men could accomplish in twice the time of his comparatively short life. What he did for obstetrics is well known by those devoted to this department of the profession. Looking at his life and character as a whole, it may be said he was a many-sided man, of restless energy and determination, gifted with that quick perception of the possibilities of certain lines of thought and action characteristic of genius, and especially endowed with the power of personally influencing others, which most men of great mark have shown—a power for which we have seen no adequate physiological explanation. While he lived, Simpson was a great social influence, and he has left a name which will be long associated with the introduction of anaesthetics into obstetrical practice, with accupressure, with certain well known views regarding the construction of hospitals, and with many important improvements in obstetric practice. He was born at Bathgate, in Linlithgowshire, on June 7th, 1811; he died in Edinburgh in his 59th year, on May 6th, 1870; and he is buried in Warriston Cemetery, Inverleith Row. His biography has been written by J. Duns, D.D., Professor of Natural Science, New College, Edinburgh (now out of print). It is a work on the whole well executed, but it falls far short of what a life of Simpson ought to be.

A most discriminative essay, giving the writer's impression of what he was and what he did, lately appeared from the pen of Mr. Sampson Gamgee of Birmingham.

BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st, Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 31ST, 1875.

THE APPROACHING ANNUAL MEETING.

IN anticipation of the forty-third annual general meeting of the Association next week, which will take place in Edinburgh, we present to-day a collection of short monographs by competent persons, descriptive of the leading features of medical interest in this important centre of medical science and teaching. Edinburgh has great medical traditions, of which we have endeavoured to condense the spirit; it has a grand medical history, of which we have faintly sketched the outlines; of its recent greatness and modern efficiency, we shall have, next week, the opportunity of supplementing by observation that which is imperfect in our knowledge gathered from other sources. These brief sketches do not, of course, pretend to do justice to the theme; they only constitute a miniature framework to which greater diligence, larger knowledge, more ample opportunities, and higher skill, can give solidity, completeness, and verisimilitude. We aim at furnishing to those who are about to visit Edinburgh the material to assist them in appreciating the Alma Mater of many illustrious sons of medicine, and of the great army of well-educated practitioners, whom it has in the course of years sent forth fitly armed for their life-long battle against disease. Those who are prevented from enjoying the pleasure of attending the meeting, will doubtless thank us, not only for the sketches themselves, but for the local colour which they will give to subsequent reports. Medical Edinburgh, familiar in substance to many, will be henceforth not unfamiliar in spirit to any of our present readers.

The general arrangements for the meeting are fully set forth in the detailed programme. It will be seen that the unremitting labours of the local officers and committees, and the generous goodwill of the University, of the College of Physicians, and of the profession at large in Edinburgh, have prepared an ample programme of scientific work, of oratorical prolixion, and of pleasant relaxation. The days of the meeting will be fully occupied; every hour has its allotted employment for men of varied tastes. The arrangements have been made with much labour and forethought; and the welcome which is so warmly extended to Southern brethren will, beyond doubt, attract a large gathering disposed to be pleased, desirous to be instructed, and anxious to make and to maintain closer acquaintance with their brethren north of the Tweed, and to enter into a compact of professional and social co-operation with them. We are happy to be able to add that, following the example of London and other large towns and cities, the Town Council of Edinburgh unanimously voted at a meeting this week that the British Medical Association be received officially; they also intended an entertainment, but, as no night was open for the purpose, they have voted £100 to the reception fund.

The greatest interests of the medical profession are identical in all parts of the kingdom. The elevation of the professional character, the promotion of science, the fostering of brotherly intercourse and mutual helpfulness, are characteristic aims of this Association which cannot fail to find an increasing response in all parts of the kingdom. The earnestness and success with which they have been pursued by the

British Medical Association have widened year by year its limits and enlarged its numbers. We have already a very large body of members in Scotland, and more than one branch. In order that the voice of the Scottish members shall be fully heard, and their influence adequately felt in the councils of the Association, it is desirable that further branches be organised, and especially that one be formed at an early date in Edinburgh. The need of scientific debate is so fully supplied in Edinburgh by its excellent societies, as our columns have regularly borne witness, that in Edinburgh, as in London, the Branch would rarely, if ever, be called upon to fulfil a scientific purpose; with these societies it would not enter into any sort of rivalry, any more than our Metropolitan Counties Branch does in London. But, by organising a Branch, the due representation of the Edinburgh members of the Association would be obtained in the Council and the Committee of Council of the Association, and in its Parliamentary and other Committees. The Scottish members of our Association have an equal interest with ourselves in many of those socio-medical subjects on which this Association brings to bear the full influence of organised medical opinion; such as the status and remuneration of the medical departments of the army, navy, Poor-law; health-administration and public medicine; medical education and the public law relating to the practice of medicine; the settlement of such questions as the legal treatment of confirmed drunkards, and revision of the legal tests of lunacy; the uses and abuses of hospitals, infirmaries, and dispensaries; and many other questions of national importance and of interest to almost every medical man. On most of these questions the British Medical Association has already rendered important services; they are progressive questions of which the development advances with time, and which will, in the changes that time brings, call for all the wisdom, care, and combined influence which the members of the medical profession in Scotland can join their brethren in England in bringing to bear on them.

It is, therefore, much to be desired that every opportunity be used of giving a formal voice to the combined members of our Association in Scotland. This may be aided by the constitution of a Branch having its seat in Edinburgh; one meeting annually for the purpose of electing officers is all that the laws require. An address at that meeting might be the means of raising a discussion on some of the more important topics of the year; or it might be left to the Council or members to arrange for summoning special meetings for this latter purpose when occasion should occur. We desire that the powers of the Association for combined usefulness and common exertion for the professional and public good may be everywhere developed to the utmost; and it has always been found that Branch organisation largely subserves this end by keeping alive local initiative and affording the readiest means of the independent and free development, and ready and powerful expression, of local opinion on all subjects of interest.

THE CHOICE OF ANÆSTHETICS.

WE publish in another column a letter from Mr. George Pollock, which will be read, we believe, with general satisfaction. The humane sentiment which prompted Mr. Pollock's utterance on the subject in the *Times* could not be doubted. The letter was in many ways incautious, and in some unjust, in the palpable inferences which could be drawn from it. But the failings which lean to virtue's side are those most easily condoned; nay, they extort admiration even when we are bound to point out that they inflict injustice. None can feel, perhaps, more strongly than ourselves the very solemn responsibility which is involved in the choice of anæsthetics. We have acted up to our sense of that responsibility and the duties which it imposes, by sparing no pains to ferret out all the cases of chloroform accidents and chloroform deaths. We have repeatedly and urgently impressed on all our readers the public and professional duty of giving the fullest and most candid publicity to all details of such accidents, and to every circumstance connected with them which can, however remotely, throw light upon their nature or

causes. Collecting from every source information as to the administration of ether as an anæsthetic, we have invited from all quarters comment and communication calculated to completely inform the professional mind. Many scores of such communications have been published in our columns, and we have had the satisfaction of producing and maintaining a "chloroform-panic" and an "ether-revival". The papers by Clover, Haward, Braine, Norton, Bowditch, and Fifield of Boston, Hutchinson, the late John Murray, and a host of others, appeared to us to establish the superior safety of ether over chloroform, and they led to a very large and general substitution of ether for chloroform as a surgical anæsthetic. The word "surgical" should here be noted, because, as we pointed out long since, and as others have shown, there is, so far as we know, no recorded case of death from chloroform administered during parturition. For the purposes also of dental surgery, nitrous oxide, which was likewise first pressed on the attention of the profession in these pages, appears to have superior advantages, and to be equally safe with ether. We have never admitted that greater rapidity of effect, or other reasons of convenience, could justify the use of a more rather than a less dangerous anæsthetic; but, inasmuch as the alleged inconveniences of delay, loss of time, and atmospheric diffusion of the vapour, have undoubtedly produced a prejudice against ether, we think it to the point to observe that ether, administered skilfully and properly, is found, in the hands of experienced operators, not to cause much if any greater delay than chloroform. Anæsthesia is, we believe, in practised hands, produced at our hospitals by ether in about five minutes. The unpleasant diffusion of ether through the air is obviated by the use of a suitable inhaler. The very satisfactory apparatus which has been introduced and improved by Mr. Hawksley certainly obviates this source of discomfort, together with most others which are complained of.

There is one point, however, to which we desire to direct attention, and as to which we should be glad to have information for the guidance of the profession. Is the ether (ether sulphuricus) of the *British Pharmacopœia* that which is most desirable for use as an anæsthetic, or the ether purus (washed ether), of the *Pharmacopœia*? In standard authorities, such as Garrod, the ether sulphuricus is that which is specially recommended for use as an anæsthetic. It has a specific gravity of 0.735. On the other hand, we are assured by a distinguished practical authority, that the ether which should be used, to insure the highest degree of safety, is the ether purus (washed ether), pure from alcohol and water, and having a specific gravity not exceeding 0.720. Perhaps Dr. Garrod will kindly state on what ground he recommends the sulphuric ether. And, on the other hand, we should be glad to hear from Mr. Clover, Mr. Norton, Mr. Braine, or others who are now employing ether, which kind they prefer, and why. Garrod mentions among the drawbacks to ether, its nauseous odour and taste, and the laryngeal spasm and violent struggling which it causes at the outset. The struggling and spasm may, we believe, be overcome by a little practice in freely admitting pure air for a moment when they threaten; and with an apparatus such as Hawksley's this is easily effected. In a word, the practical inconveniences of ether are such as may be overcome by skill; its greater safety is an over-mastering and all-powerful recommendation. The question of cheapness we do not discuss; it is really one which cannot enter into serious consideration. The question of mixtures of alcohol, ether, and chloroform, requires possibly further investigation. They have an enthusiastic supporter in Mr. Ellis of Sloane Street. They do not meet with general favour, owing to the impression that, as these fluids evaporate at different temperatures, and with varying rapidity, they add to the uncertainties and risks of anæsthetics; that, in inhaling such mixtures, the patient is at one time receiving nearly pure chloroform; at another, nearly pure ether or pure alcohol. We earnestly commend this subject to renewed attention. It is certain that those whose duty it is often to administer anæsthetics, are deeply interested in the question of the choice of anæsthetics; to them and to their experiences we must chiefly look for guidance. But we are all concerned to arrive at a just conclusion in so

grave a matter. And, if that conclusion be in favour of ether, the sooner we all attain it, and the more quickly more dangerous anæsthetics, such as chloroform and bichloride of methylene, are relegated to their proper place, the better for patients and for surgeons.

WE regret to announce the death of Dr. Peter Mere Latham, at the ripe age of eighty-six, at Torquay. This accomplished, amiable, and distinguished physician had long retired from practice. In the leisure of his old age, he collected, for the benefit of our readers, his notes of past experience. We shall publish a further notice of his life and work.

THE sentence of death passed upon Michael Murphy at the last session of the Central Criminal Court for murder has been respited, the convict having been certified to be insane by two physicians specially appointed by the Secretary of State to examine into the state of his mind. He will, therefore, be placed in a convict prison appropriated for the detention of insane prisoners.

THE CHOLERA IN SYRIA.

OUR Constantinople correspondent writes:—Much anxiety is felt here amongst us, and it is with grave alarm that we witness the increasing dimensions of the recent outbreak of cholera in Syria. Whether it is endemic or epidemic, is at present undecided; a fierce controversy concerning the same is now being carried on by the Turkish and Frank physicians. Medical assistance has been urgently demanded by the Sali of Damascus; and a letter has been addressed to Marco Pacha, the Medical Director of the Turkish Military School of Medicine, begging that he will send to, and place at the disposal of, the cholera-stricken inhabitants a number of the young military surgeons who have lately passed through and qualified in the Army Medical School, of which he is an able and efficient director. The request has been acceded to, and a number of young military surgeons leave immediately for Beyrout. A Sanitary Council was held last week in Constantinople, presided over by Caboli Pacha, Minister of Commerce, to devise measures against its further spread, etc. From trustworthy advices lately received by telegram, it appears that the mortality and likewise the number of cases are on the increase both at Antioch and at Damascus. At Damascus, from the 5th to the 12th of July inclusive, there were 1,118 cases, 506 of which proved fatal. The worst day was the 12th, when there were 190 cases and 107 deaths. At Antioch, from the 6th to the 11th, there were 115 cases and 66 deaths. No cases have been reported from Damascus.

INSANE BUT GUILTY.

THE newspapers this week have been much exercised, because the jury who tried George Blampied at Maidstone last week pronounced him not accountable for his acts on the ground of insanity, in the teeth of the judge, Mr. Justice Brett, who summed up most strongly for a conviction, and recited to the jurors the whole of the judge's answers in the Macnaghten case, by which they must have been greatly edified. The prisoner was in Barming Heath Asylum from 1868 to 1872, a long period. He was attended by the surgeon of the dockyard in 1874 for swimming in the head and melancholia, and now, without any cause, quarrel, or provocation, he suddenly struck a fellow workman on the head with his adze. At the trial he was undefended. We were under the impression that an undefended prisoner was specially protected by the presiding judge; but here the latter requested one of the counsel present to defend, and himself did all he could to bring about a conviction. The surgeon of the gaol, however, said that Blampied had been under his observation for three months, and that he was undoubtedly of unsound mind, being mad on the subject of religion. And the jury, in spite of the judge's remarks about controllable or uncontrollable impulses, the knowledge that he was doing wrong, and the like, acquitted him as an insane man. Of course we read the usual remarks about the "mad doctors'" views; but it is notice-

able that in this case there were no "mad doctors" at all. Probably if there had been they would have said that the man was suffering from religious melancholia, and that the delusions under which he laboured were such as would be likely to lead to homicide. Mr. Justice Brett told the jury that swimming in the head had nothing at all to do with insanity, and might have been merely a symptom of the stomach being out of order. He further said, that if he had religious delusions, that was not such insanity as the defence required; in fact, he assumed that the man was insane, yet directed a conviction. The jury, however, exercising their own common sense, acquitted him, thus furnishing another reason, in addition to those laid down by Lord Chief Justice Cockburn, Mr. Justice Blackburn, and others, for the alteration of the existing law.

RECENT URBAN MORTALITY.

DURING last week, 5,413 births and 3,555 deaths were registered in London and twenty other large towns in the United Kingdom. The annual mortality was at the rate of 24 per 1,000 living; in Portsmouth it was 13 per 1,000; Norwich, 17; Edinburgh and Wolverhampton, 21; Birmingham, London, Sunderland, and Sheffield, 22; Bristol and Liverpool, 23; Dublin, Salford, and Oldham, 24; Bradford, 25; Leeds, Hull, and Newcastle-upon-Tyne, 29; Leicester, 30; Glasgow and Manchester, 31; and Nottingham, 34. The annual zymotic death-rate averaged 5.5 per 1,000 in the eighteen English towns, and ranged from 1.3 both in Portsmouth and Norwich, to 9.2 and 11.3 in Salford and Nottingham. Measles and diarrhoea prevailed in Salford; scarlet fever and diarrhoea in Nottingham. Scarlet fever showed a markedly increased fatality in Bristol; and the annual death-rates from diarrhoea were 5.2 and 5.7 per 1,000 in Leicester and Nottingham respectively. In London, 2,330 births, and 1,471 deaths were registered. The births exceeded the average by 100; the deaths were 162 below the average. The annual death-rate was 22.3 per 1,000. The 1,471 deaths included 35 from measles, 96 from scarlet fever, 11 from diphtheria, 58 from whooping-cough, 22 from different forms of fever, 138 from diarrhoea, and not one from small-pox; in all, 360 deaths, which were 116 below the average. The 96 fatal cases of scarlet fever exceeded the number in any week since the middle of November last. The 138 deaths referred to diarrhoea were 66 less than the number recorded in the previous week, and were 141 below the average. In greater London, 2,824 births and 1,713 deaths were registered, equal to annual rates of 35 and 21.2 per 1,000 of the population. In outer London, the general and zymotic death-rates were 16.6 and 3.1 respectively, against 22.3 and 5.5 in inner London. The mean reading of the barometer at Greenwich for the week was 29.62 inches; the mean temperature of the air 60.2 deg., or 2.2 deg. below the average. The mean humidity of the air was 91; the general direction of the wind, W. S. W.; and the horizontal movement of the air averaged 8.9 miles per hour. Rain fell on five days to the amount of .49 of an inch. The amount of rain measured in fifteen other large towns during the week, varied from .90 of an inch in Bristol, to 5.13 inches in Birmingham.

THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.

THE new Hospital for Sick Children in Great Ormond Street has been thrown open for inspection during the past week, and has been visited by numbers of the friends and supporters of the institution, including a large contingent from the medical profession. The new building faces Powis Place, and occupies what was the garden of the old hospital. Only half of the new hospital is as yet ready for occupation. To complete the design, the old houses in Great Ormond Street, which are rapidly becoming insecure, must be pulled down. The whole will then accommodate two hundred patients; the portion just opened will contain a hundred and ten or fifteen. The new building is of red brick, with terra-cotta mouldings; and, although the Committee insist strongly on the fact that they have spent nothing in ornament, the external effect is decidedly handsome. Internally, also,

great taste is displayed, as well as evidence of careful attention to practical details. The general result is, accordingly, highly satisfactory. There should be six large wards, each about 70 feet long, by 24 feet wide, and 12 feet high, arranged in pairs right and left of the central staircase; but one of the top wards has been subdivided, to provide accommodation for special or contagious cases. The walls of the wards are of coloured glazed bricks set in cement; the floors are of polished teak, and the ceilings of parian. Great ingenuity has been shown in contrivances for the saving of labour. Attached to each ward are three lifts, one for coals, another from the kitchen, and a third from the dispensary. There is also a shoot for dust and ashes, and another for dirty linen. The out-patient department occupies nearly the whole of the basement, and is exceedingly well arranged. The kitchen and staircase are, however, crowded in between the two large waiting-rooms; and we fear it will be difficult to prevent the inevitable effluvia from these from invading the upper storeys. The kitchen and chapel both struck us as disproportionate to the size of the hospital. In the chapel, quality has evidently been studied before quantity; the decorations are most gorgeous. The cost of the new building, exclusive of the chapel, has been nearly £40,000; and to this another £4,000 must be added for furnishing. Both the architect (Mr. Edward Barry) and the hospital subcommittee must have taken great pains, and they are certainly to be congratulated on the very considerable measure of success which has rewarded their efforts.

CHOLERA IN THE EAST.

AN outbreak of cholera has occurred at Alibang, but energetic measures have been taken to limit its course as much as possible. A slight outbreak has also occurred at the Sassoon Reformatory for Boys. Three cases occurred, one of which ended fatally. The next day, twenty-two other cases had been reported; but eventually it was discovered that in these cases the boys were "shamming", under the guise of which they contrived to make their escape.

SANITARY WORK WITH PAY.

WE have before us printed copies of a letter addressed by Dr. Strange, Medical Officer of Health, Worcester, to the Board of Guardians of that town, complaining of the conduct of Dr. Woodward, District Poor-law Medical Officer, in neglecting to inform him (Dr. Strange) of the occurrence of cases of epidemic or contagious disease which had come under Dr. Woodward's observation; and of the reply of that gentleman thereto. This correspondence occupies much space in the *Worcester Journal*, and fully exemplifies the impolicy of the course followed by Mr. Stansfeld in framing his Public Health Act. It was the wish of the late President of the Local Government Board, contrary to the opinion of all those who had practical experience of the subject, to constitute district Poor-law medical officers sole health-officers in their respective districts. At the time, we strongly objected to this proposal, and our conviction that it would not work satisfactorily was borne out by the result; for, as soon as the Act was put in operation, so large a number of Poor-law medical officers refused to accept the position, that the department was compelled to make other and even more objectionable arrangements, whereby the great majority of district medical officers were left out in the cold. Finding that the health-officers were utterly at a loss, from the want of information which the district Poor-law medical officers were alone able to supply, and which, if our suggestion had been adopted, they could have safely furnished, the department, in the early part of last spring twelvemonth, issued a circular letter to all boards of guardians, requesting them to direct their medical officers to furnish to the health-officers information respecting the occurrence of epidemic or contagious disease, but omitting to suggest any mode whereby such officers should be remunerated for such extra trouble. Prior even to the issue of this letter, it appears that Dr. Strange had requested Dr. Woodward to furnish him with a copy of his quarterly return of sickness, and with information as regards the occurrence of contagious disease. This Dr. Woodward

declined to do, unless he were remunerated for his labour. It would appear that erysipelas has been epidemic in Worcester during the last twelvemonth, and Dr. Woodward has reported its existence in the column set apart for that purpose in his medical relief-book. The attention of the Board having been directed thereto, and the matter having acquired publicity, Dr. Strange makes complaint of Dr. Woodward for alleged neglect of duty, to which the latter gentleman vigorously replies, stating that, when appointed, no arrangement was made with him that he was to supply to any other officer information as regards the sickness in his district, and protesting against the assumption that he was bound by virtue of his office to supply him with information; and also pointing out that it was competent for Dr. Strange to attend at the workhouse and make such extracts from the medical officer's report-book as he required. In regard to this correspondence, we confess that, however desirable it may be that early information should be given of the outbreak of preventable disease, our sympathies go rather with the ill-paid Poor-law medical officers, upon whom it is hard that extra work should be demanded of them without remuneration. The Registrar-General has successfully resisted a like demand upon metropolitan registrars; but the Poor-law medical officers seem to have no official protectors.

MEDICAL LITERATURE IN CHINA.

THROUGH the courtesy of Mr. Curling, we have been favoured with a sight of a highly interesting specimen of medical literature; viz., a translation into Chinese of his well-known classical work on the *Diseases of the Testis*. The translation has been made by Dr. Patrick Manson of Amoy, who, in an English preface, says that his object in publishing a translation of so elaborate a book is to supplement the works on general surgery already in the possession of the Chinese, and to supply the earnest student with the opportunity of acquiring a thorough knowledge of at least one very important branch of the art.

"I have chosen this particular department of surgery—the diseases of the testis—partly because it is a well defined one, but principally because eight years' experience of Chinese hospital practice in Formosa and Amoy has taught me the great frequency of those diseases, and the ease, when an accurate diagnosis has been arrived at, with which they may be cured."

The book is published in three volumes; and at the end of the third the plates illustrating Mr. Curling's work are reproduced with great accuracy. This is, we believe, the first instance of the translation into Chinese of a monograph on a medical subject.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE quarterly court of the directors of the Society was held in the rooms of the Royal Medical and Chirurgical Society, 53, Berners Street, on the evening of July 14th. Mr. Charles Hawkins, Vice-President, took the chair. The sum of £1,116 : 10 was voted to be distributed among fifty-seven widows now receiving grants; a sum of £75 : 10 to be divided between seventeen children; and a further sum of £19 : 10 was granted to three children from the Copeland Fund. The expenses of the quarter amounted to £66 : 10.

THE INTERNATIONAL CONGRESS OF OPHTHALMIC SURGEONS.

DRS. AGNEW, Noyes, and St. John Roosa, the Provisional Committee appointed in 1872 to organise the next International Congress of Ophthalmology, announce that the meeting will be held in New York city on the second Tuesday in September, 1876. The following extracts from the rules of the Congress will give an idea of the general character of the society and of the terms of membership. 1. The object of the International Periodic Congress of Ophthalmology is to promote ophthalmological science, and to serve as a centre to those who cultivate it. It will entertain no discussion foreign to this object. 2. The number of members is unlimited. 3. Every member must be either a doctor of medicine, or of surgery, or of science, or possess some other equivalent degree, or be distinguished for his scientific knowledge. 4. Candidates for admission into the society shall be

admitted on presentation of their diploma or of their scientific title, unless ten members demand a ballot. 5. The sessions of the society shall take place every fourth year, and be limited to ten days. Before the opening of each session, a card available for admission to all the meetings, and signed by the President and Secretary, shall be given to each member on payment of his subscription (fixed at two dollars), and upon signature of his name on the register of those attending the meeting. The Committee are making all efforts to secure a large attendance, and one that will leave its mark upon the progress of scientific ophthalmology. The co-operation of the profession of Great Britain in securing these objects is earnestly desired by the Provisional Committee.

THE RELATION OF THE MEDICAL STAFF TO THE MANAGING COMMITTEE OF A HOSPITAL.

WE have over and over again maintained that the medical officers of our hospitals have not that share in the management of these institutions to which they are entitled by their special knowledge and important services. At the special meeting of governors of the Queen's Hospital, Birmingham, to which we referred last week, and which was called to consider several radical alterations which the Committee proposed to make in the management, the Chairman, the Rev. C. Clarke, F.L.S., who has devoted a good deal of time to the subject of hospital management, is reported to have said, in reply to the assertion made by a previous speaker that the Medical Board ought to have been consulted before the changes in question were recommended to the governors for adoption, that "the Committee did not wish to trouble the Medical Board. Their medical friends were members of the Managing Committee, and rendered to that Committee official and valuable help; but, as a Medical Board, they had to deal with clinical affairs, to look after their instruments and drugs, and to do things that needed the collective wisdom of their body. He fancied, however, that they had nothing whatever to do, in that collective capacity, with the arrangements of the hospital. Every man to his last; let every man mind his own business. He was quite sure the Committee did not step out of their province to invade that of the Medical Board, and it would be quite as well if the latter did not step out of their province to invade the functions which belonged to the Committee." We reproduce this statement, because it briefly and well describes the views held by many lay hospital committeemen on this subject of medical representation in the management of these institutions. We pass over the illogical conclusion of Mr. Clarke that, although an honorary officer, as a member of the General Committee, is fully competent to give a valuable opinion upon all points, still, for some unexplained reason, the honorary staff, when assembled in their collective capacity as a Medical Board, have no right, because they are not competent, to give an opinion. We are fully convinced that the system at the London Hospital of having a Medical Committee acting independently, and giving distinct opinions upon all points in the management of the hospital which relate to their department—and how very little does not in some way do this!—is the best solution of this vexed question, because it ensures to the honorary medical staff a powerful and irresistible voice in the management, and at the same time protects them from the undignified position in which they are often placed by the action of the lay Committee when they are themselves members of that body, and when the Medical Board becomes, as it does under this system, simply a subcommittee. We regret that Dr. Heslop, who at one time loyally held and acted up to these views, has, when tempted by the power which the position of Chairman of the Medical Committee of the Queen's Hospital would place in his hands, or by some other reason, so far departed from his avowed convictions as to become an active member not only of the General Committee, but, in addition, of the House and other Subcommittees also. "Familiarity breeds contempt" in this, as in other matters; and, if the honorary medical staff of our hospitals are to have that share in the management which they are entitled to both by their ability and by justice, and are at the same time to receive that respect-

ful treatment from the lay Committees which is, alas! so often wanting now-a-days, they must insist upon their right to be constituted an independent and distinct Committee, and must at the same time secure for their Board so constituted the same privileges and responsibilities now enjoyed by their *confères* at the London Hospital.

DEATH FROM CHLOROFORM.

FOR the following detailed report of the case to which we referred last week, we are indebted to Mr. G. E. Wherry, House-Surgeon to Addenbrooke's Hospital. Ann Shaw, aged 45, was admitted into Addenbrooke's Hospital on Wednesday, July 14th, 1875, with inflammatory disease of the left eyeball, consequent on an injury. The eye was lost; the anterior chamber was full of blood; and there was the mark of a wound in the sclerotic near the upper margin of the cornea. She complained of some pain in the right eye, and considerable pain in the damaged eyeball. On Thursday night, she was tremulous and sleepless; and on Friday night she was violently delirious, requiring a careful watch through the night. This was an evident attack of delirium tremens. On Saturday morning, Dr. Humphry saw her. She complained of severe pain and "flashing lights" in the eye, which she said prevented her from sleeping. Dr. Humphry decided on that account to remove the eye. She expressed a wish to have chloroform. She walked into the operating-room, got on to the table, and lay down, without assistance. I have been accustomed to give ether, administering at first a small quantity of chloroform; and it was the intention in this case to give ether, with only a preliminary slight inhalation of chloroform. Dr. Humphry examined the heart, and found no evidence of disease. The pulse was good. I proceeded to give chloroform with the inhaler (a thin flannel stretched upon a hoop of wire). Less than a drachm (by measure from a graduated bottle) had been inhaled by the patient, when she began to struggle. The inhaler was at once removed, and no more chloroform given. I could still feel the pulse in the temporal artery. She continued struggling; but the pulse suddenly stopped, though after this she breathed distinctly and deeply several times. Artificial respiration was at once commenced, and very effectually kept up for nearly an hour. Nélaton's method, the battery, and cold affusion, were also employed, but without avail; and the action of the heart was never in the least degree restored. At the examination, twelve hours after death, all the organs were healthy, excepting the heart, in which there was a growth of the size of a nut in the anterior wall of the right ventricle, and projecting into the interior. This growth presented to the naked eye all the appearances of cancer. On examining a scraping of the fresh section under the microscope, cells of varied and irregular shape and size, with free nuclei, were found, which were recognised as of cancerous nature by all the medical officers who examined them. The specimen is preserved. I should add that the eye was examined, and all the other organs, including the brain, lungs, liver, kidneys, spleen, mesentery and intestines, uterus and ovaries, not omitting the mammary glands, and no trace of cancer found in them.

THE WORCESTER INFIRMARY.

THREE weeks ago we alluded to the vote of censure which the Committee of the Worcester Infirmary lately passed upon Dr. Inglis for an alleged breach of rules; though, as we pointed out, Dr. Inglis, while unable from the circumstances of the case to fulfil the letter of the law, had taken the best means to comply with its spirit, and to secure the interests of his patients. It is with regret, though not with surprise, that we have now to report that he has sent in his formal resignation as one of the honorary medical staff of the infirmary. Indeed, it was scarcely possible for him to act otherwise, considering the hard measure that has been dealt out to him, notwithstanding his fourteen years of service at the hospital. As the rest of the medical staff entirely sympathise with Dr. Inglis's views in respect to the rule in question, and as, under the exigencies of practice, there is no saying upon whom the rod may next fall, it remains to be seen what action they will think fit to take with the view of checking the Committee in

their present course. We trust, however, that it will not be necessary for them to follow the example of their colleague; but, we agree with the local journal that, if permanent injury to the institution is to be avoided, and if the Committee are to be restored to harmonious concert with their medical officers, it is high time that the governors should step in, and put an end to the discord which their representatives have created by their indiscreet zeal.

SCOTLAND.

THE public analysts of Greenock, in reporting that they have been unable to find, in the samples of water and milk submitted to them, anything likely to account for the recent severe outbreak of fever in the town, indicate that a real danger is being incurred by those who are using carbolic acid and certain powders as disinfectants. These mixtures are sometimes, it seems, largely adulterated with hurtful foreign substances, and may really introduce disease instead of warding it off.

DR. CROMBIE, the Medical Officer of Health of North Berwick, writes to the *Scotsman* to contradict rumours which have been afloat as to the prevalence of scarlet fever in the town. These reports, he says, are greatly exaggerated, there having been only a few mild cases at the beginning of the month, which are now convalescent, and no more cases having occurred for ten days.

WATER-SUPPLY OF EDINBURGH.

THE water-supply of Edinburgh continues to show a decrease. Although there has been a considerable rainfall during the past fortnight, we have had nothing like the deluges which have done so much damage in the midland counties of England, and, indeed, no more than an average July rainfall in the Edinburgh district. There is a decrease of seven million cubic feet during the past fortnight, the delivery remaining the same, viz., 27.84 gallons a head for a population of 275,700.

CURIOUS ACCIDENT.

ON Saturday, a young man died in Kilmarnock Infirmary, from the effects of an accident of an unusual character. In climbing a tree he fell a distance of about sixteen feet, and was impaled on the point of a paling. It was found that the foreign body had entered the pelvis through the great sacro-sciatic notch, and was left impacted in the wound. Its removal caused a very severe hæmorrhage, which, it was found, came from the gluteal artery. The wound was enlarged, and the injured vessel tied above and below the seat of laceration. At first the patient progressed favourably, but subsequently gangrene set in, and he died on Saturday.

CLOSURE OF THE SUMMER SESSION IN EDINBURGH.

THE summer session of the Edinburgh School of Medicine, both in the University and the extramural school, closed on Friday last, a week earlier than usual, in view of the approaching meeting of the Association. The class prizes were distributed, as usual, by the University professors, and the lecturers and a number of the students have already taken wing. There remain behind, however, a much larger proportion than is usual at the end of a summer session, who intend to take advantage of the students' tickets, which are to be issued, to enable them to attend at the sectional meetings of the Association. The session has been a highly successful one, and the University bids fair to keep up, or even to surpass, the exceptionally high numbers of matriculated students which have marked the past two or three *anni medici*.

HEALTH OF EDINBURGH.

THE report of the Medical Officer of Health shows that, during June, the mortality of the city was at the rate of 22.87 per 1,000, being 19.69 for the New Town, and 26.54 for the Old Town; while that of the southern suburbs was only 15.06. A large proportion, 27.2 per cent. of the whole mortality, was due to diseases of the chest, while 41 per cent. occurred in children under five years of age. Scarletina and whooping-cough are still prevalent to a considerable degree.

THE ALMOND POLLUTION CASE.

THIS is one of a series of actions brought by the riparian proprietors along the course of the river Almond, against the manufacturers, in order to put a stop to the pollution of the river by refuse matter ejected from their works. In this case, the skilled men, appointed by the court, reported that an elaborate scheme adopted by the defenders to prevent any polluting matter from finding its way from their works into the stream, is perfectly satisfactory and thoroughly answers its purpose. It was decided, at the pursuers' request, that the scheme should remain on for the summer, and the approval of the report be delayed till the court meets after the vacation.

THE WATER-SUPPLY OF GALASHIELS.

A DECREE of the Court of Session, in this case, was pronounced last week, by which the local authority were ordered to take immediate steps to introduce a sufficient supply of water into the town according to the statute; and it was decided that, as no objections had been made by the local authority to the scheme prepared by Messrs. Leslie for providing 500,000 gallons *per diem*, they were bound to take the steps required by the statute according to that scheme.

THE ANNUAL MEETING IN EDINBURGH.

THE final arrangements for the reception of the Association are now being made, and, by the end of the week, all the machinery of a large gathering will be in readiness to come into operation on Tuesday morning. The sectional work promises a more than usually studious meeting, and if all the papers are got through, allowing for a short discussion upon each, much good steady work will have been done; while the many attractions of Edinburgh and its neighbourhood combine, with the social gatherings promised, to make a very attractive programme for those who make these annual gatherings a holiday rather than a solemnity, and a pleasure trip rather than a journey in the pursuit of knowledge. We may remind old Edinburgh men that Monday, August 2nd, is the graduation day or capping, when the medical and surgical graduates of the year will take their degrees, and a number of M.B.'s will be promoted to the full Doctorate. After the ceremony, an address will, as usual, be delivered to the new graduates by one of the professors of the medical faculty.

RECOGNITION OF EXTRAMURAL LECTURES ON SURGERY BY GLASGOW UNIVERSITY.

WE learn from the daily papers that Dr. H. C. Cameron has obtained recognition from the University Court of his lectures on Systematic Surgery, to be delivered in the Royal Infirmary during the ensuing session. This notice is worthy of attention, as it is, so far as we are aware, the first time that Glasgow University has recognised an extramural lecturer, as it will be the first occasion of the delivery of a systematic course of lectures on surgery in the Royal Infirmary.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

EXETER COLLEGE: SCHOLARSHIPS AND EXHIBITIONS.—An examination for the election of four scholarships and three exhibitors on the foundation of Exeter College will be held on October 14th. Two of the scholarships, value £80 each, tenable for four years, will be given for proficiency in natural science. There is no limit to age in these scholarships. The examination will be in biology, chemistry, and physics. The candidate must be proficient in two of these subjects. The successful candidates will be required to read for honours in biology in the School of Natural Science. Collegiate candidates must have passed responses or the equivalent examination of the Oxford and Cambridge Schools examination. Non-collegiate candidates will not be admitted to residence until they have shown their ability to pass responses or the equivalent examination. The examination for matriculation at the College will take place on October 14th. Students desirous of entering should present themselves to the Rector, with the necessary credentials, on the 13th. Candidates for the scholarships and exhibitions should give notice of their intention to the Rector not later than October 7th.

ASSOCIATION INTELLIGENCE.

BRITISH MEDICAL ASSOCIATION:
FORTY-THIRD ANNUAL MEETING.

THE Forty-third Annual Meeting of the British Medical Association will be held in the University Buildings at Edinburgh, on Tuesday, Wednesday, Thursday, and Friday, August 3rd, 4th, 5th, and 6th, 1875.

President.—E. COPEMAN, M.D., Senior Physician to the Norfolk and Norwich Hospital.

President-elect.—Sir ROBERT CHRISTISON, Bart., M.D., D.C.L., LL.D., F.R.S. Ed.

An Address in Medicine will be given by JAMES WARBURTON BEEBIE, M.D., F.R.C.P. Ed.

An Address in Surgery will be given by JAMES SPENCE, F.R.C.S. Ed., F.R.S.E., Professor of Surgery in the University of Edinburgh.

An Address in Physiology will be given by WILLIAM RUTHERFORD, M.D., F.R.S.E., Professor of the Institutes of Medicine in the University of Edinburgh.

The business of the Association will be transacted in Six Sections, viz.:

SECTION A. MEDICINE.—*President*: Dr. Quain, F.R.S., London. *Vice-Presidents*: Professor W. T. Gairdner, Glasgow; Dr. Grainger Stewart, Edinburgh. *Secretaries*: Dr. Claud Muirhead, 7, Heriot Row, Edinburgh; Dr. Stephenson, 33, Buccleuch Street, Edinburgh.

SECTION B. SURGERY.—*President*: Professor Lister, F.R.S. Edinburgh. *Vice-Presidents*: Professor Pirrie, Aberdeen; Professor Macleod, Glasgow. *Secretaries*: Thomas Annandale, Esq., Charlotte Square, Edinburgh; Dr. John Duncan, 8, Ainslie Place, Edinburgh.

SECTION C. OBSTETRIC MEDICINE.—*President*: Dr. Matthews Duncan. *Vice-Presidents*: Dr. Keiller; Professor Simpson. *Secretaries*: Dr. Peel Ritchie, 16, Hill Street, Edinburgh; C. J. Cullingworth, Esq., 260, Oxford Street, Manchester.

SECTION D. PUBLIC MEDICINE.—*President*: Right Hon. Lyon Playfair, M.P., C.B., F.R.S. *Vice-Presidents*: Inspector-General Smart, M.D., C.B.; Dr. Arthur Mitchell. *Secretaries*: Dr. Andrew Smart, 24, Melville Street, Edinburgh; Dr. Fraser, Knutsford.

SECTION E. PSYCHOLOGY.—*President*: Dr. Lowe, F.R.S., Edinburgh; *Vice-Presidents*: Dr. Sibbald; Dr. Clouston. *Secretaries*: Dr. Brown, Royal Asylum, Edinburgh; Dr. Saundby, Saughton Hall, Edinburgh.

SECTION F. PHYSIOLOGY.—*President*: Professor Burdon Sanderson, F.R.S., London. *Vice-Presidents*: Dr. McKendrick; Professor J. Dewar. *Secretaries*: Dr. Lauder Brunton, F.R.S., 23, Somerset Street, Portman Square, London; Dr. Caton, 18, Abercrombie Square, Liverpool; and Dr. Wm. Stirling, Physiological Laboratory, University of Edinburgh.

Honorary Local Secretaries.

Dr. John Batty Tuke, 20, Charlotte Square, Edinburgh.

John Chiene, Esq., 21, Ainslie Place, Edinburgh.

Dr. J. G. McKendrick, 2, Chester Street, Edinburgh.

Dr. J. Bishop, 28, Alva Street, Edinburgh.

Tuesday, August 3rd.

11 A.M.—SERVICE IN ST. GILES'S CHURCH. Sermon by the Rev. Dr. Alexander.

1 P.M.—MEETING OF COMMITTEE OF COUNCIL.

3 P.M.—MEETING OF THE COUNCIL, 1874-75.

3.30 P.M.—GENERAL MEETING.—*President's Address*; Annual Report of Council; and other business.

9 P.M.—*PRESIDENT'S RECEPTION IN ASSEMBLY ROOMS, MUSIC HALL.*

Wednesday, August 4th.

9.30 A.M.—MEETING OF COUNCIL, 1875-76.

11.30 A.M.—SECOND GENERAL MEETING.

11.30 A.M.—ADDRESS IN MEDICINE.

2 P.M.—SECTIONAL MEETINGS.

9 P.M.—CONVERSATIONS GIVEN BY THE ROYAL COLLEGE OF PHYSICIANS IN THE INDUSTRIAL MUSEUM.

Thursday, August 5th.

9 A.M.—MEETING OF THE COMMITTEE OF COUNCIL.

10 A.M.—THIRD GENERAL MEETING.—Reports of Committees.

11 A.M.—ADDRESS IN SURGERY.

2 P.M.—SECTIONAL MEETINGS.

6.30 P.M.—PUBLIC DINNER IN MUSIC HALL.

Friday, August 6th.

10 A.M.—ADDRESS IN PHYSIOLOGY.

11 A.M.—SECTIONAL MEETINGS.

1.30 P.M.—CONCLUDING GENERAL MEETING.

4 P.M.—PARTY IN THE ROYAL BOTANIC GARDENS, GIVEN BY THE UNIVERSITY OF EDINBURGH.

Saturday, August 7th.

EXCURSIONS.—Bass Rock, Melrose, Trossachs, Roslin, Dalmeny Park, and Hopetown House. Messrs. Currie and Co., Leith, have placed at the disposal of the Excursion Committee a large Steamer for the excursion to Bass Rock.

ARRANGEMENTS FOR ADDRESSES, SECTIONS, SOIRÉES, ETC.

It is particularly requested that Members on their arrival will at once proceed to the Reception Room, in Lower Library Hall, University Buildings, and record their names and addresses, and obtain their tickets and programmes; they should also inquire for letters and telegrams.

President's Address—Tuesday, 3.30 P.M., Queen Street Hall, 6, Queen Street.

Addresses in Medicine, Surgery, and Physiology—Lecture Room in the Industrial Museum.

President's Reception—Assembly Rooms and Music Hall, George Street.

The *conversazione*, given by the Royal College of Physicians, will be held in the Industrial Museum.

University Garden Party—Botanical Gardens, Inverleith Row.

Rooms for Sections:

A. Medicine—Mathematical Class Room.

B. Surgery—Anatomy Class Room.

C. Obstetric Medicine—Materia Medica Class Room.

D. Public Medicine—Chemistry Class Room.

E. Psychology—Hebrew Class Room.

F. Physiology—Physiology Class Room.

Meetings of Council; Latin Class Room. Reception Room; Reading and Writing Room; Lower Library Hall. Editor's and General Secretary's Room; Court Room. Local Secretaries, Treasurer, and Editor of *Daily Journal*; Professors' Reading Room. Annual Museum; Practical Chemistry Class Room.

In the Vestibule of the Library (all in University Buildings)—Post Office and Telegraph Office; Registration Office; Ticket Office; Cab Office; Inquiry Office.

Refreshment Room.—By permission of T. C. Archer, Esq., Director of the Industrial Museum, the Buffet and Refreshment Rooms attached to that institution will be open to members of the Association during the meeting. They can be reached either by the main entrance of the Industrial Museum, or (which will be more convenient for members) by a lobby communicating with the University Quadrangle. A moderate tariff has been arranged for Luncheons, etc. Lavatory, etc., adjoining Refreshment Rooms.

All places will be carefully placarded.

It is expected that Dr. Burdon Sanderson will shew his experiments on the Electrical Phenomena which attend the Contraction of the Irritable Organs of Plants, on Friday afternoon. The Demonstration will probably be given in the Natural Philosophy Class-Room.

Messrs. Maclachlan and Stewart, opposite the University, have kindly offered the use of their Saloon, as a Writing and Reading Room, to the members during the meeting of the Association, when every new work in medical literature will be on view.

Papers.—The following papers are offered.

Section A.—MEDICINE.

Anderson, T. McCall, M.D. On the Treatment of Aneurism of the Arch of the Aorta by means of Galvano-puncture.

Black, D. Campbell, M.D. On certain Aspects of Medical Advertising.

Boyd, Robert, M.D. Effect of Various Diseases on the weight of the Brain in 2050 sane and insane Adults of both sexes.

Braidwood, P. M., M.D. Severe Cerebro-spinal Symptoms produced by a fall at Foot-ball.

Brown, James, Esq. Typhoid Fever in the Isle of Skye.

Browne, J. Crichton, M.D., F.R.S.E. Rhythmical Neuroses.

Browne, Lennox, Esq. On the Treatment of some Diseases affecting simultaneously the Voice, Speech, and Hearing.

Craig, William, M.D. 1. Note on Jaborandi. 2. On the External Uses of the Hydrate of Chloral.

Croom, J. Halliday, M.B. On Melæna in the New-born Child.

Daldy, Thomas M., M.D. On Functional Cardiac Murmurs.

Deas, P. Maury, M.D. Notes on an unusual Case of Epilepsy.

Dowse, Thomas S., M.D. On Bulbar Paralysis.

Fox, Cornelius, M.D. Is Enteric Fever ever spontaneously Generated?

Fox, J. M., Esq. Scarlet Fever: its Prevention.

Hovell, D. De Berdt, F.R.C.S.Eng. On Emotional Aphasia.

Jagielski, V. A., M.D. Some Further Remarks on the Use of Spirometry in Medicine, demonstrated by a new Double Spirometer.

Johnston, James, M.B. On Rheumatic Fever and its Treatment.

Lee, R. J., M.D. Remarks on Hooping Cough, and its Treatment by the Inhalation of Carbolic Acid Vapour.

Lucas, T. P., L.R.C.P.Ed. On the Action of Stimulants.

Maclagan, T. J., M.D. On the Nature of Contagion.

Martyn, Samuel, M.D. Hospital Registration.

Morison, Alexander, M.B., C.M. A rare Case of Disease of the Pulmonary and Tricuspid Valves of the Heart: with Remarks.

Rickards, E., M.B. Epitome of Notes of Four Cases of Thoracic Aneurism.

Ross, James, M.D. Comparative Pharmacology.

Shuttleworth, G. E., M.D. Notes of a Series of Cases of Rubeola Notha.

Torrance, Robert, Esq. On the Appearance of the Tongue in Health and in Disease.

Section B.—SURGERY.

Adams, William, Esq. On a New Subcutaneous Operation for the Obliteration of Depressed Cicatrices.

Acton, William, Esq. On the Modern Treatment of the Advanced Stages of Constitutional Syphilis.

Althaus, Julius, M.D. Further Observations on the Electrolytic Treatment of Tumours.

Bradley, S. M., Esq. The Surgical Treatment of Lymphatic and Glandular Tumours of the Neck.

Brotherston, Peter, Esq. Provincial Surgery in Scotland, illustrated by Cases treated in the Alloa Hospital.

Brunton, T. Lauder, M.D., F.R.S. On the Means of preventing Death from the Extraction of Teeth under Chloroform.

Buchanan, George, M.D. (Glasgow). Tracheotomy in Croup and Diphtheria.

Cassells, James P., M.D. On Conservative Aural Surgery.

Charles, J. J., M.D. The Treatment of Patent Urachus.

Chiene, John, Esq. 1. Dislocation of the Astragalus; 2. Value of an Antiseptic Catheter.

Dix, John, Esq. Two Cases of Aneurism, one of the Carotid and one of the Femoral Artery, treated by the Wire Compress.

Drysdale, C. R., M.D. Tertiary Sore-throat.

Duncan, John, M.D. 1. On the Modes of Administering Mercury in Syphilis; 2. On the Treatment of Nævus.

Duncanson, J. J. Kirk, M.D. On Fibrous Tumours of the Auricle: with Specimens and Microscopical Sections.

Hardie, James, M.D. 1. On a Case in which a New Nose was formed by Transplanting a portion of one of the Fingers; 2. On the Treatment of some forms of Ulcer by Incision of the Edges.

Hill, Matthew, Esq. A New Operation for Ununited Fractures.

Hirschfeld, John C., M.B. On Extirpation of the Tongue.

Hoggan, George, M.D. On a Case of Transfusion by Aveling's Apparatus.

Jordan, Furneaux, Esq. Note on a Peculiar Variety of Encysted Hydrocele of the Cord.

King, Kelburne, M.D. Two Cases of Punctured Fracture of the Frontal Bone, treated by Trephining; and resulting, one in total, the other in partial Loss of Vision.

Little, W. J., M.D. 1. Latest Experiences on the Treatment of Congenital Club-foot of Infants. 2. The Varieties of Wry-neck, with some Observations on their Treatment.

Lund, Edward, Esq. 1. Case in which Adams's Operation for Subcutaneous Division of the Neck of the Thigh-bone was performed on both sides in the same patient for Straight Ankylosis; 2. On the Use of Steel Screws in the Treatment of Ununited Fractures, Resections of Joints, etc.

Mackenzie, Morell, M.D. On the Treatment of Enlarged Strumous Glands by Hypodermic Injection.

Maclaren, R., M.D. On some Cases of Subperiosteal Excision.

M'Rae, Alexander E., M.D. Case of Perforation of the Abdomen (*per Vaginam*): with Remarks.

Maunder, C. F., Esq. A Subcutaneous Operation for the Relief of Fibrous Ankylosis of the Knee-joint.

Meade, R. II., Esq. A Case of Tubercular Disease of the Breast simulating Cancer.

Morton, James, M.D. The Treatment of Spina Bifida.

Ogston, Francis, jun., M.D. The Nourishment of the Head of the Femur after Intracapsular Fracture.

Pemberton, Oliver, Esq. On Ligature of the Common Femoral Artery, and especially on Ligature by an Antiseptic Material.

Rivington, Walter, Esq. A Case of partial Rupture of the Popliteal Artery and complete Rupture of the Popliteal Vein, for which Primary Amputation of the Thigh was Successfully performed: with Remarks.

Solomon, J. V., Esq. Section of the Cornea in certain Diseases of the Eye.

Taylor, C. Bell, M.D. On the Modern Methods of Extracting Lenticular Cataract: with Illustrative Cases.

Thomas, Llewelyn, M.D. The Causes and Results of Otorrhœa.

Watson, Eben, M.D. A Case of Femoral Aneurism, with Ligature of the External Iliac.

Watson, P. Heron, M.D. Excision of the Thyroid Gland.

Wolfe, J. R., M.D. 1. On Conjunctival Transplantations from the Rabbit to the Human Subject.—2. On Egyptian Ophthalmia and Cataract Complications: with Cases.

Section C.—OBSTETRIC MEDICINE.

Anderson, Mrs. E. Garrett, M.D. On Dysmenorrhœa.

Braithwaite, James, M.D. The Use of Nitric Acid as a Caustic in Uterine Practice, and its superiority as such to Nitrate of Silver.

Coghill, J. G. S., M.D. On Uterine Flexions and Displacements; and their Mechanical Treatment.

Donovan, W., L.R.C.P.Ed. On Placenta Previa.

Edis, Arthur W., M.D. On the Prevention and Management of Miscarriages.

Ewart, J. H., Esq. Case of Inversion of the Uterus of Three Months' standing.

Haddon, John, M.D., M.A. On Intemperance in Woman, with special reference to its Effects on the Reproductive Organs.

Haining, William, M.D. On Death of the Child from Shock from Injury caused by Rupture of the Umbilical Cord.

Hill, Charles, M.D. On Placenta Previa.

Hime, T. Whiteside, M.D. On the Management of the Lying-in Woman.

Keiller, A., M.D. Embryotomy: its various Modes of Procedure, with Illustrative Cases.

McClintock, A. H., M.D. Life of William Smellie, M.D.

McDonald, William, L.R.C.P.Ed. The Nature, Cause, Cure, and Prevention of Puerperal Fever.

Madden, T. More, M.D. Turning *versus* the Forceps in cases of Difficult Labour.

Roberts, D. Lloyd, M.D. Two Cases of Occlusion of the Os Uteri after Labour.

Robertson, Alexander, M.D. Observations on the Unilateral Phenomena of Mental and Nervous Disorders.

Smith, H. Fly, M.D. Vomiting connected with Pregnancy.

Smith, Protheroe, M.D. Ovarian Dropsy; some points in its Pathology and Treatment.

Swayne, J. G., M.D. On Obstetrical Statistics.

Tait, Lawson, Esq. On the Existence of Capillaries in the Umbilical Cord.

Tilt, Edward J., M.D. On Internal Metritis.

Section D.—PUBLIC MEDICINE.

Aitken, Lauchlan, M.D. On the Sanitary State of Rome.

Bartlett, H. C., Esq. On Drinking and Table Waters.

Beddoe, John, M.D., F.R.S. On the Mortality of Adolescence.

Braidwood, P. Murray, M.D., and Vacher, Francis, Esq. First Contribution to the Life History of Contagion.

Cooper, James, Esq. On some points relating to Cottage Hospitals.

Davenport, John A., Esq. On the Drainage and other Sanitary Conditions of Rural Districts.

Dickson, Walter, M.D. The Numerical Ratio of Disease in the Adult Male Middle-class Population, as deduced from the Sanitary Statistics of Her Majesty's Customs, London, 1857-74.

Drysdale, C. R., M.D. Tobacco: its Effects on the Health of Males.

Eassie, W., Esq. On the Sanitation of Houses.

Fergus, Andrew, M.D. Some Sanitary Remarks on Traps and Soil-Pipes.

Freer, Alfred, Esq. On the Evils of Medical Men undertaking the Duties of Nurses.

Goldie, George, L.R.C.P.Ed. On Ventilation; with Model and Apparatus.

Haviland, Alfred, Esq. The Geographical Distribution of Heart and other Diseases in England and Wales.

Kenyon, G. A., M.B. On the Comparative Merits of the Water-carriage and Dry Systems of Sewage-disposal from a Sanitary and Economical Point of View.

Mackintosh, Angus, M.D. On the Outbreak of Enteric Fever at Killamarsh, Derbyshire.

Mitchell, Arthur, M.D., and Buchan, Alexander, Esq. Some of the Relations of Weather to Death-rate.

Nicolson, David, M.D. The Causes of Invaliding among Convicts in the Government Prisons of Scotland.

Page, David, M.D. On a Village Outbreak of Enteric Fever traceable to a specifically polluted Water-supply.

Rogers, Joseph, M.D. The Anomalies and Deficiencies of Parochial Medical Relief in Scotland.

Ross, George, M.D. The Relation of Mortality and Dwellings.

Russell, Henry, M.D. The Expense of Ventilation and Warming, as Sanitary Requirements.

Smart, William R. E., M.D., C.B. On the Ratios of Deaths by Violence in the Army and Navy relatively to each Service and to Civil Life.

Tripe, John W., M.D. On the Death-rate at Different Ages from Epidemic Diseases.

Wilson, George, M.D. On the Sanitary Improvements of Country Villages.

Wanklyn, J. A., Esq. On the Mineral Constituents of Drinking Water.

Waters, Edward, M.D. 1. On the Propagation of Typhus Abdominales. 2. On the Training of Nurses in Provincial Hospitals.

Yeld, H. J., M.D. State Medicine in Relation to Education.

Section E.—PSYCHOLOGY.

Bodington, G. F., M.D. On the Control and Restraint of Habitual Drinkers.

Clouston, T. S., M.D. On Disorders of Speech in Insanity.

McDiarmid, John, M.B. On the Hypodermic Injection of Morphia in Insanity.

Peddie, A., M.D. The Necessity of Legislation for the Control and Treatment of Insane Drinkers.

Shuttleworth, G. E., M.D. Two Cases of Microcephalic Idiocy.

Sibbald, John, M.D. 1. The Relative Amount of Pauper Lunacy in Town and Country. 2. The Extent to which Medical Knowledge can contribute to the Determination of Criminal Responsibility.

Section F.—PHYSIOLOGY.

Caton, R., M.D. Report on the Electric Currents of the Brain.

Coats, J., M.D. The Results of Injection of the Kidneys in Bright's Disease in Relation to Albumen and Hemoglobin.

Ferrier, David, M.D. The Localisation of Centres of Special Sense.

Fothergill, J. Milner, M.D. The Action of Drugs upon the Intracranial Circulation.

Hoggan, Mrs. Frances E., M.D. On a New Histological Process for Staining Tissues.

Nairne, John S., Esq. On the Psychology of Muscle.

Ord, William M., M.B. On the Form of Uric Acid as affected by Urea; and on a new Compound containing Uric Acid and Urea.

Power, Henry, Esq. On the Action of Certain Drugs on Muscular Contraction.

Rutherford, William, M.D., F.R.S.E. and Vignal, M. On the Biliary Secretion.

Shettle, R. C., M.D. The Magnetic Conditions of Arterial and Venous Blood, considered in relation to the Influence which Arterial Blood exercises in promoting the Functions of Life; and the consequent value of Magnetism as a Therapeutic Agent.

Stirling, William, M.B., D.Sc. 1. On the Effects of Division of the Sympathetic Nerve in the Neck in Young Animals. 2. On the Summation of Electrical Stimuli to the Skin.

Woakes, Edward, M.D. On the Existence of Correlated Vasomotor Nerve-Tracts.

ANNUAL MUSEUM.

The Eighth Annual Museum of the British Medical Association will be held in the Practical Chemistry Class-room in the University on the 3rd, 4th, 5th, and 6th of August, 1875, and will be open from 10 A.M. to 6 P.M. The Honorary Secretaries are Dr. Charles Underhill and Dr. John Playfair.

FRANCIS FOWKE, *General Secretary.*

36, Great Queen Street, July 30th, 1875.

LANCASHIRE AND CHESHIRE BRANCH: ANNUAL MEETING.

THE thirty-ninth annual meeting of this Branch was held in the Town Hall, Chester, on Wednesday, June 30th; about fifty members and seven visitors were present.

In the absence of JOHN SKAIFE, Esq., the President, Dr. E. WATERS (Chester) was called to the Chair, and, with a few remarks, introduced the President-elect, T. DAVIES-COLLEY, M.D.

President's Address.—The President delivered an address, an extract of which was published at page 66 of the JOURNAL for July 17th.

Report of Council.—The Secretary (Dr. STEELE) then read the report of the Council, which stated that the Branch was in a prosperous and satisfactory condition. The number of members at the commencement of the year was 461; 19 new members had been elected during the year, while they lost from death 3, and from removals and other causes 17, making a total of 20, thus leaving 460 as the present number of members. These figures indicated the progress the Branch had made since it last met in Chester in 1867. Then the number of members was 233, showing that the numerical strength of the Branch had doubled in about eight years. It was by far the highest number of members in any of the Branches, with the single exception of the Metropolitan Counties Branch. In the two counties which constituted the Branch, there was scope for a considerable increase of members, and the Council urged that members should avail themselves of every opportunity of bringing under the notice of their professional brethren who had not joined the privileges and advantages gained by being members of the Branch and of the Parent Association. As it was probable that the annual meeting of the Parent Association would be held in Lancashire in the autumn of next year, the Council hoped that that a considerable number of new members would join the Branch. The Council had received a communication from the editor of the JOURNAL, calling attention to the question of the propriety of advertising medical books in the daily papers as one that specially concerned the medical practitioner and the profession at large, and they had drafted a resolution on the subject which would be submitted to the meeting, and the adoption of which was unanimously recommended by the Council. The report concluded by stating that the Council had received a deputation representing the medical profession at Southport, giving the Branch a cordial invitation to hold their annual meeting at that town next year.

Medical Advertising.—The following motion was put from the Chair, and carried unanimously:

"That this Branch, having considered the prevalence of advertising in the daily and other newspapers medical works avowedly addressed only to medical readers, and not calculated to enlighten or intended for the perusal of the public generally, is of opinion that, in the majority of instances, this practice can in no way tend to public edification; that it is largely used as a means of indirectly advertising the names and departments of practice of the authors of such books; that it tends to confuse and mislead the public by confounding the distinction between medical men of real eminence and laborious work and others who find such advertisements a means of notoriety, and a costly, but still lucrative mode, of commercially pushing their professional fortunes; resolved, therefore, that this Branch is of opinion, that medical works intended for medical readers should not be advertised in any but the medical journals."

Annual Meeting in 1876: President and Vice-President-Elect.—It was resolved—"That the annual meeting in 1876 be held at Southport, and that George Woods, Esq., F.R.C.S., be the President-elect; and Dr. Laing and John Harrison, Esq., F.R.C.S. (Chester), the Vice-Presidents-elect, for the ensuing year."

Council.—The following members were elected. *Representatives in the General Council of the Association:* R. Beales, M.D.; T. Davies-Colley, M.D.; L. E. Desmond, M.D.; James Hardie, M.D.; Reginald Harrison, Esq.; John Harrison, Esq.; C. Johnson, Esq.; E. Lund, Esq.; C. E. Lyster, M.D.; W. McCheane, Esq.; W. Martland, Esq.; W. McEwen, M.D.; Thomas Mellor, Esq.; J. E. Moreton, Esq.; E. G. Morley, Esq.; G. W. Mould, Esq.; A. Ransome, M.D.; Wm. Roberts, M.D.; T. L. Rogers, M.D.; H. Simpson, M.D.; A. T. H. Waters, M.D.; Charles White, Esq.; M. A. Eason Wilkinson, M.D.

Ordinary Members of Council: G. Barron, M.D.; E. Bowen, M.D.; C. J. Cullingworth, Esq.; W. M. Coultate, Esq.; W. H. Fitzpatrick, M.D.; W. Garstang, M.D.; J. H. Gornall, Esq.; John Haddon, M.D.; William Hall, Esq.; M. J. J. Jennett, Esq.; Leslie Jones, M.D.; D. J. Leech, M.B.; W. H. Manifold, Esq.; J. E. Morgan, M.D.; Daniel Noble, M.D.; J. Thorburn, M.D.; James Vose, M.D.; Edward Waters, M.D.; F. P. Weaver, M.D.; George Woods, Esq.

Communications.—The following communications were read:

1. Lymphoma or Lymphadenoma, with pathological and microscopical specimens. By Dr. OXLEY.
2. Supracondyloid Amputation of Thigh. By Dr. C. E. LYSTER.
3. Note on a case of Sudden Death after Thoracentesis. By Dr. GLYNN.
4. Specimen of Cancer of Mediastinal Glands. By Dr. GLYNN.
5. Case of Hydrophobia. By Dr. HADDON.
6. Note on the management of the third stage of Labour. By Dr. STEELE.
7. Note on a case of Prostatic Calculus, and exhibit of the results of Lithotomy in the Chester General Infirmary during the last six years. By Dr. HAINING.

A Vote of Thanks to the Mayor and Corporation for the use of the Town Hall brought the meeting to a close.

Dinner.—Fifty members and visitors dined together at the Grosvenor Hotel. Dr. Davies-Colley occupied the Chair.

NORTH OF ENGLAND BRANCH: ANNUAL MEETING.

THE eleventh annual meeting was held in the Town Hall, Darlington, on Thursday, July 8th. There were present thirty-nine members and five visitors. Previously to the meeting, the members were entertained at luncheon by the President, S. E. PIPER, Esq., at his residence.

The retiring president, Dr. LEGAT, in resigning his office, congratulated the meeting upon the present satisfactory position of the Branch, and expressed his gratification at the steady increase of the number of the members, but stated that, although they were progressing, they ought not to rest satisfied until they had enlisted every registered medical man resident in the district into its ranks.

The New President, S. E. PIPER, Esq., then took the chair, and delivered an address, which was principally directed to sanitary medicine, the causes of the unhealthiness of towns being carefully discussed, and compared with the salubrity of rural districts.

Vote of Thanks to the President.—It was moved by JOHN JOBSON, Esq., seconded by Dr. GIBSON, and granted, "That the warmest thanks of the meeting be accorded to the president for his able address."

Vote of Thanks to the Retiring President.—It was moved by E. H. MALING, Esq., seconded by S. FIELDEN, Esq., and resolved, "That the best thanks of the meeting be given to the retiring president, Dr. Legat, the council of management, and the other officers for their services during the past year."

Report of Council.—The Council reported favourably of the stability and usefulness of the Branch. During the year, twenty-eight new members had been elected. At the present time, the Branch consists of two hundred and thirty-one members, sixteen more than at the annual meeting in 1874. During the year, three meetings, including the annual meeting, had been held. The attendance at the meetings had been large, and the interest of the papers had called forth animated discussion.

The Treasurer's Account showed a balance in favour of the Branch amounting to £5 5s. 3d.

The Subscription to the Rumsey Testimonial amounted to £20 8s. 6d.

Officers for 1875-6.—Dr. EASTWOOD proposed, Dr. ROUTH seconded, and it was unanimously carried, "That the next annual meeting be held at Morpeth, the autumnal meeting at Sunderland, and the spring meeting at Newcastle; that Matthew Brumell, Esq., be President-elect; Dr. Philipson, Honorary Secretary and Treasurer; and Drs. Gibson, Byrom Bramwell, Dixon, and Frain, the Council of Management."

Representatives in the General Council of the Association.—It was moved by J. B. PEACOCK, Esq., seconded by JAMES MACKIE, Esq., and carried unanimously, "That the following gentlemen be the representatives of the Branch in the General Council of the Association: Byrom Bramwell, M.B.; S. W. Broadbent, Esq.; Matthew Brumell, Esq.; Martin Burnup, M.D.; W. H. Dixon, M.D.; J. W. Eastwood, M.D.; Charles Gibson, M.D.; G. Y. Heath, M.D.; C. S. Jeaffreson, Esq.; Andrew Legat, M.D.; S. E. Piper, Esq.; R. N. Robson, Esq.; and G. H. Philipson, M.D."

Representative in the Parliamentary Committee of the Association.—Mr. S. W. BROADBENT proposed, Mr. EDWARD HEFFERNAN seconded, and it was unanimously carried, "That Dr. Philipson be the representative of the Branch in the Parliamentary Committee of the Association."

Vote of Thanks.—On the motion of the PRESIDENT, a vote of thanks was carried to the Mayor and Corporation of Darlington, for their kindness in granting the use of the Town Hall for the purposes of the meeting.

Dinner.—The members and their friends afterwards dined together at the King's Head Hotel, Darlington; the chair was occupied by the President, who was supported by the Mayor of Darlington, and the Rev. Mr. Stephens. The vice-chair was filled by Dr. Philipson.

SOUTH WALES AND MONMOUTHSHIRE BRANCH: ANNUAL MEETING.

The fifth annual meeting of this Branch was held at the Corn Exchange, Abergavenny, on July 16th. The President, Dr. EDWARDS of Cardiff, took the chair at one o'clock; and there were about thirty-five members present. Dr. Edwards resigned the chair to the President-elect, S. H. STEEL, M.B., Abergavenny; and a vote of thanks was unanimously accorded to the retiring President.

President's Address.—The PRESIDENT delivered an address on the Origin and Mode of Dissemination of Enteric Fever.

The Report of Council, from which it appeared that the Branch now numbered 147, and the statement of accounts, showing a balance in the hands of the Treasurer of £15:16:4, were read and adopted.

New Members.—The following gentlemen were elected: T. D. de B. Stanistreet, Esq., Cowbridge; J. G. Roberts, Esq., Aberdare; J. D. Hutcheson, M.B., Aberdare; Lewis Jones, M.A., M.B., Dowlais; J. T. Griffiths, Esq., Dowlais; T. G. Anthony, Esq., Tredegar; John Evans, Esq., Swansea; C. E. Hardyman, Esq., and W. Campbell, M.D., Cardiff.

Election of Officers.—The following were appointed. *President-elect:* Andrew Davies, Esq., Swansea. *Members of Council:* P. R. Cresswell, Esq.; Ebenezer Davies, Esq.; H. N. Davies, Esq.; J. Probert, Esq.; and Jabez Thomas, Esq. *Representatives in General Council:* P. R. Cresswell, Esq.; H. N. Davies, Esq.; J. G. Hall, Esq.; Evan Jones, Esq.; Talfourd Jones, M.B.; A. Sheen, M.D.; Jabez Thomson, Esq.; T. Williams, M.D.; and Andrew Davies, Esq., Honorary Secretary. *Honorary Secretaries:* Andrew Davies, Esq., Swansea; and A. Sheen, M.D., Cardiff.

Membership of the Association.—The members present proceeded to sign a declaration of membership of the British Medical Association, under the provisions of the Joint Stock Companies Act, with limited liability.

Medical Advertisements in Non-Medical Papers.—The following resolution, proposed by Mr. A. DAVIES, was carried unanimously.

"That this Branch desires to express its opinion that the system permitted by many authors of medical works of advertising their works in the non-medical papers is one which, being open to much abuse, ought to be discouraged and condemned."

Papers, etc.—1. Mr. CRESSWELL (Dowlais) gave a demonstration of the mode of application of Professor Lister's Antiseptic Treatment.

2. Dr. SHEEN read a paper on Medical Book-keeping, and also showed some forms to facilitate the same.

3. Dr. SHEEN read a case of Inflammation of the Vermiform Appendix, from a foreign body ulcerating through it, and producing general and fatal peritonitis, in a male aged 7.

4. Dr. SHEEN (for Mr. G. Robathan of Risca) read a case of extensive Compound Comminuted Fracture of the Skull, with loss of bone and paralysis, resulting in complete recovery.

5. Mr. EVAN JONES (Aberdare) showed a Lithotrite which he had recently and successfully used in breaking down vesical calculi weighing 5½ and 5 ounces respectively.

6. Dr. GRIFFITHS (Swansea) related a case in which he had successfully adopted Dr. Copeman's suggestion for the treatment of the Sickness of Pregnancy, by means of digital dilatation of the os uteri, in a primipara at seven months.

Medical Benevolent Fund.—Dr. EDWARDS (Cardiff) brought the claims of the Medical Benevolent Fund before the Branch, and it was unanimously resolved, "That a donation of £5 be made from the funds to the Medical Benevolent Fund."

Dinner.—Twenty-eight members, with the Vicar of Abergavenny, afterwards dined together at the Angel Hotel. A very pleasant day was passed.

PRESENTATION.—A substantial testimonial in recognition of public services was recently presented to Dr. Robert Mungall of Cowden Heath. Subscriptions for the purpose flowed in liberally from all classes in the surrounding neighbourhood to the amount of £250 in a fortnight. The forms of the testimonial had the merit of combining the useful with the ornamental, consisting of an epergne with side ornaments, a carriage and horse, with trappings and livery, and a purse of sovereigns in addition.

CORRESPONDENCE.

DEATHS FROM ANÆSTHETICS.

SIR,—With reference to your note on this subject, in which my name is mentioned, I desire to say that, if my letter to the *Times* could be considered to imply any imputation on those who do not at present employ ether as an anæsthetic, it implied that which was not in my mind. I was led to write that letter from a sense of duty, and from the belief that, by prominently directing attention to the safety of ether as an anæsthetic on an occasion when two deaths simultaneously were recorded from chloroform, I might be the means of saving life and of shielding my fellow-practitioners from the intense pain of seeing a patient die under the inhalation of an anæsthetic administered by their hands.

I believe you share with me the conviction of the greater safety of ether; and its present reintroduction into this country as an anæsthetic is certainly mainly due to the persevering and laudable efforts of the BRITISH MEDICAL JOURNAL during the past three years, by which the dangers of chloroform have been brought clearly into view, and the advantages of ether as the safer anæsthetic repeatedly enforced.

I am, sir, yours truly,

G. POLLOCK.

36, Grosvenor Street, July 27th, 1875.

THE UNIVERSITY OF DUBLIN AND THE VISITORS OF EXAMINATIONS.

SIR,—At a meeting of the professors of the School of Physic in Ireland, thirteen being present, held on the 9th October, 1874, the following resolution was passed *unanimously*:

Resolved—"That, in the opinion of the professors, while every facility should be given to the visitors of the General Medical Council to inspect the examination papers and answers thereto, it is not expedient that the Medical Registrar should surrender the custody of the examination papers, or permit any extracts to be made from them for the purpose of publication."

Dr. Stokes, Dr. Apjohn, and Dr. Aquilla Smith were present at that meeting and concurred in the resolution, which was forwarded to the Board of Trinity College, who approved it, and gave me instructions to carry it into effect, which, of course, I did. It was, therefore, with extreme surprise that I read, in the BRITISH MEDICAL JOURNAL of the 10th July, 1875, the following.

Dr. Apjohn: "It was a mistake to state that this was in consequence of a recommendation of the professors."

Dr. Stokes: "He was ignorant of any recommendation of the professors regarding the written answers."

Dr. Aquilla Smith "had no recollection of it".

Dr. Haldane telegraphed to me, on 23rd June, to know whether such a resolution had been passed or not; and I telegraphed to him in reply, stating that it had been passed; but until I saw the discussion in the BRITISH MEDICAL JOURNAL of the 10th July, I could not understand Dr. Haldane's reason for wishing me to confirm by telegram what I had already informed him of.

The resolution itself was passed after mature deliberation, and on weighty grounds; and I may add that the Board of Trinity College were unanimous on the question as well as the professors.—I am, yours faithfully,

SAMUEL HAUGHTON, Medical Registrar.

Trinity College, Dublin, July 21st, 1875.

P. S.—Dr. Stokes was in the chair at the meeting of the 9th October, 1874; and Dr. Apjohn assisted in wording the resolution.

VOTING BY PROXY AT THE ROYAL COLLEGE OF SURGEONS.

SIR,—I trust the country Fellows will one and all send in their names *en masse* without delay to Mr. Smee, so that the oft-mooted question of voting by proxy may be fully discussed, its equity duly acknowledged, and not only so, but, better still, its request speedily settled by Act of Parliament, ere another election takes place; for it is very clear that, without this concession, the interest and future well-being of the College must be at stake. To expect that justice can be done a constituency so cosmopolitan as the Fellows of the English College of Surgeons, under the present state of things, is a delusion.

I remain, sir, your obedient servant,

OCTAVIAN N. ROYLE.

Milnthorpe, Westmorland, July 13th, 1875.

IN MEMORIAM. MR. J. F. CLARKE.

SIR,—My attention (as solicitor to the *Lancet*) has been directed to an article in your JOURNAL of last week, headed "In Memoriam J. F. Clarke", in which grave charges are made against the editor of the *Lancet* in reference to the dismissal of the late Mr. Clarke from the staff of that journal, caused by an act impossible to be passed over. The written proofs of the correctness of this statement have remained in my custody ever since, and are now before me.

The motives of delicacy which restrained the *Lancet* from noticing the matter until the present time give way before the necessity of repelling the insinuations of your article, and I must request the insertion of this letter in your next issue, in rectification of the wrong impression made upon the minds of your readers.

I am, sir, your very obedient servant,
SAMUEL POTTER.

36, King Street, Cheapside, London, July 26th, 1875.

* * Such a letter as the above must, of course, have caused great pain to those who felt it necessary that it should be written. It gives us not less pain and surprise to be requested to publish it, concerning a man whose reputation during life was spotless, and to whose general character and career we paid what we believed to be only a just tribute.

MEDICAL ADVERTISING.

SIR,—Will you allow one who differs from the members of the Lancashire and Cheshire Branch of the British Medical Association, with respect to the advertising of medical books as the authors or proprietors may deem fit, to inquire if the denunciation embodied in their recent resolution applies to other modes of advertising? For example, is it considered advertising to establish a large hospital? Is it considered advertising to establish a small hospital or institution, which, by the way, seems to be a favourite term?

Which line of conduct redounds most to the credit of a professional man: to be able to write an useful book, and advertise it as he pleases, and for the edification of any one who can understand it; or to take one or two rooms, designate them a hospital or institution, advertise the same in every conceivable way, and appeal to the public for aid towards defraying the attendant expenses?

If it be justifiable to found and advertise a large hospital, it must be equally justifiable to do likewise with a small one; and what a body of men can do, must be equally within the liberty of an individual. Have not many of the most prominent members of the profession in the metropolis made their position by special institutions and the advertising of books in non-medical journals? Is this line of conduct not at present the rule? If so, what course is open to the friendless and possibly penniless medical man entering on practice?—I am, etc.,

Glasgow, July 1875. D. CAMPBELL BLACK.

* * * Two wrongs can never make one right; and the advertising of medical books in lay papers cannot be more right for a poor man than for a rich one. There are, no doubt, abuses connected with the foundation of special hospitals; and we have many times pointed them out. How does the existence of such abuses justify other evils?

DENTAL SURGERY AND MECHANICAL DENTISTRY.

SIR,—In the paragraph referring to Mr. Hamilton Cartwright's letter in your issue of last week, you ask whether it would not be well if the surgeon-dentist were to confine himself to the surgical care of the diseases of the teeth, and to entrust to other hands—those of the mechanic—the business part of dentistry, the manufacture of teeth. The question of the separation of the two apparently distinct branches of dentistry has been carefully considered in past years by the leading members of the profession, and the unanimous opinion has been formed that it is impossible for the mere artisan, however skilful, to practise successfully even what—as you say—seem at first sight simple mechanical operations, the construction of artificial teeth and their adaptation to the mouth. To practise this art safely, a professional education is required, such as is undergone by candidates for the license in dental surgery of the College of Surgeons. This course of study, besides practical instruction in dental surgery and mechanics, provides that the candidate shall go through a course of instruction in general anatomy and surgery, so that, having an acquaintance with the nature of disease and the principles of medical practice, he may avoid error and be able to deal with confidence with the special region of the body to which his treatment will be confined. Not to speak of the mechanical treatment of cleft palate, of deformities of the jaws, of irregularities of the teeth,

I may safely affirm that every dental surgeon meets almost daily with cases which could have presented originally no difficulty, but which, having been treated by uneducated mechanics, without regard to the physiology of the teeth, and of the parts influenced by the apparatus, have resulted in the infliction of unnecessary, intense, and prolonged suffering.

In mechanical dentistry, as in every other department of surgery, we have in every case to deal more or less with living structures; and ignorance on the part of the practitioner, being very closely allied to cruelty, cannot under any circumstances, be tolerated. It is customary to estimate lightly the suffering which arises from dental disease, and from the ignorance of the dental mechanic—perhaps because it does not directly endanger life; but I may venture to assert that there are well nigh as many lives rendered wretched from this cause as there are from any other kind of physical pain which afflicts mankind.

Your obedient servant,
HENRY SEWILL.

6, Wimpole Street, July 17th.
* * * Mr. Sewill appears to us completely to misunderstand the argument, and to confuse things which it is the gist of the matter to discuss separately. The treatment of cleft palate, deformities, etc., is a branch of dental or, as it is more properly called, oral surgery. The making of instruments for the purpose, and the making of sets of teeth, is mechanical work. All that Mr. Sewill says of the necessity of surgical knowledge in devising, modifying, and directing the application and fitting of them, is equally true of trusses, orthopædic instruments, and other contrivances. Surgeons do not, however, on that account make the instruments themselves; and we are still of opinion that Mr. Sewill entirely fails to show that the dental surgeon would not have a higher average skill, capacity, and status, if he separated his profession from the *métier* of the mechanical dentist.

THE COLLEGE TEST.

SIR,—It is difficult to understand for what purpose the statistics were published under the imposing title of College Tests in your last impression, unless it be to draw attention to the respective educational merits of the different medical schools.

It would be a most desirable thing if a fair comparison could be made of the teaching capacities of these; but this cannot be done by means of the table you have published. Firstly, some of the schools examine those of their members who wish to present themselves for examination at the Royal College of Surgeons, to prevent as far as possible any from going up whom they consider unfit. The result is, that many men for the primary examination are kept for at least three months, possibly longer, at their anatomical studies; thus either diminishing the time they have afterwards for preparing themselves for the pass examination, or increasing the term of residence at the hospital. Another tendency of this system is to increase the proportion of men who leave the hospital as unqualified assistants, and who thus delay indefinitely the date of their qualification. At other schools, this arbitrary restriction is either not imposed, or not imposed so rigidly. Any comparison, therefore, based upon the number of men rejected at these examinations must be unfair.

It may be seen from the table that some of the schools which appear to the greatest advantage in the primary do not figure so well in the pass examinations, possibly on account of the time for preparation for the latter having been curtailed.

Secondly, statistics such as these are always more or less fallacious. They can generally be turned and twisted to one side or the other, as those who draw them up choose. For instance, a very different inference might be made from these tables, if arranged as follows.

Primary Examinations.

	Total Exam.	Number Passed.	Number Rejected.	Percentage of Rejections
Three London Schools not represented on the Court of Examiners of the College	83.	51.5	32	38.55
Six London Schools represented each by one Examiner on the Court	263.63	168.83	94.33	35.77
Two London Schools represented each by two Examiners on the Court	158.	127.3	31.5	19.93
Provincial Schools	219.88	156.83	63.29	28.78

Pass Examinations.

	No. Exam.	No. Passed.	No. Rejected.	Percentage of Rejections
Three London Schools not represented on the Court of Examiners of the College	43.16	26.16	17	39.38
Six London Schools represented each by one Examiner on the Court	192.96	156.1	36.83	19.07
Two London Schools represented each by two Examiners	158.33	124.13	34	21.47
Provincial Schools	123.79	85.46	38.13	30.8

A better comparison could be made, if tables showing the number of

students attending each hospital, classed according to their years, were annually published, together with a specification of the examinations passed by these, and the period of study at which they were passed. From such tables, many fair inferences might be drawn, and the general efficiency of a particular school roughly sketched. Such information could only be obtained from the schools; but, if one or two of the larger ones set the example of publishing it, the others would soon follow.

I am, sir, yours faithfully, R.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE Hartlepool Board of Guardians have increased the salary of Dr. George Moore, as Medical Officer of the Workhouse, from £40 to £65 per annum.

THE Leamington Urban Sanitary Authority have increased the salary of Mr. Joseph S. Baly, the medical officer of health, from £50 to £80 per annum.

VACCINATION.—Mr. John H. Gornall has been awarded for efficient vaccination, as Public Vaccinator for the Borough of Warrington, grant of £69 : 4.—The Local Government Board have awarded to Dr. H. Heygate Phillips of Reading an extra grant of £8 : 19, as a gratuity for efficient vaccination in the Caversham District, Henley Union.

POOR-LAW MEDICAL APPOINTMENTS.

BOOKRY, Thomas, L.R.C.P.I., appointed Medical Officer for the Iscody District of the Whitchurch Union, Shropshire, *vice* J. Parker, M.R.C.C.S.Eng.
BOREHAM, W. T., L.R.C.P.Ed., appointed Medical Officer for the Morden and First Wareham Districts of the Wareham and Purbeck Unions.
DOVE, Harry, M.R.C.S.Eng., appointed Medical Officer for the Workhouse and the First District of the Stow Union, *vice* S. Freeman, M.R.C.S.Eng., resigned.
GREY, Frederick A., L.R.C.P., appointed Medical Officer for the Fourth District of the Honiton Union, *vice* R. B. Morell, L.R.C.P.Ed., resigned.
LUER, James J., M.D., appointed Medical Officer for the Alveston District of the Stratford-on-Avon Union, *vice* H. Lupton, L.R.C.P., resigned.
PALMER, Frederick S., M.R.C.S.Eng., appointed Medical Officer and Public Vaccinator for the Mortlake District of the Richmond Union, *vice* Alexander Crichton, L.R.C.P.Ed., deceased.
PATTERSON, Thomas, M.D., appointed Medical Officer for the Workhouse of the Oldham Union, *vice* S. Jackson, L.R.C.P.Ed., resigned.
PENNY, W. L., M.B., appointed Medical Officer for the Colton District of the Ulverstone Union, *vice* G. Stunt, M.R.C.S.Eng., resigned.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, July 22nd.

The Pharmacy Bill (Ireland).—The Duke of RICHMOND, in moving the second reading of this Bill, said its object was to institute a Pharmaceutical Society, and regulate the qualification of chemists and druggists in Ireland. At present no person could keep open a shop in Ireland for compounding poisons and medical prescriptions except licentiates of Apothecaries' Hall. Permission was given to them under the Act of 1791, which contained provisions of a very stringent character, and the consequence had been that, comparatively speaking, very few persons had applied in Ireland for licenses under that Act, not liking to submit themselves to such an examination; and there was a difficulty in many parts of Ireland in getting medicines properly compounded. The Bill at first proposed that there should be reciprocity between the Pharmaceutical Society of England and the Pharmaceutical Society of Ireland to be constituted under this Bill; but, in consequence of the objections taken by the former to such a provision being introduced into the measure, the clause was struck out. The main provisions of the Bill were to establish a Pharmaceutical Society for Ireland; to name the first members of the Council to be appointed under the Bill; that the President should be Sir Dominic Corrigan, and the Vice-president Dr. Aquilla Smith; and that the Council should have power to make rules and regulations, and to regulate examinations to be held under the Bill when it became law. It also provided for two grades of chemists, one to be called pharmaceutical chemists, and the other—those who passed an inferior examination—to be called chemists and druggists; and no person would be able to keep open shop for the sale of poisons and the compounding of drugs unless he was registered in one of the two grades, a licentiate of the Apothecaries' Hall, or a duly registered medical practitioner. The Bill reserved existing rights, and would allow phar-

maceutical chemists to fill the office of apothecary in district lunatic asylums in Ireland, and he should propose, in committee, to extend that privilege to the office of apothecary in county gaols in Ireland.—Earl GRANVILLE said he had a great deal to do with settling the law upon this subject with regard to England, and he was in favour of the general principle of this measure. In England, pharmaceutical chemists had to pass three examinations, and chemists and druggists only two; and, as there was a desire and a possibility of reciprocity between the two societies, he should, in committee, move an amendment that the examinations of pharmaceutical chemists in Ireland should be of the same standard as in England.—The Bill was read a second time.

The Sale of Food and Drugs Bill.—On the order for the third reading of this Bill, the Duke of RICHMOND moved the insertion of the following Clause after Clause 4: "That no person shall be liable to be convicted under either of the two last foregoing sections of this Act in respect of the sale of any article of food or of any drugs, if he shows, to the satisfaction of the justices or court before whom he is charged, that he did not know of the article of food or drug sold by him being so mixed, coloured, stained, or powdered, as in either of these sections mentioned, and that he could not, with reasonable diligence, have obtained that knowledge."—Agreed to.—The Duke of RICHMOND then moved the omission of Clause 5, and the substitution of the following: "No person shall sell, to the prejudice of the purchaser, any article of food or any drug which is not of the nature, substance, and quality of the article demanded by such purchaser, under a penalty not exceeding £20, provided that an offence shall not be deemed to be committed under this section in the following cases: that is to say, when any matter or ingredient not injurious to health has been added to the food or drug because the same is required for the production or preparation thereof as an article of commerce, in a state fit for carriage or consumption, and not fraudulently to increase the bulk, weight, or measure of the food or drug, or to conceal the inferior quality thereof; when the drug or food named is a proprietary medicine, or is the subject of a patent in force, and is supplied in the state required by the specification of the patent; where the food or drug is compounded, as in this Act mentioned, and where the food or drug is unavoidably mixed with some extraneous matter in the process of collection or preparation."—Agreed to.—Some other amendments were also agreed to, and the Bill was read a third time, and passed.

Tuesday, July 27th.

Pharmacy (Ireland) Bill.—The report of the amendments made in this Bill was brought up and agreed to.

HOUSE OF COMMONS.—Friday, July 23rd.

Mortuary at Shoreditch Workhouse.—Mr. PULESTON asked the President of the Local Government Board whether his attention had been called to the report of the Local Government Inspector on the condition of the Shoreditch Workhouse, where it was stated decomposing bodies were brought into proximity with the wards of the infirmary, the health of the patients and of the people of the neighbourhood being endangered thereby; whether action could be taken to ensure the immediate erection of a suitable mortuary; and whether, in view of the importance of the matter, he would consider the desirability of causing special inquiries to be made in other crowded districts, with the object of enforcing such sanitary regulations as would prevent the evils above referred to.—Mr. SCLATER-BOOTH said, with reference to the first question, that the report had been addressed to himself, and, therefore, had come under his notice. From that report, it appeared that the mortuary at Shoreditch workhouse had been unduly and improperly used by the vestry of the parish, with the permission of the guardians, for a purpose in reference to which the vestry was bound to find accommodation of its own. As soon as the attention of the guardians was called to circumstances set out in the report of the inspector, notice was given to the vestry that the mortuary could no longer be used for the purposes of the parish. In reply to the second question, he was happy to say he had received a letter from the vestry clerk, stating that, after great difficulties, they had succeeded in making arrangements which would enable them to provide a mortuary for their own use. The House would not be surprised to hear that there had been difficulty in procuring such a place, because there was no power of compulsory purchase in respect of land for a mortuary. Replying to the third question, he might say that one of the new provisions of the Public Health Bill, now passing through Parliament, conferred on the Local Government Board the power of compelling local authorities to provide mortuaries where necessary. Though the provisions of the Bill did not extend to the metropolis, there were crowded localities in the country where mortuaries would be found necessary, and when the Bill came into operation he should cause inquiries to be made in respect to them.

Army Medical Department.—Replying to Mr. M. Henry, Mr. HARDY said he had no objection to the Army Medical Department following the example of the Indian Medical Service by declaring the number of vacancies offered when advertising the date of the competitive examinations, though hitherto that course had not been adopted.

Unqualified Medical Practitioners.—In answer to Mr. O. Lewis, Mr. CROSS said his attention had been called to the verdict of the jury at the inquest upon the body of Emma Jane Plain, aged nine months, viz., that, while they found that death was from natural causes, they pointed out the fact that the deceased received medical treatment at a dispensary in Copenhagen Street, where medicines were administered by an irresponsible unqualified medical practitioner. This was an unfortunate case. All he had to say about the state of the law was that the question now raised by the honourable member was discussed at the time of the passing of the present Act—whether absolutely unqualified practitioners ought to be allowed to administer medicine. The law was that, if an unqualified person held out, in any shape or form, that he was a qualified practitioner, he was liable to punishment; otherwise not. As the question was one which came within the province of the Lord President of the Council, he would call his noble friend's attention to it.

Lunatic Asylums (Ireland) Bill.—This Bill, as amended, was considered and advanced a stage.

OBITUARY.

SIR CHARLES LOCOCK, BART., M.D., D.C.L., F.R.S.

ON Friday last, July 23rd, Her Majesty's First Physician-Accoucheur passed quietly away in his retreat at Binstead Lodge, near Ryde. For many years, this once prominent physician had been retired from anything like active professional duty; but he carried with him into his retirement alike the affection of his friends and of his patients. From 1840 to 1857, Sir Charles Locock was one of the most prominent figures in the medical world, having attended Her Majesty in all of her accouchements.

Sir Charles Locock was born in 1799, at Northampton, and was the son of Mr. Henry Locock of that town. Having chosen medicine as his vocation, he turned his steps northwards, and passed his student life in Edinburgh, whence, with his degree of M.D., he went to London. Like many more of the graduates of Edinburgh University, who have tempted fortune in the great metropolis, he had to start at the first round of the ladder of success, and climb by degrees. It was his good fortune at an early part of his career to come into contact with Dr. Gooch, who was struck by the intelligence displayed by Dr. Locock in the treatment of a troublesome case. This acquaintance soon ripened into friendship, and Dr. Gooch was often in a position to do friendly acts towards the rising physician, of which he availed himself. While a very young man comparatively, he was elected a physician to the Westminster General Lying-in Hospital. He was elected a Fellow of the Royal College of Physicians in 1836, and was a Councillor of that body in 1840, 1841, and 1842. By the advice of Sir James Clark, he was appointed Physician-Accoucheur to Her Majesty, and acted in that capacity at the birth of the present Crown Princess of Germany. In 1857, he was created a baronet; and in the same year was elected President of the Royal Medical and Chirurgical Society of London. In 1863, he was elected President of the Obstetrical Society of London; and in 1864, he was made a Fellow of the Royal Society. For many years before his decease, he retired from all practice, though he kept up his door-plate for several years after his practical retirement, and was always glad to give his advice in a friendly way to those of his medical brethren who knew him well, and who from time to time informally consulted him. For the last year of his life he was an invalid, and gradually died from no very distinguishable malady. His last appearance among his friends was at the last meeting of the St. Alban's Club, of which he was President. On that occasion, he was very feeble, and evidently declining; but was able to receive a deputation from the Club this year to present him with a gold snuff-box as an evidence of their goodwill towards him.

In his domestic relations, he was very fortunate; and, in his twenty-seventh year, married Amelia, youngest daughter of Mr. John Lewis, of Southampton Place, Euston Square, a lady of large means. This lady lived until 1867, long enough to see her husband rise to the highest position in his branch of medicine, and bore him five sons, the eldest of whom is a barrister, now Sir Charles Brodie Locock.

As a man, Sir Charles Locock was small in person and slight, firm and decided in manner, and to strangers undemonstrative to the extent of coldness. To those who knew him well, he was far from cold, and was kindly and sympathising to a degree. His intimates were warmly attached to him, and his patients placed implicit confidence in him. In diagnosis, he was quick and clear-sighted; he soon formed his opinion, and gave it candidly and outspokenly, though always in a manner free from offence to other medical men. His decision and firmness produced their effect in procuring the obedience of his patients, who always fulfilled his orders. His relations with Her Majesty were always those of an attached servant, whose affectionate services were required by the gracious friendship and confidence of his illustrious patient. This was shown by the request of the Queen that he should be present at Windsor on the occasion of the accouchement of the Princess Alice of Hesse, when Dr. Arthur Farre was the official Physician-Accoucheur. It was not that he had any duties to perform, but it pleased Her Majesty to know that he was at hand. Dr. Farre always speaks in the kindest manner of the way in which Sir Charles Locock conducted himself in his somewhat difficult position. His friendly relations with the Royal Family were shown by the interest Her Majesty felt in his last illness; and on the Wednesday before his death she drove over to Binstead to see him for the last time. The official notice which appeared in the *Gazette* expressed Her Majesty's personal regard and respect for her physician.

Sir Charles Locock did not make himself in any way prominent in medical politics, and never held any other office in the College of Physicians than that of Councillor. Neither did he contribute much to medical literature; his best known writings are his articles in the *Cyclopædia of Practical Medicine*. The articles are Amenorrhœa, Convulsions (Infantile and Puerperal), Dysmenorrhœa, Lactation, Leucorrhœa, Menorrhagia, and the Pathology of Menstruation, all of which testify to his acuteness of observation and perception of the indications for treatment. These articles were written during the time when he was physician to the Westminster General Lying-in Hospital, and doubtless did much to establish the reputation of the rising obstetrician. It was not, however, by his writings or his public appearances that Sir Charles Locock rose to position and reputation in his profession. It was rather by his personal qualities which always attracted those who knew him, and converted his patients into partisans, so that he built around him a phalanx of attached patients who believed in him implicitly. He was a wary, shrewd practitioner, who gained the entire confidence of his patients. He did little, however, to advance even his own department of medicine; and his name is not associated with any improvement in obstetric or gynaecological practice. He was a good practitioner, and was one of the first to perceive the utility of bromide of potassium in cases of epilepsy, associated with an excitement in the reproductive organs; and used chloroform in the later accouchements of the Queen.

Though he lived to his seventy-sixth year, Sir Charles Locock was never a robust man, and was almost a valetudinarian. He had a feebly acting heart, and was rejected by many insurance offices. A story is told of personal anxiety about his health in his early days. He often corresponded with Dr. Davies, known as "Chest-Davies", but they did not know each other personally. Sir C. Locock took advantage of this, and one day presented himself to Dr. Davies as a patient, with a note from Dr. Locock, in which he wished to have in writing Dr. Davies's opinion about the patient's heart. After examining him, Dr. Davies sat down and wrote a note to Dr. Locock. His anxiety was such that he had scarcely left Dr. Davies's door-step when he tore open the letter and read: "Dear Dr. Locock,—I have examined your patient's heart, and he has no more heart-disease than you or I have." This was, of course, a very satisfactory announcement, and gave him much relief; but all his life he was anxious about his heart.

Sir Charles Locock was an example of the successful physician who mounted to the highest place in medicine by the quieter bye-paths of personal regard rather than by the more conspicuous road of public reputation. He did not even study abroad ere entering on practice in London; and his name is not conspicuous in medical literature. He was, however, a man whom his profession regarded with esteem; and, now that death has removed him, his worth will be remembered and his loss regretted by all his friends.

DR. JAMES WELSH, of Kinghorn, Fifeshire, has been presented with a black marble timepiece and a purse of sovereigns. The timepiece bears the following inscription: "Presented to James Welsh, M.D., with a purse of one hundred sovereigns, by numerous friends in Kinghorn and surrounding district, as a token of their appreciation of his professional zeal and personal worth. 19th July, 1875."

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Licentiates on July 19th, 1875.

Annington, Thirkell, Burnley
 Baly, William, St. Mark's Hospital, City Road
 Blackmore, George Henry, Shaftesbury Road, Hammersmith
 Childs, Christopher, 121, Warwick Street
 Clarke, Arthur, Brill, Buckinghamshire
 Clayton, Joseph Everett, 4, Rutland Street
 Collins, Charles Edward, 47, Crownhill Road
 Cooper, Ernest Frederick, 13, St. Paul's Road
 Haines, Edmund William, 5, Tavistock Place
 Hood, Francis Edward Charles, Guy's Hospital
 Irving, Charles, St. Bartholomew's Hospital
 Jackson, Ernest Carr, 51, Harley Street
 Kebbell, William, Brighton
 Kempe, John Arthur, 74, Wimpole Street
 Murrell, William, 12, York Street, St. James's Square
 Pasley, Nicholas Claude Burgoyne, 19, Palace Road
 Peck, Awdry, Yalding, Kent
 Peavor, George Hamilton, 4, Portsdown Road
 Phillips, Arthur Owen Henry, Bethlem Hospital
 Poynder, George Frederick, Weeting, Brandon
 Ree, Frederick George, Ealing
 Reid, Thomas Whitehead, St. Bartholomew's Hospital
 Rendall, John, Maiden Newton, Dorchester
 Robson, Arthur William Mayo, Leeds
 Romano, Frederick William Richard, 17, Albany Road
 Rudd, Leonard, Guy's Hospital
 Spooner, Frederick Henry, Plymouth
 Thompson, Alfred, Spilsby
 Waylen, George Swithin Adee, 19, Granville Square
 Williamson, Francis, 5, Durham Place

The following candidate, having passed in Medicine and Midwifery, will receive the College License on obtaining a qualification in Surgery recognised by this College.

Sykes, John Frederick Joseph, 20, Fitzroy Square

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on July 22nd.

Messrs. R. A. Stevenson, M.D. McGill, London, Canada West; E. J. Le Quesne, Jersey; M. H. H. Vernon, Battle, Sussex; R. F. Godfrey, M.D. Bellevue College, Montreal; N. Williams, B.A. Cantab., Ruthin; G. H. Jameson, M.B. Edin., Heywood; C. C. Turnour, Millman Street, W.C.; J. G. Hancock, Halse, Taunton; H. Bartlett, L.S.A., Great Dover Street, S.E.; G. H. Makins, L.S.A., Walton-on-Thames; A. G. Lacy, L.S.A., Guernsey; P. Bruce, L.S.A., Valparaiso, Chili; H. B. Briggs, L.S.A., Horncastle; St. C. B. Shadwell, Walthamstow; C. J. Hancock, Bath; W. Cock, Redruth—H. A. Collins, L.S.A., Bayswater, who passed in Surgery at a previous meeting of the Court, having subsequently obtained a medical qualification, was also admitted a Member.

Three candidates passed in Surgery; and, when qualified in Medicine, will be admitted members of the College.—Six candidates were referred to their hospital studies for six months' further attendance.

Candidates who passed on July 23rd.

Messrs. W. A. E. Hay, L.S.A., Bridport; T. M. Hovell, Clapton; A. L. Bowen, Ludlow; Salop; W. Roughton, The Grove, Hammersmith; G. R. Corndell, L.S.A., Lock Hospital; J. Todd, Tufnell Park; F. H. Carter, Pewsey, Wilts; R. Humphry, Kensington; T. Burtonshaw, L.S.A., Hackney Road; E. Ground, Whittlesea; C. Rees, L.S.A., Cape Town; G. C. Karop, L.S.A., Camden Town; J. V. Continho, Ladbrooke Road; C. M. Johnson, L.S.A., Lancaster; J. K. Barton, Doughty Street; J. G. Langley, Mildmay Grove; A. J. W. Pettigrew, L.S.A., Hounslow.

Three candidates passed in Surgery; and, when qualified in Medicine, will be admitted Members of the College.—Five candidates were referred for six months.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 22nd, 1875.

Branson, John, Rotherham, Yorkshire
 Clarke, Arthur, Brill, Buckinghamshire
 Davies, John, Queen Street, Worship Street, E.C.
 Eames, James Crompton, Kearsley, near Manchester
 Laverick, John Valentine, Hindewell, Yorkshire
 Morgan, William, Ynysudw, Swansea Valley
 Richardson, Joseph Berridge, Castle Bytham, near Stamford

The following gentlemen also on the same day passed their primary professional examination.

Campbell, Robert Huntley, St. Thomas's Hospital
 Carlyn, Thomas Baxter, St. Bartholomew's Hospital
 Owen, Charles James Rayley, St. Mary's Hospital
 Pritchard, Ernest James, Guy's Hospital

MEDICAL VACANCIES.

The following vacancies are announced:—

ARMY MEDICAL DEPARTMENT—Surgeons. Examination on August 9th and following days.
 BOROUGH OF ROCHDALE—Medical Officer of Health. Salary, £300 per annum. Applications on or before August 7th.
 BOURNEMOUTH GENERAL DISPENSARY—Resident Medical Officer and Secretary. Salary, £120 per annum, with furnished apartments, coals, gas, and attendance.
 BURY UNION—Medical Officer for the Raddiffe District.
 CHERTSEY UNION—Medical Officer for the Chobham District.
 CHRISTCHURCH UNION—Medical Officer for the Eastern District. Salary, £90 per annum, and fees. Applications on or before August 16th.
 DUDLEY DISPENSARY—Resident Medical Officer at Michaelmas.
 GREAT NORTHERN HOSPITAL—House Surgeon. Ophthalmic Surgeon. Applications on or before August 6th.
 HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton—Resident Clinical Assistants. Applications on or before August 2nd.
 INDIAN MEDICAL SERVICE—Ten Surgeons. Examination on August 9th and following days.
 LEEK UNION—Medical Officer for the Norton District.
 LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE—Demonstrator of Anatomy. Salary, £100 per annum, and other emoluments. Applications on or before the 31st instant.
 LYMINGTON UNION—Medical Officer for the Hordle, Lyminster, and Milford Parishes.
 MACCLESFIELD GENERAL INFIRMARY—House Surgeon. Salary, £90 per annum, with board and residence. Applications on or before August 6th.
 MARLBOROUGH UNION—Medical Officer for the Second District. Salary, £50 per annum, and fees. Applications on or before July 31st.
 NORTHERN LONDON CONSUMPTION HOSPITAL—Two Physicians. Applications on or before August 5th.
 NORWICH DISPENSARY—Salary, £120 per annum, with unfurnished residence and apartments.
 ORMSKIRK UNION—Medical Officer for the Second District.
 OUNDLE UNION—Medical Officer for the Weldon District. Salary, £60 per annum, and fees. Applications on or before August 4th.
 QUEEN'S HOSPITAL, Birmingham—Ophthalmic Surgeon. Applications on or before August 2nd.
 ROYAL CORNWALL INFIRMARY—House-Surgeon, Secretary, and Dispenser. Salary to commence at £120 per annum. Applications on or before the 31st instant.
 ROYAL FREE HOSPITAL, Gray's Inn Road—Senior House-Surgeon. Salary, £104 per annum, with board and residence—Two Junior House-Surgeons. Applications on or before August 4th.
 ROYAL SURREY COUNTY HOSPITAL—House-Surgeon. Salary, £75 per annum, with board, residence, and washing. Applications on or before July 31st.
 ROYSTON UNION—Medical Officer for No 5 District. Applications on or before September 6th.
 ST. IVES UNION—Medical Officer for the Warboys District.
 TIVERTON UNION—Medical Officer and Public Vaccinator for the Western District. Salary, £70 per annum. Applications on or before August 9th.
 TOWNSHIP OF MANCHESTER—Assistant Medical Officer at the Workhouse Hospital. Salary, £120 per annum, with furnished apartments, fire, light, washing, and attendance. Applications on or before August 12th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

CARTWRIGHT, Alexander, M.R.C.S. Eng., appointed Surgeon-Dentist to the Hospital for Sick Children, Great Ormond Street, near T. L. Eggleston, L.R.C.P. Lond., resigned.
 JONES, J. T., L.K.Q.C.P.I., appointed Medical Officer to the Brixton, Streatham, and Herne Hill Dispensary, *vice* J. T. Mercer, M.B., deceased.
 LEFTWICH, R. W., M.B., appointed Resident Medical Officer to the East London Hospital for Children and Dispensary for Women.
 RENDLE, Richard, F.R.C.S. Eng., appointed Resident Medical Officer to the Hospital for Consumption and Diseases of the Chest, Brompton, *vice* Vertue Edwards, M.R.C.S. Eng., retired, after nearly twenty-five years' service.
 *WOODS, Oscar T., M.D., Senior Assistant at the Warwick County Asylum, appointed Medical Superintendent to the Killarney District Asylum, *vice* W. Murphy, M.D., deceased.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the communication.

MARRIAGES.

ATKINSON-TIMINS.—On July 28th, at the Parish Church, Kingston-on-Thames, by the Rev. John Brass, M.A., Frederick Page Atkinson, M.D., of Surbiton Road, eldest son of J. C. Atkinson, M.D., Kew Green, Surrey, to Eliza Henrietta, only daughter of A. Kier, M.D., Tunbridge Wells, late H.E.I.C.S., and widow of the late Rev. Douglas C. Timins, A.M., of Hilfield, Aldenham, Herts.
 HAINING—ROBERTS.—On July 27th, at St. Thomas's Church, Chester, William Haining, M.D., L.R.C.S.E., to Mary Ellen, eldest daughter of Robert Roberts, Esq., The Firs, near Chester.

DEATH.

ELLIS.—On July 22nd, at Beechhurst, Poole, Mary, the wife of Heber Ellis, Esq. aged 34.

A CONVALESCENT home at Ilkley, for the accommodation of sixty inmates, was formally opened last week by the wife of Mr. C. Semon, by whom it has been built at a cost of £8,000. A small sum will be charged to those who use it, to avoid the taint of charity, and foster a feeling of independence.

OPERATION DAYS AT THE HOSPITALS.

MONDAY Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

TUESDAY Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY . . . St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.

THURSDAY . . . St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.

FRIDAY..... Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.

SATURDAY . . . St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M.—Royal Free, 9 A.M. and 2 P.M.

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with Duplicate Copies.

AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor: those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

VOTING AT THE ROYAL MEDICAL BENEVOLENT COLLEGE.

SIR,—I have just received an appeal for my vote and interest on behalf of a lady 68 years of age, who, as a candidate for a pensionship, seeks for the third time the support of the governors of the Royal Medical Benevolent College. The medical profession know well the anxiety and worry that all contested elections occasion, not to say anything of the expense. Surely it is bad enough to require the young and vigorous to engage in such ordeals, but to extend it to the old, the decrepid, and the orphan, is simply trafficking in human miseries, and ought to be discontinued by any institution that appeals for support on the grounds of its charitable work.—I am, sir, yours, etc.,

REGINALD HARRISON.

38, Rodney Street, Liverpool, July 24th, 1875.

DR. J. A. COUTTS (Banchory).—Your question shall be answered in an early number.

SEGEN ON DIABETES.

THE second edition of Professor Segen's valuable work *On Diabetes* contains a résumé of his views, the chief points of which are these. Healthy urine contains no sugar. All sugar in the urine, excepting its mere momentary presence from a passing cause, is an expression of a morbid process in the organism: one cannot distinguish, in its origin or its results, between diabetes mellitus as a disease and as a harmless increase of a physiological process. The sugar-excretion is the result of an anomalous conversion of the liver-glycogen into sugar; a direct excretion of the food-sugar does not take place. There are two forms of diabetes: one, in which only the glycogen formed out of the carbohydrates is converted into sugar; the other, in which the glycogen originating in the albuminates is also changed into sugar. A morbid condition of the central nervous system is in most cases to be traced as the cause of this anomalous process. Whatever the origin, the excretion of sugar is the cause alone of all the characteristic symptoms. There exists an intimate connection between excessive fat-formation and sugar-secretion. Corpulence, especially in the young, is often a forerunner of diabetes. The symptoms of diabetes fall into two groups: one, occasioned by the presence of sugar in the blood; the other, the result of defective nourishment. An hereditary disposition is by no means infrequent. The course of the disease is most favourable when there still exists some tolerance of amylaceous food: the second form runs much more quickly to a fatal termination. Cure of diabetes, so that starchy food may be freely eaten, is not observed. The prognosis depends on the form of the disease, the age of the patient, the power of living on a flesh diet, and the temperament. In the treatment of diabetes, the regulation of the diet is of first and primum importance. Among remedies, alkalies and alkaline mineral waters have proved themselves the best. The use of Carlsbad water has always a favourable influence on the symptoms of diabetes; the amount and the duration of the influence varies with the severity of the disease. Opium and its preparations have, among all known means, the most decisive influence on the excretion of sugar; but the duration of the action is only exceptionally an enduring one.

L.D.S., R.C.S. Eng. (Torquay).—The persons mentioned have no right whatever to the title. Perhaps the "L.D.S." is an American title; but if they add "R.C.S.," or lead the public to suppose their diploma is obtained from the Royal College of Surgeons, they can be prosecuted. The advertisements, which are disgraceful, have been forwarded to the College.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

A PARTNER.—Both in law and equity you are bound by the agreement. It is not only necessary that you should not reside within three miles, but that you should not attend any patient residing within that distance.

WASHING OUT THE UTERUS.

SIR,—In the JOURNAL of July 17th is a letter from A Learner, alluding to the washing out of the uterus in an offensive condition of the secretion after childbirth, and asking for further information on the matter. As the discussion at the Obstetrical Society did not embrace treatment, the matter was only alluded to; but if a Learner will refer to the JOURNAL (No. 463, Nov. 13th, 1869), he will find the report of a paper read by me at the Leeds Meeting of that year, entitled On the Use of the Intrauterine Douche after Labour as a Rule of Treatment. In that paper, I gave preference to permanganate of potass, but said any other disinfectant would do. Dr. Wynn Williams prefers iodine. Both answer very well. Weak carbolic lotion (one to 200), or chloralum (one to 200), or chloride of zinc, or even common salt, if others cannot be obtained, about one teaspoonful to a pint; or perchloride of iron, very weak, one teaspoonful of the tincture to one pint of water; either of these may be employed, the great point being to use plenty, and to carry the tube well up to the fundus.—I am, etc.,

J. BRAXTON HICKS.

SIR,—Like many others, I have taken a deep interest in the discussion which has been held in the London Obstetrical Society on the subject of puerperal fever. There was great need for such a discussion, and no doubt much good will arise out of it. In the report which appeared in your issue of the 12th ultimo, we had some very practical remarks from Dr. Wynn Williams and Dr. Tilt. They were specially interesting in being practical, and as the outcome of, in my humble opinion, a very rational theory; and I think if Dr. Tilt, whose valuable paper in vol. xvi of the London Obstetrical Transactions, on Lymphangitis in Pelvic Pathology, must be known to many of your readers, and who laid most stress on the benefit to be derived from the washing out the uterus, would kindly develop his views on this point in your JOURNAL, and tell us circumstantially how he does it, what instrument he recommends, what disinfectants, and of what strength, etc., he would, I have no doubt, confer a very great benefit on the community. I am satisfied many want information and instruction on this point; and he seems well qualified to give both. Most practitioners use vaginal injections only; and I have heard more than one maintain that these find their way into the uterus, but of this I have very great doubt.

In the hope that Dr. Tilt will, at an early date, comply with this request, I am, sir, your obedient servant,

WM. MORTIMER.

Turriff, July 5th, 1875.

* * We have received a paper from Dr. Tilt which contains answers to the questions in Dr. Mortimer's letter; and will publish it at an early date.

A MEMBER OF THE ASSOCIATION.—The *Illustrated London News* published an engraving of the dinner in the Hall of Christ Church College, Oxford, when the Association met there.

HABITUAL DRUNKARDS.

SIR,—I have been very much struck, as I am sure have the majority of the profession, by the observations of Sir T. Watson at the recent deputation to Mr. Cross. Never in the history of his long career did he make out so urgent a case for legislative interference, than when pleading the cause of that unfortunate being, the dipsomaniac. I could instance many cases where I was totally at a loss how to act or what to advise, the general impression being that the dipsomaniac was irreclaimable. Within the past few days I was consulted about a deplorable case of a female, of most respectable parentage, who had reduced herself to the poorest circumstances by drink. As she was suffering from a suppurating tumour, I got her, with some difficulty, into a hospital, from which, having conducted herself most violently, she had to be removed after a few hours. Now here is an instance where a reformatory might restore to this poor creature her reason, and, possibly, to society. I fully concur with Sir Thomas's view on the matter.—I have the honour, dear sir, to be yours faithfully,

J. J. MURPHY, L.R.C.P. & S.E., etc.

74, Camden Street, Dublin, July 20th, 1875.

MRS. M.—The session commences in October. Our Students' Number will give you the desired information.

ROYAL COLLEGE OF SURGEONS.

THE following were the questions in surgery and medicine submitted to the candidates for the diploma of membership on July 16th and 17th. They were required to answer at least four out of the six questions, including one of the first two. 1. Describe the ischio-rectal fossa, mentioning the structures which bound and occupy that space. 2. If the throat be cut across between the os hyoides and the thyroid cartilage down to the vertebrae, what parts would be divided, and in what order? 3. In a case of severe compound fracture of the leg, what indications would lead you to infer that traumatic gangrene had commenced? and what would be your treatment under such circumstances? 4. State the diseases which give rise to extravasation of urine, and the treatment to be adopted in its progress. 5. Describe the treatment of an incised wound penetrating the knee-joint; mention the consequences which may follow such an injury, and the treatment which may be required. 6. What are the symptoms and appearances of a well marked case of syphilitic iritis? How would you treat it? What may be the unfavourable permanent results?

DR. CAMPBELL.—John Heurnius was, according to Hutchinson, the first who taught anatomy by lectures on dead bodies at Leyden.

COTTAGE HOSPITALS.

SIR,—Will any of your readers kindly inform me how I am to gain information as to the practical working of Cottage Hospitals in England.

Caledon, July 1875.

I am, etc.,

M.D.

A YOUNG MEMBER.—The reason why Mr. Birkett does not wear the President's robe at the examinations is, because he has not yet reached that distinction. The President (Sir James Paget) and the Senior Vice-President (Mr. Hewett) decline to become members of the Court of Examiners; hence Mr. Birkett, the Junior Vice-President, has been elected Chairman of the Court.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

THE CONTAGIOUS DISEASES ACT: THE LATE DIVISION.

SIR,—Though there is, I trust, no danger of the mock philanthropists succeeding in getting these most useful and humane acts repealed, there is, I fear, more risk that they may suffer injurious mutilation, unless some of the *ad captivum* objections to them can be removed, or considerably diminished. One of the chief of these is, that women who have committed no offence (which, by the way, is not true: a public prostitute is, *ipso facto*, a disorderly character, and justly liable as such to such punishment as it is expedient to inflict) are compelled to submit to indecent examination by men, not for their own benefit, but merely to ascertain whether they are or are not diseased. Few would condemn surgical examination for a curative object, and with the consent of one who is suffering from disease that may be relieved or cured; but a compulsory examination, not for the benefit of the woman examined, cannot be justified unless a very important public benefit be not otherwise attainable, and many doubt if it would be justifiable even then. The practice of examination to ascertain the existence or absence of apparent disease, would be far less objectionable, and much less objected to, if made by women instead of by men; the surgeons would be very willing to be relieved from such disgusting duty, and women might easily be instructed so as to ascertain the existence of any irritant sore or discharge quite as well as surgeons can; and there need be no examinations at all by men except when disease is discovered needing surgical assistance, to which no fair opposition could be, and very little opposition would be, offered; and I submit that such a simple and obvious change in the operation of the Acts would be of unmixed benefit to all concerned, and would remove one of the most plausible objections urged against it.

Another popular objection to the Acts is, that diminishing the fear of infection encourages profligacy, as possibly it would if it gave, or was believed to give, complete immunity from danger, which the opponents of the Act complain, and its supporters allow, it does not give, and never will; all it does being, which is a great deal, to diminish both the frequency and severity of what cannot be altogether prevented. This, however, is unlikely to diminish the fear, for the fear of a danger is seldom in proportion to its reality, and is very often greater because the real danger is less, a rarely occurring evil affecting the imagination much more than one to which we are more accustomed. For example, the great majority fear hydrophobia, the risk of having which is almost infinitely small, more than they do fever, the danger of which is nearly two thousand times as great. A great part of the fear of hydrophobia is because it is so rare and so extraordinary. If as many died of it as die of fever, it would be no more dreaded. Sensible people fear fever far more, and with good reason. If a few venomous snakes had escaped, as it was lately feared they would, from the Zoological Gardens, people would for many months have been more afraid of walking in Regent's Park than they are in India or in Virginia, where venomous snakes are common. And if syphilis became very rare, as it is most desirable it should do, so long as the risk of contracting it continues at all, the fear of it will continue but little diminished, and it may even considerably increase. Those who think it wrong to diminish the risk lest profligacy should be increased, may be fairly asked if they would think it right to introduce the disease when it does not exist in order to check profligacy; and as doubtless they would not, they should be asked to explain why it is wrong to try to remove or diminish an evil they would certainly not increase, on the chance of increasing self-restraint by its existence. Surely if it be wrong to diminish the frequency and severity of disease arising from vice, it must be wrong to diminish the injury and suffering it produces; and all who, by their own fault, contract it, ought to be left unaided to endure the natural punishment of their sinful indulgence. This is only the logical conclusion of what it is polite to call the *argument*. But the case does not stop here: the immediate are not the only, sometimes not the most, severe sufferers from the disease. Wholly innocent wives and children may, and often do, suffer also; and perhaps the severest punishment that could be inflicted upon one who has brought this dire disaster upon his wife and child would be dooming them to suffer unaided. Would it be right to inflict this punishment upon him as a warning to others to avoid vice? If it be not right to diminish danger of contracting disease lest vice should not be discouraged, can it be right to diminish even this tremendous punishment, the indirect but not remote consequence of vice? The answer is very easy. It is our duty to guard against danger, and to relieve suffering, however caused; but it is not our duty to punish vice, if it be not also crime—*i.e.*, what is directly injurious or dangerous to others; nor can we innocently inflict greater suffering even on the criminal than is needed for the protection of society. We may, however, and ought, to discourage vice in innocent ways, and to help those who have fallen into vice to escape its thralldom; and experience has shown that one of the most successful modes of rescuing the vicious has been by the machinery of the Contagious Diseases Act; and what is, if possible, still more satisfactory, it has done much to save from falling many who, to all appearance, were in extreme danger. How humane men, who are doubtless well meaning, can persuade themselves that it is right to oppose such laws, is to me most wonderful. As to the amiable but mistaken women who have been misled by misrepresentations into opposing a law the merits of which they cannot understand, all that can be said for them is, they know not what they do, and forget that more suffering is often inflicted by well meaning ignorance than by intentional cruelty, but it is suffering nevertheless.—I am, etc.,
July 1875. P. H. HOLLAND.

UNQUALIFIED ASSISTANTS.

SIR,—Will you kindly give me space for a few words on the question of qualified and unqualified assistants? J. L. selects as a specimen of the former class a man who has been hurried in and out of an anatomy room or the wards of an hospital for twenty-four months without a single patient being entrusted to his care; while of the latter, he takes a gentleman who has years of experience, after a few lessons at hospital and college. Doubtless there will be found older (which does not necessarily imply more experienced) men among unqualified assistants as a class than among qualified. But why? Simply because the latter generally get into practice for themselves, and so cease to be assistants, whereas the former are doomed to linger on in that capacity; and this is one of the chief reasons why they are preferred by principals, who, as a rule, dislike changing their assistants. But I deny that his is a fair specimen of the qualified assistant. Most men do not pass on twenty-four months' study, hurried or otherwise; besides, J. L. must remember that many students, being the sons of medical practitioners, have ample opportunities of becoming acquainted with the ordinary routine of general practice independently of their collegiate studies. His general assertion, that men pass without a single patient having been entrusted to their care, is not true. It

is the practice in many hospitals for the advanced students to have charge of a certain number of cases, reporting progress each morning to the physician or surgeon on duty; and if J. L. had seen, as I have, earnest students spending hours daily in hospital, after the usual clinical instruction, taking notes and thermometric observations, and making chemical and microscopic examinations of urine, etc., he would not write so glibly about men being hurried in and out of the hospital wards.

J. L. is altogether mistaken about the general salary of qualified assistants, when he fixes it as very seldom reaching £50 in door. It may have been so formerly, but now it is very frequently £50 and £60, while some men I know get £100, and even £150 and £200 per annum in door.

Why is J. L. not satisfied with defending unqualified assistants without making a general attack upon qualified men? We are all aware that many qualified men who competed for appointments in the army and navy heretofore, were found wholly incapable to undertake any professional duties. Will J. L. kindly give his authority for this sweeping assertion? On the other hand, I consider the proposal to make unqualified assistants, acting under the guidance of qualified practitioners, amenable to the law, a very illiberal one indeed. What would then become of dressers and clinical clerks in hospitals?—I am, sir, yours obediently,
Manchester, June 23rd, 1875. H. G. D.

SIR.—It is very kind of you to allow the assistant—*the doctor*—a corner in which to defend himself, and I hope that you will find room for this answer to the attack of Vigilans and others. It has been stated, sir, in your pages that the unqualified man possesses "no guarantee whatever" as to the extent of his professional knowledge. I will endeavour to show that this is not a fact. The unqualified man is generally to be found engaged in a working class practice, among men who are anxious and impatient to return to their labours. They have the recollection of former accidents and illnesses to guide them, so have their friends. They ask blunt and unevadable questions as to the prognosis, and are keenly observant as to the success of the treatment. The most sublimely theoretical and newly fledged licentiate cannot deny these men the evidence of their own senses. Is not their approval a guarantee of competency? Throughout practice there are merciless judges upon all sides; every town has a telegraphy of gossip by which the doings of an assistant soon become known; and I fear that in some of the northern towns malpraxis would result in the perpetrator being himself put under surgical care.

The unqualified assistant is generally an unfortunate and hardworking student, with the ultimate intention of "getting through". To state that his only prospect is that of "becoming a principal instead of a subordinate quack", is an unwarrantable and cruel slander. Why do not some of the practitioners who employ unlicensed gentlemen by preference (not economy) state their experience of the class whose existence they encourage?

In conclusion, I have no hesitation in stating that, as a body, the unqualified assistants will compare favourably with their registered opponents; but if they are to be purged from the profession, some provision must be made for those whose living it already is many with wives and families. I hope that this important subject will be further discussed.—I am, sir, yours obediently,
Lancashire, July 10th, 1875. C. P. UNQUALIFIED ASSISTANT.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Bristol Daily Post; The Daily Bristol Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Glasgow Herald; The Sunderland Daily Echo; The Carnarvon and Denbigh Herald; The Manchester Guardian; The European Review; The Hackney and Kingsland Gazette; The Worcestershire Chronicle; The Birmingham Daily Post; The Brighton Daily News; The Sussex Daily News; The Glasgow Herald; The Cork Examiner; The Scotsman; The Cork Daily Herald; The Southampton Times and Hampshire Express; The Hampshire Advertiser; The Birmingham Morning News; The Chester Courant; The Metropolitan; The Live-Stock Journal; The Shield; The Grocer; The Shipping and Mercantile Gazette; The Advertiser; The Islington Gazette; etc.

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PRESIDENT'S ADDRESS,

DELIVERED AT

THE FORTY-THIRD ANNUAL MEETING OF THE
BRITISH MEDICAL ASSOCIATION,

Held in EDINBURGH, August 3rd, 4th, 5th, and 6th, 1875.

BY

SIR ROBERT CHRISTISON, BART.,

M.D., D.C.L., LL.D., F.R.S.ED.

Ordinary Physician to the Queen in Scotland; Professor of Materia Medica in the University of Edinburgh.

GENTLEMEN,—My first duty is to bid you all welcome to this seat of medical learning, familiar of old to many as the school in which they were initiated into the mysteries of physic—to welcome you in the name of my medical brethren of the city, in name of my fellow-citizens at large, in behalf of the good town, too, herself, who, I see, means to put on her fairest sunshine smiles to greet your arrival,—no common favour, let me tell you, in this the usual week of the Lammas Floods.

My next duty is to offer you my gratitude and thanks for your great kindness in choosing me for your President during the meetings of your present annual session. You might fairly have bestowed that great honour on another; and perhaps I might have thanked you in that case also for sparing me a task which I find it not easy to perform to my own satisfaction. You might well have bestowed your favour on another; for, when this Association last met in Edinburgh, the health of your then President and my dear colleague Dr. Alison was such as to throw his work in a great measure upon me as his deputy, placing me virtually at your head, so that, were I inclined to take the most flattering view of my present position, I might almost claim for myself the singular distinction of now occupying for the second time the chair of the British Medical Association.

So much the more am I called on to look well to the next and most trying of the duties I have to discharge towards you now: the delivery of the address which you are now assembled to claim from me. Especially is it incumbent on me to look warily to its subject. Assuredly my subject should be a high one, when so many hundreds of the chosen among the members of our profession, as well as some from foreign countries, are met together, as they never do meet unless under the auspices of your annual convocation.

After hesitating between several topics coming up to this valuation, and well worthy of being considered by you, I ultimately thought I should fulfil my duty to you, to our medical brethren generally, and to the public interest, too, by fixing on a topic, which for some years has been uppermost in the minds of many thinking men of our profession: the question, "Whether, and what, change is desirable in the present system of education and of examination in the medical schools of our country?" I am led to choose this subject, among other reasons, because in the public prints only one side of the question has been hitherto shown, while there is unquestionably another, and a good one, too. I hope I shall not be thought to intend the slightest disrespect to this Association when I add that I am all the more inclined to take up the subject here, because my own views do not altogether coincide with those which are understood to be popular in the Association, and which at least have been powerfully advocated from time to time in its JOURNAL. My subject, then, is, What sound reason exists for a fundamental change in medical education and medical examinations?

I beg you not to be startled by my choice of a rather hackneyed theme. It would be very dry and hackneyed, indeed, alike to you and to myself, were I to undertake it methodically and in whole. I mean, with your leave, to view the question from a quarter whence it has not yet been looked at. I propose to give you historically some insight into the school life of one of our chief seminaries of medical education, in the hope that there may be found in its history some safe guidance in the present somewhat wild struggles of our profession to improve itself, to redress what seems faulty, and to frame, if possible, a masterpiece of medical examination and precursory study. In singling out for this end the medical school within whose walls we are to be assembled, I do so from no vain-glorious pride in the school to which I have myself for many years belonged, but because: firstly, I know its history, constitution, and work best; secondly, being here, you will probably take some interest in a subject with which most of you are but slightly acquainted; and, thirdly, because it is most surely worth while

to inquire in the present conjuncture into the causes which have led the medical department of the University of Edinburgh, situated in an outlying quarter of the kingdom, to become for wellnigh a century, with little interruption, the most populous medical school in the British Islands.

The University was founded by James I (of England) in 1582. In the following year, the Faculty of Arts was started at once by the teaching of six of the seven subjects now required for graduation in that faculty; and the Theological Faculty was instituted at the same time by the founding of a Chair of Divinity. A Law Faculty was not initiated till a few years after the commencement of last century; that of medicine had its beginning in 1685, through the energy and influence of three of the most remarkable medical men of the day in Scotland: Sir Andrew Balfour, Sir Robert Sibbald, and Dr. Pitcairn.

Botany seems to have been their first object. Fifteen years earlier, Balfour and Sibbald created the rudiments of a botanic garden, one object of which expressly was to introduce into Scotland the cultivation of foreign plants yielding medicinal products, which, in those days of not easy intercourse among nations, were not readily obtained when wanted. Our modern "Royal Botanic Garden" of twenty-seven acres, too small for its 340 students, had its origin, in 1670, in a little plot of ground close to Holyrood Palace, measuring forty feet square, in which, nevertheless, were reared no fewer than 900 plants. The site was soon transferred to a large garden, where now flourishes the City Station of the North British Railway. Dust and iron, hurrying engines, interminable rows of trucks and carriages, clouds of steam-vapour, and the scent of coal-gas from the neighbouring gas-works, have taken the place of the groves and avenues, the perfumed airs, and the scientific seclusion of the "Old Physic Garden." But one relic survives in a fine yew now adorning the garden in charge of Dr. Balfour and Mr. Macnab, twice transplanted successfully after becoming a considerable tree, and proving its own age by the *modulus* of De Candolle, according to which it must be above two hundred years old. The success of the Physic Garden was so great, owing to the fostering care of its promoters and the ability of its first keeper, James Sutherland, originally a clever young gardener, that, in 1676, an Act of the Town Council of the city, then the founders and patrons of professorships, established in Sutherland's favour a Chair of Botany in the University. But, for some unknown reason, the Act was not given effect to, so that a second Act of Foundation became necessary to make him effectually an University Professor in 1695.

In the meantime, Sibbald had influence enough to obtain also, in 1685, the establishment of a Chair of Medicine.

It is a fact not unworthy of notice, as throwing some light on the early history of medical education in this country, that, in every other university of what is now the United Kingdom, there existed for a long period of years only a single professorship of medicine. Oxford had its professor of medicine first in 1535, and no other medical professor for nearly a century. Cambridge had its Chair of Medicine in 1540, and no other till 1702. Dublin began in the same way in 1637, without addition till 1783. Of the Scottish Universities, Glasgow was slow to undertake the teaching of medicine, its professorship of medicine having been founded in 1713, of anatomy in 1718, of no other branch till 1807. St. Andrew's had its first professor of medicine in 1722. Singularly enough, the University of Aberdeen has the merit of having anticipated all others, even Oxford and Cambridge, and been the very foremost in the United Kingdom to possess a Chair of Medicine. Under the name of Mediciner, King's College, Aberdeen, had a professor "before 1522" (Calendar, 1875), probably so soon as 1505. In the younger Marischal College, there was a Professorship of Medicine in 1701, but no support to it till a Chair of Chemistry was erected in 1793.

Plainly, then, it was understood in all these universities for more than a century that one man was competent to educate students for the medical profession. Whether Sir Robert Sibbald and his coadjutors, trained at a continental school and by continental travel, were aware this was a faulty arrangement, we cannot now tell. But they were the means of establishing, for the first time in Britain, three professorships of medicine in the University of Edinburgh. Thus they may have introduced the valuable novelty of dividing its special branches among special men. But it is not now known how they taught, or even that they did all teach. If they did, it is quite possible that, according to the system pursued in the Faculty of Arts, each professor carried his students through a three years' course of study, taking up "freshmen" every third year, each in his turn. As little is now known of their success. They have left no mark upon the University, except the foundation of their own chair and of that of botany. Their teaching, at all events, made no graduates; for there was no medical graduation in Edinburgh till 1726, forty years almost after their appointment.

The University of Edinburgh was not the only theatre in which efforts were early made to institute medical education in the Scottish capital. The Royal College of Surgeons also appears to have given it encouragement. Alexander Monteith, a member of the College, and the chief surgeon of Scotland at the time, certainly so soon as 1699, and until at least 1702, delivered a six weeks' course of lectures on chemistry, followed by demonstrations in *materia medica*; and he divides with Dr. Pitcairn the distinction of first overcoming the prejudices of his countrymen, and persuading the city authorities to grant license and means for pursuing anatomy by dissection of the human body. But the College of Surgeons never established a School of Anatomy and Surgery. I should add, perhaps, that lectureships, in default of professorships, were appointed for several branches of medicine by the Universities of Glasgow and Aberdeen; but not till last century was far advanced. In Edinburgh alone were the roots of a medical school, in the true sense of the word, fairly planted in its university so early as the end of the seventeenth century, and brought to maturity in the first quarter of the century following.

The school of Sibbald and Pitcairn was but a beginning, and probably not very successful; but soon afterwards matters took the right direction towards a separation of subjects, by the establishment of a lectureship on anatomy in 1705, and the foundation of a professorship of chemistry in 1713. In fact, it was not till the appointment of Alexander Monro *primus* to be professor of anatomy in 1720, that the University School of Medicine put on a shapely form, and entered upon its career of prosperity.

Monro has his place in history as one of the European anatomists of last century. But anatomy was not his sole gift by any means. Highly educated, favoured by his conspicuous office, which he entered when only twenty-three, and bringing to the task he had set himself an intimate knowledge of the organisation of the schools of Paris and Leyden, a profound knowledge of men, and polished affable manners, he won the confidence of men of station and influence, attained popularity with all ranks, and is understood to have had much weight in the general affairs of the city and country. Thus it was that he not only soon placed the University Medical School on a sound and prosperous footing, but likewise mainly created the Royal Infirmary. In the University he found ready to his hand a chair of chemistry and a chair of botany; there was also the old chair of medicine, capable of being moulded into the fitting shape of practice of physic. Anatomy and surgery were his own province. In 1724 was added a chair of theory of physic, which then embraced physiology, pathology, and therapeutics. In 1726 midwifery was also provided for; and *materia medica* was early taught by the professor of botany in the winter, botany itself occupying his attention during the summer months. Thus the whole round of medical science and practice came to be skilfully partitioned—anatomy, chemistry, botany, physiology, medical practice, and midwifery being each taught separately; surgery, too, by one of the six professors, and *materia medica* by another of them. This arrangement—extensive, complete, and harmonious for the times—was carried into effect very long before anything of the kind was attempted at any other University, or, indeed, so far as I can discover, in any other school of medicine in the United Kingdom. Several of these professorships have been subdivided since that time. Surgery has been assigned to a separate professor, pathology to another, and therapeutics has been transferred to *materia medica*. But all branches were taught from the first; and the only new creations in the University have been those for natural history, medical jurisprudence, and clinical medicine and surgery. The first of these is a general rather than a medical chair. In the establishment of the three others, the University of Edinburgh took the lead by a long way of all other British schools, as it had done in the organisation of a school, complete, according to the times, immediately after 1720.

I have said that Monro was mainly instrumental in originating the Edinburgh Royal Infirmary. For this end, he took advantage of his influence with the Royal College of Physicians, and also with a very able and enlightened man, of great weight in city affairs, Lord Provost Drummond. He must have set about this enterprise very early; for, in 1728, subscriptions enough had been raised to set on foot next year a small hospital. A larger one having been subsequently built and gradually extended, a Royal charter of incorporation was obtained in 1736. Monro evidently had designed from the first that the hospital should be devoted not more to the cure of the sick poor, than for the education of students of medicine. Repeated early minutes of the infirmary managers prove this, and show how zealously they concurred with him. The culmination of the fabric, so far as education is concerned, was the inauguration of the teaching of clinical medicine in 1748 by Dr. John Rutherford, Professor of the Practice of Physic. The hospital managers espoused warmly the cause of clinical teaching, as appears

from sundry minutes of their proceedings in favour of the University professors and their students. In consequence, Rutherford was joined ere long by some of his colleagues; and in 1756, as we find from the infirmary records, clinical instruction was given by Rutherford; Whytt, Professor of Theory of Physic; Cullen, then Professor of Chemistry; and Monro himself.

The coalition of four such men in training up a medical school from its infancy was a mighty element of success. Priceless, too, was its own organisation, as fashioned by the genius of Monro. What, then, was the success of this new University School of Medicine?

Monro himself began his lectures on anatomy and surgery in 1720 with 57 pupils, and increased them to 182 in 1746. It is impossible to arrive at a knowledge of the number of medical students generally for many years later. The earliest register, in 1772, when it was far from being complete, makes the matriculated medical students 269. In 1791, when Black taught chemistry, John Hope botany, James Gregory practice of physic, Monro *secundus* anatomy, Francis Home *materia medica*, Andrew Duncan *senior* theory of physic, and Alexander Hamilton midwifery, the list had risen to 430; and at the close of the century it exceeded 500. By this time, the youth of England, Ireland, and the British colonies flocked to Edinburgh to fill the classrooms of Monro, Black, Gregory, and their colleagues and successors. Of 383 medical graduates in the ten years following 1790, only 71, or scarcely a fifth, were Scotsmen, 102 were English, 113 Irish, and 35 from the West Indies. Of the remainder, 27 were from the United States, and chiefly Virginians, 15 Canadians, 7 Swiss, 7 Portuguese, 4 French, probably of refugee families; and the tale is made up with a Prussian and a Dutchman, whose patronymics, however, unmistakably betray British blood.

After the beginning of the present century, still farther progress was made; so that, in 1815, the medical matriculations were 929; in 1824, 939; and, till 1830, very close upon 900 every year. Subsequently, a succession of adverse events, betokening, however, the prosperity of the nation, conspired to bring down this great school population. It was inevitable that the University Medical School should feel the influence of the establishment, on its own model, of University College and King's College in London, the London University, and the Colleges of the Queen's University in Ireland, of the gradual advancement of the Universities of the United States, and of the great demand made by the rapidly increasing colonies and commerce on the supply of the half educated youth of the mother country. Thus it fell, that in thirty years more the Medical School sunk by degrees to about 500. A great change in 1861, made in the plan and conditions of graduation through the action of the Universities' Parliamentary Commission of 1858, brought about a further temporary fall, till the students in 1868 numbered only 445. But the elasticity of the University soon put the stamp of wisdom on the measures of the Commissioners. A steady annual increase of from 50 to 90 has restored the list to the high standard between 1815 and 1830, till at last in the present year the medical students number 898.

Graduation has marched, on the whole, in a line with matriculation—in the number, at least, of the recipients. During the five years preceding 1831, the graduates in medicine were 575, or, on an average, 115 annually. Of these, 187 were from Scotland, 168 from England, and 175 from Ireland, showing a nearly equal resort from the three countries of the kingdom; and the remainder was made up of 34 Colonists and 11 foreigners. At that time, the University gave no other medical degree but that of doctor. But, since 1861, the candidate who aims at the doctorate must pass through the stage of bachelor of medicine at least two years previously; and hitherto about a third only of bachelors go on to the higher degree. During the last five years, ending with 1874, the bachelorship has been taken by 358 candidates, or 72 annually on an average; and 113, or 23 annually, have been made doctors of medicine. Their relative nationalities show a remarkable change during the last forty-five years in the sources whence the graduates, and consequently the students, have been derived. Of 113 doctors, 53 are from Scotland, 47 from England, 9 from the Colonies, 3 from foreign parts, and 1 from Ireland. Of 358 bachelors, 154 are Scotch, 126 English, 62 Colonists, 10 foreigners, and 6 Irish. The proportion of English to Scotch remains nearly the same as formerly. Colonial men have increased threefold. But the supply from Ireland has been almost dried up; for, in the ratio of the earlier period, the Irish bachelors, instead of 6, should have been 150, and the doctors 50, instead of 1.*

So far as the relations of Ireland to the Medical School of Edinburgh are concerned, it has accomplished the isolation aimed at by the Irish

* Yesterday were graduated, in all degrees, 35 Scotch, 47 English, 2 Irish, 14 Colonial, and 2 Foreign candidates.

people in weightier matters. In medical education, Home-Rule has been effectually attained. I hope it has been wisely exercised. In that case, Scotland's loss may be Ireland's gain. And, perhaps, the latter will not regret to learn that the loss she has thus occasioned has been fully compensated by the increased afflux to the University of Edinburgh from other quarters. Thus has been reached the old high standard of the period between 1815 and 1830. It is true that, had Ireland still entrusted the medical education of her sons to Scotland, there would have been above 1,100 medical students in Edinburgh, instead of 900. But, as matters actually stand, do not the attractions of its school stand out all the more conspicuously, since the present standard has been reached with scarcely any contribution from the sister island?

Such are the facts we have to deal with. On proceeding to inquire into the causes of this great prosperity, the first to catch the observer's notice is the organisation of the University—very different as it has been from the not less prosperous Universities of England.

The King who granted its charter did not himself, in strict language, found his College. He remitted that honour to the Town Council of the City. The Council naturally created themselves not only patrons, but likewise sole irresponsible governors. They were possibly led to take this step by the knowledge that the more independent universities elsewhere had proved very troublesome neighbours to a meddling municipality; and in their frequent squabbles and encounters, not always bloodless, always in the end won the victory on appeal to their mutual sovereign. The Town Council proved hard taskmasters during the first hundred years of their government. They appointed professors to hold office during pleasure only; and in the troublous times of alternate episcopal and presbyterian persecution they put them up and knocked them down like nine-pins. On one occasion, they delicately intimated that "the affairs of the College were to be treated of in the Council, and the professors sent for *pro re nata*". They interdicted the professors from electing their own representative in the General Assembly of the Church. They fixed the days and place of graduation, appointed even the College porter, and took fatherly charge of the College bell. In all things which concerned the professors, they never lost sight of proverbial Scottish parsimony. Founding, in 1586, one of the arts' professorships, they attached to it a salary equivalent to £3 6s. 8d. English, and 13s. 3d. for board. When, a century later, they founded, in 1685, the three Chairs of Medicine for Sir R. Sibbald, Dr. Pitcairn, and Dr. Halket, they did so "with express condition that they should never have any salary from the town". This was a disagreeable precedent, which their abler, wiser, and more liberal successors of last century scrupulously followed. Perhaps they thought it best that their professors, left to their fees only, should know they had to live by their wits alone. Some people are of that opinion still, and imagine that such provision was one of the sources of success of Monro, Whytt, Cullen, Black, Hope, Gregory, and the other University lights of last century. For my part, I should think a moderate salary scarcely capable of abating the zeal of such men, or of their successors; and, on the whole, the case of a professor with a moderate salary is probably much akin to that of the "frugal swain" in the tragedy of *Douglas*, "whose constant care was to increase his store".

Setting aside this peculiarity of unendowed chairs, as probably not requiring to be taken into account among the causes of prosperity, we see nothing yet in the organisation of the University to give it elasticity and progress. Nor had it yet come forth from obscure mediocrity. But early in last century, the genius of Monro and the high place in public esteem, at home and abroad, attained by him and his coadjutors, not medical alone, but also in all the other faculties, imposed a powerful check on town council interferences, to which greatly contributed the superiority of Lord Provost Drummond over municipal prejudices and jealousies, and his reliance on those who were now allowed to take charge of their own University affairs. So completely was University government thus thrown for full one hundred years into the hands of the principal and professors, at last really deserving their title of "Academic Senate", that within this body it came to be thought and assumed, that they were in University business legally the council and executive. But in 1825 they were painfully roused from this delightful dream; and two costly lawsuits proved that the town council still possessed autocratic authority in all things; and that the Senatus had scarcely any power whatever, except that of doing each man his special duty to his students. Softened by time, my memory shrinks from recalling the heart-burnings, the strife, and the decadence which ensued. Let it suffice, that the highest authorities here and at the seat of government came to see, not too soon, that things could not be allowed to go on so; and, as the result, there has been granted to the "College of King James the Sixth", by Queen and Parliament, a true University constitution. All matters are now ruled within the University itself by the Senatus Academicus as administrators, by a University court as

comptrollers in all affairs, and originators in some, by a general council of some thousand graduates as advisers,* and by Her Majesty in Council for certain specified objects. It is only thirteen years since the new constitution, granted in 1858, was set in free motion. During that time the matriculation list has increased by one-half; in the Medical Faculty it has been doubled; important professorships have been founded and endowed liberally; many good bursaries, scholarships, and prizes have been instituted; students,—and professors too, as I can see,—have been stirred up to renewed zeal; vast improvements have been made by the introduction, wherever it has been attainable, of thorough practical teaching; and this has been rendered possible by a material augmentation of the general University funds through the greater afflux of students, as well as the generosity of donors. Such are the natural results of free, liberal, self-government, duly controlled, however, but within itself.

Under the permissive government by the Senatus Academicus during last century, the Medical Faculty was organised by Monro and his colleagues or their immediate successors, as already partly indicated. Their first principle of action, borrowed from Continental schools, was to assign special subjects to special professors. Of all the schools in the British dominions theirs was the first to discover this now very obvious element of success. At first, indeed, they could not carry it into every branch of medical tuition. But this has been done gradually since with all but clinical medicine. Clinical medicine was systematically taught almost a century before it was similarly taught anywhere else in this country. Soon after its introduction it was entrusted to four of the medical professors; and such continues to be the practice in the present day,—three or four teaching every academic year. There were also, at first, other exceptions, the most instructive of which was the conjunction of surgery with anatomy. The first Monro, his son, and his grandson, whose singular fortune it was to fill the Chair of Anatomy in succession for a hundred and twenty-six years, kept fast hold of surgery also till near the close of that long period. A useful lesson is conveyed in the fact, that, until after the foundation of a chair of surgery in 1831, the University was almost unknown as a surgical school. Very different was the fortune of physiology. That subject was detached in 1724, alike from anatomy and from the practice of physic; and, as the result, physiology has flourished, and flourishes more and more in the hands of a succession of able professors. We know, on the other hand, what has been its fate in other British schools, where, till only a few years ago, it was linked with the great subject of anatomy,—as if that were not ample enough, singly, to strain the energy of the ablest instructor.

Another ruling principle with the originators of this Medical School was, that they should admit no slovenly half-measures into their school-work. Having chosen for their system of teaching, not the detached tutorial method of the English Universities, but the delivery of lectures by professors to the students in mass, they determined that each subject should be taught in all its details by full courses of lectures of five months' duration, which were afterwards, in the progress of medical knowledge, extended to six months about the close of their century. Thus it came about that, when I studied medicine from 1815 to 1819, the winter session began with the last week of October, and lasted till the end of April. Several professors disposed of their whole subjects in a hundred and twenty lectures; the professors of anatomy and of the practice of physic got through two-thirds of their materials, varying the omitted subjects in alternate years; and Dr. Hope, by making use of Saturdays and occasionally a second hour on other days, went over the whole chemistry of the period in a hundred and thirty-six lectures, so as to leave very little not illustrated by his luminous discourse and splendid never-failing experiments. A different opinion is now in vogue from what was then entertained of the utility of such full courses of oral instructions; and pressure on the University has led to the reduction of the winter session again to five months—with what advantage, I confess I have not been able to discover.

During last century, medical education consisted almost entirely of an elaborate system of lecturing. We may form some idea of the

* In an account, otherwise correct, which has been given of the University of Edinburgh, in last Saturday's BRITISH MEDICAL JOURNAL, the writer has unfairly represented the privileges of the General University Council, and the administration of the University Court in relation to the Council. In recounting the Council's privileges, he strangely omits one, to which most people would attach some value—that of choosing a Member of Parliament; and in stating their right to be consulted by the Court as to its measures for "improving the arrangements of the University", he adds that "this rule is generally honoured in the breach". The Court of eight members has had from the beginning the aid of one or more of them being of the first rank at the bar or on the bench, who are not very likely to have winked at such illegality; and I can testify, as a member since the commencement to the present day, that after the first year or two of experience of its novel functions, the Court has never failed to consult the General Council in all matters which by statute must be referred to them.

labour bestowed on it, as well as the high appreciation of it at the time, from many MSS. still extant—manuscripts so detailed, that they must have been written almost *verbatim*, and, indeed, have been mistaken by inexperienced book-hunters for originals by the professors themselves. Thus an enormous folio volume of Cullen's *Lectures on the Practice of Physic in 1775*, in our University library, would make three goodly octavo volumes, of five hundred pages each, of the close class-book print of the present day. One copy I have seen consists of a hundred and forty-six lectures.

But it is not a little strange that the able professors of that century seem not to have thought of helping their oral instruction by practical teaching. Anatomy, indeed, was made the subject of practical teaching; how soon, I have not been able to discover. But even so far down as 1815 it was by no means an universal study; and, though it became so not long after that date, it was not made an imperative part of education for the medical degree till 1832. Nothing else was taught practically. Botany, for example, was not taught thus till Dr. Graham introduced field-instruction on his succeeding Dr. Rutherford in 1820. Nor at that time was even chemistry taught otherwise than by lectures. In 1820, indeed, there was no school for practical chemistry for students in the British islands; so that in the same year I had to resort to Paris, and Dr. Edward Turner to Göttingen, to study chemical analysis. Matters are differently circumstanced now-a-days. Every branch of medicine taught in the University, save one, is now fully taught by the practical method; and those who desire to cultivate any one of them as the subject of special research may easily command the opportunity. The sole exception is my own subject—*materia medica*—one branch of which, pharmacy, eminently lends itself to practical teaching. I should have taken advantage of this circumstance long ago, had not the large accommodation required been absolutely unattainable in the present University buildings; but I have taken care that for this purpose ample provision shall be made in our new Medical College, for myself or my successor in office.

It is very difficult to account for the neglect of practical instruction by the great Scottish physicians and professors of last century; but, nevertheless, amidst the enthusiasm in the present day for practical instead of systematic instruction, let this lesson—handed down to us by the experience of the medical luminaries of the last age—never be forgotten by us, though it seems to be put out of sight by many; that their system of tuition bred physicians of great name in British medicine, and spread able practitioners over the whole British dominions, who, among other conspicuous incidents in their lives, filled many of the highest medical offices in the State, and often took, in medical practice, the foremost place not only in the great metropolis, but likewise everywhere in the large county towns of England and Ireland, as well as in Scotland.

From the commencement of the University Medical School till after the close of the first quarter of the present century, no measures were taken for securing regularity of attendance on the part of students. For that the professors trusted to the good sense of the students themselves. Nor were they trusted in vain. I am confident at least that, when I was one of them, attendance was quite as regular as now under the strictest regulations which could be well enforced at a populous school of gentlemen. Neither then nor now can those who are idly disposed be forced to attend. I am even afraid that the present regulation may call forth the natural contumaciousness of not a few youthful minds, so familiar with the Horatian maxim, "*Nititur in vetita semper*", as to consider it a necessity which must be obeyed, and who are restive under a rule for no other reason than that it is the rule. On the other hand, the present practice, though it may not check absenteeism, certainly detects it, and was expressly adopted to supply the want of such a test. A few years before 1830, one of the London licensing boards complained that men from England, after matriculating and entering their names in one or more class-books, returned home at once, and never looked upon the University again, producing their mere ticket of admission as their qualification, and, indeed, the only proof of attendance ever issued by their teachers. To end this malpractice, monthly signature was required. But the same London board subsequently urged that certificates of due attendance at each class should be given; to effect which, the regulation now in force, to ascertain the student's presence in each class very many times during the session, was passed in 1832—in my opinion, unfortunately. But occasional signature, to ascertain residence, was quite right, because some check of the kind was called for in consequence of another custom adopted by the founders of the University School, and adhered to ever since. This was, that there should be no rule of residence in College halls for the students. At the foundation of the University, when it possessed a Faculty of Arts and Philosophy only, College residence was evidently intended by its patrons; for in the following year, 1583, the

Town Council records bear that the Town Council "orders the chambers to be set at forty shillings" (Scotch, equal to about as many pence English), "and two to be in a bed". The scheme was a very humble one, suited to the scanty means for carrying it through; for it ought to be mentioned that, although King James, when founding his College, undertook to endow it, the promise was not kept by the parsimonious monarch. It is well that the poverty of the city prevented the continuance and extension of the rule of residence in College; for, apart from the fact that university education is attainable at less cost without it, grave doubts may be entertained whether harm, rather than good, may not come of gathering in college halls crowds of young men at the age of those who are undergoing their professional training. A few years ago, indeed, an attempt was made to establish a college hall; the projectors being moved thereto partly by the knowledge that some anxious parents, in sending their sons from home, hesitate to turn them adrift under nothing but their own guidance, and partly by the desirableness of providing home discipline and superintendence for the lazy, the giddy, and the evil-disposed. But the scheme failed; and it fairly admits of question whether residence in the families of medical men of the city, who receive and guide students of the University in their studies, is not far better provision for troublesome youths of these several denominations.

For enforcing diligence on the part of students, the only surety possessed for a long time in this University was examination.

Whether the early medical professors held class-examinations, I have not been able to discover. By some, however, though not by all, oral examinations were held in their classes early in the present century. The practice was easy then, because the paucity of subjects of study left abundance of free hours for work of this kind. It is otherwise now, and ever since the subjects of separate lectures have been doubled in number. The difficulty thus arising is not taken into account by many who inconsiderately urge that all teachers should practise frequent oral examinations. For some years, examination by written papers has been substituted, and practised with apparent success in all the medical classes. This method has the advantage of testing all who undergo the trial with far less consumption of their time; but it cannot be practised so often as some reformers would have it, who forget, or may not know, that the labour and consumption of time in examining the written papers of a large class is enormous, and a most ungrateful task.

For the degree examinations, when the faculty of medicine here was short-handed, examiners were supplied chiefly by the Royal College of Physicians. But, as soon as the professorial staff was complete, the professors themselves became for a long period the sole examiners. In 1861, the Universities' Commissioners, with the hearty approbation of the examining body, added three extra-university examiners; and last year, by recommendation of the medical faculty, the number was raised to thirteen; so that there may be an extra-academical examiner, qualified, like each professor, specially for each subject, and two examiners constantly present at each act of examination. In the old way, until the present century was well advanced, the rule was that one professor, in presence of the whole faculty of medicine, occupied about an hour in examining a candidate upon the anatomy and physiology of a particular organ, its diseases, their diagnosis and treatment, and the chemistry and pharmacy of some of the remedies mentioned; and then each of his colleagues put a few excursive questions on other topics, not necessarily belonging to his own professorship. If I may judge from my single experience as a candidate in 1819, these examinations were a true and searching test of competence and incompetence, of ignorance and knowledge, and of talent too. It had the advantage that all the judges heard all the examinations. I shall never forget the mastery and fair examination of Dr. James Gregory as examiner-in-chief. The subsequent short skirmishing by the other professors would probably amuse you, had I time for such details—more, probably, than it did me at the time—until the last question of all. I thought myself pretty safe with Dr. Rutherford on botany, as it was a favourite pursuit of mine. But he, thinking, I am sure, that success had made me overconfident, threw botany aside, and determined to cool my courage with a question very much out of the way of a tyro. He asked me the symptoms of a calculus passing down the ureter from the kidney. A few days earlier, and he would have attained his wish. A fortnight previously, however, a well marked case of the kind had passed through my hands as resident-physician's assistant in the Royal Infirmary, and interested me greatly; and so there was neither difficulty nor merit in both mortifying and satisfying Dr. Rutherford.

This old method of examination has been completely abandoned, as I understand, at every University in the kingdom, and in the University of Edinburgh has been given up for at least forty-five years in favour of the plan now followed, according to which every candidate

is examined specially on every branch of medicine by one or more—in Edinburgh by two—examiners specially qualified in one branch. Although I was actively instrumental in carrying through and perfecting the change, I do not feel confident that it has substituted a better test. While the old method is apt to degenerate in careless hands into superficiality, the newer way is apt to dilate into too great vigour in the hands of an examiner who may appreciate too highly the relative importance of his own branch of culture. It is also an objection to the latter mode that it prevents every examiner from hearing what the candidate has to say on every subject but one; viz., his own. At least double the time, too, is consumed as was in the old way; and I am afraid the candidate is liable to be oppressed with too minute and too numerous examinations, and, which is worse, with too much and too frequent preparation for them. I entertain no doubt, however, that either method is a full and fair test when in the hands of able, impartial, and faithful examiners.

I have thus put before you the leading particulars in the history of the medical department of this University during the last 150 years. I now beg to draw your attention to the inquiry proposed at the outset: Whether this narrative may not yield some useful lessons to the many who, with praiseworthy zeal, have lately proposed to alter and innovate largely in medical education and medical examinations.

Every one, I hope, will acknowledge it to be only justice and common sense, that all reforms of the kind should bear some relation and due respect to success. I submit that the Edinburgh school of medicine—as proved alike by the great afflux of students, and by the multitude of men of mark trained in it who have held a high professional place in all parts, and in all public medical offices, in the British dominions—has thus been so eminently successful, that its system deserves great consideration; perhaps for guiding other schools, but certainly in dealing with itself. Nevertheless, there are some essential parts of that system, which the opinions of some recent reformers, if acted on, would abrogate or dangerously injure.

Take, for example, the duration of the courses of lectures. The ordinance of the Universities' Commissioners of 1860, on medical education, which by statute has the force of an Act of Parliament, requires that the courses of instruction during the winter session shall extend to at least one hundred lectures, and during the much shorter summer session to fifty. But a late eminent authority, whose name, were I to mention it, would be received with universal high respect in his department, used to sneer at this regulation whenever it was spoken of, and held up his hands in horror at the idea of the poor student being compelled to listen to one hundred lectures in a session. Other men, taking more precise views of this subject, have urged that such full courses may be reduced to fifty, as sufficient at least for any branch except anatomy. It has even been propounded in print, that some branches of medical instruction, which in Edinburgh are taught in one hundred lectures in winter, may be advantageously disposed of in thirty-five summer lectures in London and the English county schools. At length, one confident writer in a weekly journal made the discovery, that it might be better if certain of these subjects were not lectured on at all; and in one sense of the question I am disposed to agree with him.

It is true that these thorough reformers go further, and contemplate the substitution of practical teaching and home study for lectures. Reading, however, at the student's home forms an essential ingredient equally of both systems of tuition. It is scarcely necessary to say, that every student who means to profit fully by a course of lectures, possesses works of reference for enforcing, recalling, and expanding what he hears in the lecture-room. But reading cannot be advantageously substituted altogether for what he hears. The poet's maxim,

*"Segnius irritant animum demissa per aures
Quam quæ sunt oculis subjecta fidelibus".*

applies to the relative influence of the description, and the exhibition, of visible things or events, not to the respective effect of hearing and of reading about them. On the contrary, the theatre, the pulpit, and the bar prove familiarly to all how impressive are the words of a speaker compared with the words in a book. There is a magic in the human voice, a contagion in the listening attitude of a surrounding crowd, which command and intensify attention. A speaker may thus stir up enthusiasm in all who hear him; an author never, except in those endowed with unusual sensibility. The few who possess the attribute of being thus impressed by reading owe it to a rare idiosyncrasy. But idiosyncrasy cannot be called in to countervail the general experience of mankind in all ages of civilisation.

Moreover, in teaching the medical sciences, demonstration to the eye may generally be employed to aid demonstration through the ear. Our predecessors of last century seem not to have been so fully aware of this as we ourselves are. Anatomy, chemistry, botany, and natural history were indeed taught by them with that aid. But during my four-years'

course of study the professor of the practice of physic did not so much as once make use of a specimen, a drawing, a diagram, or a black board. So was it with his colleagues of clinical medicine, of physiology and pathology, and even *materia medica*. It was not till my predecessor, Dr. Duncan, succeeded to this chair in 1821, that demonstration by specimens and experiment was added to lecturing. But now, in every branch of medical instruction, the eye is appealed to as well as the ear. Wisdom is let in at both entrances; and at small additional expense of time, and no pecuniary cost to the student.

In order that lectures may be attractive, however, they cannot be very brief, not so brief as many reformers of the present day would have them. When too much curtailed, they must consist mainly of bald principles, and naked facts enunciated with the scantiest garnishing; and thus all zest is lost. No observant lecturer can fail to notice that, so long as he is dealing with abstract principles, general statements, bare descriptions, and dry facts slightly associated, it is difficult to secure the attention of his students. It is quite different when his discourse is argumentative, when he supports his propositions by suitable instances, when his description of objects is made clearly diagnostic by comparison with others, and, above all, when he is under no restraint in the copiousness of illustration by examples. The attention of his hearers is then fixed; and if he can prop up a conclusion by a well-chosen telling case of his own, all heads are raised, and all ears on the alert to take in his information. This blending of general statements with richness of illustration it was which constituted the charm of some of the lecturers in my younger days, and eminently of Dr. James Gregory, Professor of the Practice of Physic. Gregory was the most captivating lecturer I ever heard. His course of a hundred and twenty lectures was attended to the last day with great regularity by classes of from three hundred to three hundred and sixty students. I never heard any one complain that they were tedious; and I am convinced that his success was chiefly owing to the tact with which he freely used illustrations drawn from the exuberant store of his own vast experience. Every one acquainted with the history of British medicine during the present century, knows how powerful an impression Gregory made on medical practice throughout the whole British dominions. Right or wrong, he was the apostle of blood-letting, which stood the test of half a century's experience. The sway of his doctrines was owing entirely to his lectures, and to the publications of his pupils; for he himself never published on any branch of the practice of medicine. But would Gregory have found scope for his rare talent in the beau-ideal course of fifty or eighty lectures—the hobby of present-day reformers? Let Gregory himself supply the answer. In his annual course of a hundred and twenty lectures he overtook only two-thirds of his subject.

Those teachers and guardians of youth who lament, and those students who complain, that it is found irksome to attend lectures at the schools where the very short courses of instruction I refer to have been adopted, will now probably understand the cause. I know some teachers at these schools who have themselves made the discovery. It will probably be also understood, why, when tuition by systematic lectures has been made so very barren on any subject, I agree with those most radical of all reformers that it is well to have on that subject no systematic lectures at all.

But I must keep in mind that the reformers, with whom I thus disagree so widely, propose to substitute practical instruction for full systematic courses of lectures. Their theory of medical education, short, systematic, and full practical instruction, is a favourite with many at the present time. Especially was it much in favour with some prominent members of the General Medical Council, while I was their colleague; and, if I mistake not, it has met with favour also from not a few members of the British Medical Association. This is a matter as to which there exists considerable misunderstanding and some risk of error.

Practical instruction cannot take the place of systematic instruction. For, in the first place, the latter is an essential preliminary to the former; and, secondly, the student's period of study is much too short for his acquiring an extensive acquaintance with the great leading details of all the required subjects by practical study.

Systematic instruction is an essential preparation for practical study. This no man, I presume, will deny. But the more thorough the systematic instruction, the better the preparation. Take anatomy for example. Practical anatomy is studied longer and more thoroughly by the general mass of students now than it was fifty years ago. But I have never understood that the systematic teaching of it has been curtailed on that account at any of the great medical schools. On the contrary, in consequence of the extension of anatomical science, what is called "Anatomical Demonstrations"—which formerly meant daily demonstration by the professor or his "demonstrator", of what had been done during the day by each dissector in the practical rooms—has been con-

verted at several schools into an additional course of systematic lectures on anatomy, carried on at a second hour.

How far ought other branches of medical education to be treated differently? What of chemistry, for instance, the importance of which to medical science and medical practice is becoming more and more apparent every year? Chemistry was the next science, after anatomy, which was taught effectively in this University in the practical way. For many years, Dr. Hope offered his students no opportunity of practical instruction. At length, in 1823, the teaching of practical chemistry was begun by his assistant, Dr. Anderson; it has been improved, and ever since continued, by Anderson's successors in office; it has been long adopted by every extra-academical lecturer on chemistry here; and it was considered by the Universities' Commissioners of such value to the medical student that it was added by them, in their education ordinance of 1860, to the curriculum of study for medical degrees. Dr. Hope, I have said, gave no opportunity for practical study. But, as I well know from personal experience, his course of a hundred and thirty-six lectures on systematic chemistry was so complete, and so fully illustrated by never-failing experiments, that no diligent student ought to have found difficulty in taking up any branch of the subject practically, after learning the use and the handling of instruments and apparatus. I found none at least, when subsequently, at Paris, I embarked in what were then the highest objects of chemical research, the analysis of the gases, the proximate analysis of vegetable poisons and medicines, and the elementary analysis of nitrogenous organic bodies. No such thorough preparation, however, could have been attained by the brief systematic course of sixty or eighty lectures, proposed by the practically-minded of the present day. The introduction of practical chemistry into the University qualifications for medical degrees was not the cause of the reduction of our winter session from six to five months; and I am much mistaken if that change has not been found to cramp the systematic instruction given by the professor of chemistry, to limit unduly the branches included in it, and to curtail the experimental illustrations of those which he is able to overtake.

A third branch of medicine in which practical study is imperative on candidates for graduation in the University of Edinburgh is pharmacy. It is enjoined to be taken at the laboratory of an hospital, dispensary, or private practitioner; and it cannot now be studied in the University. But provision will soon be made for supplying that defect; and when it is made, the course of lectures on *materia medica* may be relieved and shortened by being confined chiefly to therapeutics.

A fourth branch is midwifery, in which practical instruction may be taken at an hospital or dispensary, or by attending the private practice of a medical practitioner.

But, besides all these subjects, botany, physiology, pathology, and natural history have been successively made subjects of practical instruction by their respective professors; in several of its branches, surgery, too, is now taught practically; and there is no reason why medical jurisprudence should not be taught in the like manner. Great success has attended such instruction in every branch of medicine in which it has been undertaken, in none more than in physiology. Hence some have proposed to add several of these newer practical studies to the imperative list, especially physiology and pathology.

But now we meet in the face a formidable question. Trusting to found on the theory of practical education a mode of escape from one horn of a dilemma, are we not about to rush on another precisely similar? Can the usual time-limit of medical study admit of such diversified practical training? Systematic instruction cannot be given up, were it merely as preliminary to practical instruction; and it cannot be given in short space. Whatever extent of it be held to be necessary, no part of it can be curtailed, without practical instruction being extended to supply the loss. But for every detail thus withdrawn from the former, treble or even quadruple the time is required to teach it by the latter method. This will be acknowledged by all who are conversant with both—by teacher as well as by pupil. In the same space of time the lecturer can go over in his systematic course, even with the addition of demonstrations and experiments, three or four times the amount of details which the student can overtake in any plan of practical study. It is a mere hallucination, then, to suppose that the latter can materially take the place of systematic lectures. In every way in which we look at the question with the eye of experience, it will be seen that, in a sound system of medical instruction, systematic teaching must be the principal means, and practical teaching ancillary only. Care must, therefore, be taken, that the practical method be not extended beyond due bounds.

These considerations lead me to observe, that many labour under an exaggerated and mistaken idea of the extent to which the medical sciences can be acquired by the practical method in the course of a student's curriculum of study. In fact, some teachers, in consequence

of the same mistake, have erred, I think, as to the kind of practical instruction which they have endeavoured to impart. Some aim at covering a large extent of ground, and thus making the student acquainted practically with a great variety of objects. By this way, the knowledge acquired is necessarily superficial, and consequently fugitive; besides proving not very serviceable afterwards in actual practice. Others, confining the attention to comparatively few objects, teach familiarity with instruments and other means of research, the principles of scientific investigation, and skill and invention in inquiry. The information so gained, though limited as to its objects, is precise, profound, lasting, and such as enables the pupils to study any other similar subject with the same accuracy and success. The one method crams the student with surface knowledge, much of which he soon forgets. The other trains him to research, and teaches him, in short, how best to acquire knowledge for himself. The latter surely is the real object of school instruction; but it is apt to be lost sight of by modern theorists, who seem to think that the purpose of education at a medical school is to furnish the student with all the professional knowledge he needs, and to turn him out an accomplished physician or surgeon. I wish practical teachers would turn their minds to this question. For my part, I entertain considerable doubts of the practical utility of those courses of practical instruction which aim at embracing a great variety of matter. In regard to practical chemistry, for example, I well remember the time when a highly popular course of the kind was given in this school; and that, on one occasion, I found my four clinical clerks, who had all gone through it, were unable to make a filter, to pour a fluid securely into it, or to boil urine with confidence in a glass tube.

The conclusion I come to on the whole question of medical training is, that the most efficient system consists of full systematic lectures, and auxiliary practical instruction carefully chosen and limited. Such has been the system pursued in the University of Edinburgh; and, hitherto, the University of Edinburgh has been eminently successful.

I have purposely reserved for separate notice the most important of all practical training, clinical study; because it is somewhat peculiarly circumstanced. Clinical teaching ought to comprise lectures, demonstration of actual cases, and examination on them. This constitutes practical instruction auxiliary to the systematic courses on the practice of physic and practice of surgery. But by practical clinical instruction is meant something more; every student ought also to acquire such experience as is gained in the office of clinical clerk in a hospital. Unless he has served as a clinical clerk, or in a similar capacity at a dispensary, or with a private practitioner, so as to have been brought into close contact with cases of disease, and in a position of some responsibility for the knowledge and treatment, he is not yet prepared for entering upon independent medical practice.

Herein lay a great mistake of our predecessors. The majority of the graduates and licentiates were sent forth into independent practice, possessing no more practical acquaintance with disease than was got from clinical lectures; and, indeed, from most schools in the kingdom, with no more than they could pick up for themselves by what was aptly called "walking the hospitals"; that is, looking on as they best could, without lectures, bedside demonstrations, examination on cases, or any other help or guidance whatsoever. But now the rule, at least at this University, is for the graduate, if not already trained as clinical clerk, to seek that or some similar opportunity of thorough practical study, before taking advantage of his newly acquired legal right to settle in independent practice.

If this rule be so general—almost, indeed, universal—as I suppose it to be, here, at least, there is perhaps no call to enforce it by educational statute; and there is the serious objection to a statutory rule, that it is one very difficult to define and enforce without inflicting frequent hardships, owing to the impediment which is sure to start up in the way of all important additions to medical study, the limit of time allowable for a student's education. But if this, the most valuable of all his practical training, is to be demanded of all medical aspirants, it may be effected in one of two ways.

The first mode is to induce the student to commence his professional studies, not with the month of October or November, as is usual, but in the beginning of the previous May, so as to take his botany and natural history before commencing his statutory four years' curriculum. It is gratifying to find that very many of the students of the University of Edinburgh are now doing so of their own accord; if they could add to these chemistry, in the preceding winter of preliminary education, so much the better. The four usual "Anni Medici" would thus escape crowding, and the last six months might be left nearly clear for a clinical clerkship. This clear half year could be obtained with certainty, if the present courses of lectures were better co-ordinated. Some are too long; several are too short; and at least two, anatomy

and practice of physic, are much too short. But by altering the sessions, from a winter period of five or six months and a summer period of three months, to two equal periods of four months, with an interval of one month for holidays or graduation examinations, I am convinced that almost all our courses of lectures would be materially improved, none injured, and the concluding six months left free for clinical clerkships, or other practical training of the same kind.

Under the present system four years of study are rather too short a period; under a different system they would generally suffice. But it will be said, why not lengthen the period of study at once to five years? This measure was a favourite one in the General Medical Council during the first years of its life, but no more has been heard of it since the following objection was mentioned. The additional year cannot be subtracted from the years for preliminary education, but must be added to the four professional years, and, therefore, license or graduation must be postponed to the age of twenty-two. But if a man may join the church, the bar, or the senate at twenty-one, why not the profession of medicine too, especially as many years must elapse before he can attain to remunerative practice? Moreover, a careful examination of the books of this University prove that, although of two hundred graduates in two successive years, four-fifths took at least five years of medical study, and graduated at a greater age than twenty-one, the remaining fifth, who graduated at twenty-one after four years of study, comprised three-fourths of those who passed their trials with distinction. Why then should these forty young men be prevented from beginning professional life early, and thus be defrauded of the advantages of the talent with which they had been blessed by Providence? And why in the profession of medicine alone?

Another way of securing the advantage of some, such practical study as a clinical clerkship affords, is to require it to be taken, as I have said that a great proportion of the students of the Edinburgh school actually do take it, immediately after graduation, or license, and before settling in practice for themselves. In that case, let it precede registration; for which purpose, remove the present statutory prohibition against entering certain subordinate offices before being registered.

But it may be said that there ought also to be a further examination. By all means. I think there is an insane rage for examinations at the present time; but there can be no great objection to a clinical examination at any period of life. Every new case of disease which a medical practitioner has to treat is a clinical examination to him. Of course, a young man who has just passed through the required training, and who professes himself competent to enter upon independent practice, may well be called on to prove his competency by examination—that is, by exemplifying what his practice is to be.

Such examinations might be fitly conducted by any of the present examining boards; or, if a Government pass be advisable, as many believe, to serve as a check on these boards, and for a greater surety to the public, there is here offered a simple and effectual opportunity for interposing a separate and independent board, to secure the sole object for which a conjunct board, or Government board—which are one and the same thing—can be reasonably demanded; viz., to see that a young man is competent to enter upon the practice of medicine independently on his own account.

Thus I approach the last topic with which I propose to occupy your attention at the present time. It is one about which the general sense of this Association and my humble opinion may hitherto have been not much in accord; but I entertain hopes that the case may prove different before we part.

For many years past there has been an outcry in our profession, and murmuring even amongst the general public, against a multiplicity, or even a plurality, of examining boards for licensing entrants into the medical profession. Many have seen, as they think, such evils in that system as even to have advocated the establishment of a single board, to supersede, or at least to override, all those now existing. Out of this feeling has been engendered the scheme of a conjunct board, or boards, to be made up of examiners selected from the existing boards, and whose province it should be to examine all candidates whomsoever, and necessarily either to supersede existing examinations, or to repeat and multiply them.

At first, measures of this kind were very popular—very much so with the General Medical Council, and not less so, I believe, with some men of note, members of the British Medical Association. For my part, however, I very early took quite a different view of the proposed revolution. There was no opportunity of stating in the General Council what could be said against it before my retirement from that body; but I have raised my warning voice since then in several other Councils, and also in correspondence. Whether from this cause, or more probably through the influence of calm reflection, which time has allowed to all public bodies concerned, the result has been that every

licensing board in Scotland is now opposed to the change; and in the two other divisions of the kingdom, where all boards seemed about to rush into one another's arms, for the purpose of being conglomerated and individually extinguished, zeal has of late been greatly cooled in this direction, and there has arisen a prudent hesitation in coming to closer quarters. Let us now, then, look a little into the whole matter, with the aid of the light which time has thrown upon it.

At a period not very distant, some licensing examining boards were too short-handed; others were undoubtedly too facile. Corruption even was charged; with what justice it is needless now to inquire. To correct these faults was one of the well understood objects of the Medical Act of 1858, and one of the duties of the Medical Council which that Act has founded. Has the Act been found to fall short of its purpose in this particular? Certainly not. The Council may have set about the work of reforming the examinations rather slowly; but they are not to be blamed on that account. They had much besides on their hands. They were too numerous to deliberate promptly. It was well that they should gain public confidence before approaching the most delicate of their tasks. Their powers were thought not clear enough, nor sufficiently direct for vigorous action: nevertheless, much good has been done in several directions, and now the Council appear to have set about the duty of controlling examining boards with determination. It is well that they have done so in the present crisis, for the results will supply, if I mistake not, valuable advice in the present conjuncture. I have gone carefully over the reports of the able inspectors who have finished this year's duty, and I find that they pronounce various examinations to be all but faultless; that they point out an important fault in the examination of one of the most powerful medical bodies in the kingdom—a fault which, I doubt not, will be at once mended; and that they declare one board so far behind in duty, that both the examination and the board of examiners must be remodelled.

The Medical Council, therefore, now know that they can command the services of inspectors who will report to them the truth without fear or favour. The Council are also already made aware of insufficiency existing in some quarters; but have they power enough to correct? Hitherto they have carried all their other measures by persuasion merely; but if in the present matter persuasion fail, have they the power to employ force? Such power is given by statute, but it is round-about. A charge must be laid against the accused board before the Privy Council, who may or may not confirm it, and enforce the remedy. The statute has been thought in this respect too feeble; it must not, however, be treated as such until it is tested by actual trial, and the trial has not yet been made. If the statutory power prove too feeble when fairly tried—for example, against a powerful recalcitrant adversary—I see no reason why the Medical Council should not receive direct power to enforce its mandate, subject to appeal to the Privy Council. Such appeals are apt, indeed, to be costly; but, perhaps, so much the better: there will be no appeal by a board not quite satisfied of being in the right. But the Medical Council and the public now know also that no small number of the examining boards of the country are without fault; and therefore they can point to models from which defective boards may take example—nay, must do so. Therefore, too, they may say to Government and the public, and the members of this Association who have taken a strong and laudable interest in the reform of examinations, "In regard to the former bodies, there is no call for any legislative interference; in respect to others, we know what is to be done with them; let us try whether we can do it with the powers already entrusted to us; it is probable that no further legislative aid will be required." This is a plain and reasonable policy. Surely it is right that the Medical Council be not disturbed in their present efforts, and perpetually paralysed at the opening of every parliamentary session by new medical bills, founded on mere theory, proposing to revolutionise and overturn what has gradually arisen as adapting itself to the wants and wishes of the nation.

One condition, however, must be admitted to be indispensable. As every physician ought to be educated in surgery, and every surgeon in physic, so every board, which simply qualifies a man for registration, must possess the power and the means of examining on all required subjects, medical and surgical. The Universities, with few exceptions, enjoy this advantage. The three corporate Colleges in Scotland have found no difficulty in acquiring it by combining together. In London, however, the medical corporations have hitherto been unable to unite, or mutually lend examiners, for reasons the cogency of which it is not easy to comprehend, but which assuredly ought to be put an end to one way or another. If these bodies cannot combine, why should they not obtain by charter the right to do, each of them, that which the Edinburgh University lately accomplished, without either difficulty or delay, under its new constitution granted by Parliament

in 1858? It possessed twelve professors specially qualified to examine, each on a special subject, and, in addition, three examiners from without who examined on any of the subjects. But the professors saw the advantage of having twelve non-professional examiners, specially qualified like themselves on each of the twelve subjects of examination, to do duty *pari passu* with themselves. In two or three months the legal forms were gone through, and twelve first-class men obtained—five in Edinburgh, two in the Scottish counties, five in England, and three of these in London. You will now understand what I meant by the "elasticity" of this University. There is, in fact, scarcely any right and wise thing wanted which may not be attained under its constitution, provided the cost be forthcoming; and that, too, is seldom long in being supplied. Why should not each of the important Royal Colleges of England possess, for their efficiency, the same power with the University of Edinburgh of borrowing all round them, completing their examinations, and each qualifying singly for admission to the *Register* in the fullest sense of a practitioner entitled to practise according to his education? Why not, indeed, but for mutual jealousy, and the antiquated fondness for keeping up a bygone distinction—a distinction which really exists no longer, except for the limited few who stand at the top of each branch of our profession? Nevertheless, these bodies are said to countenance at the same time a complicated project of conjunction with themselves, and, unhappily, for all their sisters, too, and for all the Universities likewise, which threatens to imperil the prosperity of all, and the very existence of several of them: this is the erection of a joint examining board for the whole kingdom.

Much has been said in Council and in print in praise of some such measure; but what has been uttered hitherto has been addressed to the general question only; and no one, so far as I am aware, has looked either to details or to consequences. Those who do so will not be much enamoured with it.

A favourite idea with many is, that there should be for entrance into the medical profession what they call a "one-portal system": a single-door scheme, a single examining board, to subject every candidate in the kingdom to one uniform system of examination. In England, no one has yet done more than announce the theory, which, however, has met with a favourable reception. From Ireland there was sent over, a few years ago, a scheme of the kind, which went so far as to recommend an examining board of twelve, and for each a fee of ten guineas a day. There are, however, ten subjects of examination, for each of which we must have two examiners sitting constantly together, or twenty in all.

Let us see what will be the amount of their work. From a return, for which I am indebted to the kindness of Dr. Hawkins, Registrar of the General Council, the annual addition to the *Register* may be taken in round numbers, for the last three years, at 900. To these may be added 60 for those who, going to the colonies, or for other reasons, do not require to register. On calculating the returns of all examinations for two years, as annually published by the General Medical Council, 240 rejections must be added, in order to make up the total number of persons to be annually examined by this single board.

Long experience warrants the conclusion that the oral examination of 1,200 candidates will occupy each examiner at least 400 hours. Experience also teaches that, for a moderate continuity of time, four hours of such monotonous uninteresting occupation are as great a strain upon the human mind as most persons will sustain. Further, large experience shows that the setting, watching, perusing, and judging written examinations, will take each member of the board 184 days, on the assumption that 200 candidates are set to work at one time; but as this sort of labour is of a more contemplative kind, we may ask each examiner to give eight hours a day to it. Thus his whole annual duty will occupy 124 days; so that, deducting Sundays and half-holiday Saturdays, he will be engaged, if continuously, for five entire months.

As such lengthened absorption of time involves the surrender of almost every other ordinary professional object, and the members of such a board must be men of the first water in their several spheres, to secure public confidence, the proposed remuneration will not prove so unreasonable as it might appear at first. The cost of salaries would thus consequently be £27,000; and secretary, clerks, halls, offices, and examination expenses would certainly raise the whole cost of the single board to £30,000 annually.

What return is to be got for all this inordinate outlay? In the first place, as the scheme charges the cost upon the candidates, each of them will have to pay at least £25 for his examination. The candidate—at least in Scotland and Ireland—will be subjected to the additional expense of travelling a long distance to the seat of examination, which may be presumed to be destined to be London. Thirdly, one-half of them will have to wait for their turn three, four, or five months after being ready for examination on completing their studies. Fourthly, all

this trouble and expense are in addition to what are required for their degree from an university or their license from a corporation. Corporation licentiates, indeed, may be relieved of part of the expense, and all the superfluous annoyance, of a double examination, by adopting the provision of a different joint scheme, to be mentioned presently, which provision would make the single-door examination sufficient for obtaining also the license of any of the incorporated bodies. It will be seen by-and-by whether the Corporations can safely thus give up their own examinations. But, in the meanwhile, what about the Universities? The single-door examination, being the winding up of the General Medical Council's plan of medical study, which is avowedly a minimum, cannot be a major examination; if not also a minimum, it must at least be minor. The examination of the Universities, however, generally is, and must be made at all of them, a major examination; and the Universities cannot give it up for one which is lower. Thus would arise the absurd anomaly, that, after paying smartly in time and study for a high title obtained through a high examination, the University candidate would be called on to undergo another and minor examination, and to pay another large fee for the superfluity. Fifthly, it is unnecessary to add, in the present place, the risk of a single national board of examiners conducting a minor examination over all the kingdom, without rivalry, becoming the fountain of mediocrity in all things medical, in education, in professional qualifications, and in scientific advancement. This result of centralisation and loss of freedom was so luminously put by Mr. Lyon Playfair some years ago in the House of Commons, in his speech on one of the great education questions, that few can have forgotten the deep impression which it made upon the country.

So much for the candidate. The case of the examiner should also be looked to. I presume this single-door or national board, like the General Medical Council, would consist of a half from England and a quarter each from Scotland and Ireland. Hence one-half of the members would have to pass annually almost half the year from home. I have not hitherto met with an examiner of some experience who did not find his duty in no long time irksome. A fortnight of such work four hours a day would try the powers of most men of the stamp of which such a board ought to be composed, the duty is for the examiner so monotonous and so unimproving. Five continuous months of such mental torture would probably land half the examiners in a lunatic asylum.

In order to meet some of these evils, it might perhaps be proposed that the work should be divided between two, three, or any other necessary number of similar boards. The cost would be the same, the labour would be endurable, and the convenience of candidates would be consulted. The expense to candidates, however, would remain the same, as also the vexatious absurdity of a double examination. Moreover, what would become of the one portal theory with more than one board? The written questions might be made the same for all, but not the appraisement of the answer. As for the oral examinations, it is evident that the differences could not be slight, and might be quite as great as now. Changing the examiners, and centralising their place, but leaving a plurality of boards, could tend but little towards uniformity of examinations. Such a scheme, in short, is no one-portal system at all, and it differs in no material respect, even in details, from the scheme of conjunct boards which has been for some time before the General Medical Council and the licensing bodies of the kingdom.

According to that scheme, all the universities and all the corporations are to unite in forming three boards, one for each division of the kingdom. In England, however, the labours of a single board would be intolerable for the examiners; and their sittings would be too protracted for the reasonable convenience of candidates. In Ireland and in Scotland, the duration of duty would be less, yet still too great; and in Scotland the hardship on candidates would be severely felt, because all the school sessions come to an end at the same time, and consequently the candidates of one school, instead of being examined there at once, as now, would have to wait till the other schools set the examining board free. The work of such a conjunct board could not be done to the satisfaction of the schools and the country with less than three or four sets of examiners for England, three for Scotland, and two for Ireland. This so-called conjunct scheme has, therefore, some disjunctions, and it has no alliance to the device of a single board.

In order to escape as far as possible the absurdity of double examinations, one for license or graduation, and another for registration, a complex plan of equivalents and exceptions has been proposed under this scheme. The corporations are to accept the examinations of the conjunct board for their licenses, and give up their own examinations altogether. The conjunct board is to receive as equivalent to their own the University examinations on the fundamental medical sciences. The University examinations on practice, such as physic, surgery,

midwifery, pathology, therapeutics, medical jurisprudence, are not to exempt graduates from the examinations of the conjunct board on these subjects; but graduates so re-examined are to be let off easy in the matter of fees. Why University graduates should be exempted from the operations of the Board in one class of subjects, and not in others, it is not very easy to perceive. The University examination is, or ought to be made, a major examination on every subject alike. Why a second, and minor, examination should be requisite, for security of the public, is to me, at least a profound mystery.

Another part of the conjunct scheme is, that the candidate whose aim is a corporation licence, shall receive one on passing his trials. For this favour the corporations are to divide among them a large proportion of the fees. That most ticklish of all points, their respective shares, has wisely not been mooted hitherto. But this much we know. The corporations will receive large fees, without taking the slightest trouble for them,—a provision which looks odd when thus plainly expressed, but which is necessary to compensate them for the loss of fees now received for their own examination and licence.

The reasonableness of some such compensation is apparent to us of the present generation, who will, therefore, easily submit to it. But our followers in the next generation, probably as restless and fond of change as ourselves, will be apt to take a different view, when they find themselves severely mulcted for little or nothing,—for no privilege whatever,—for an empty title only. It is mere vanity to set forth as an equivalent the advantages of museums and libraries, which no one can enjoy who is not a resident of one of the three capitals. In no long time a new agitation will arise upon the most hateful, but most potent, of all themes,—a money question; and it is easy to foretell the result. In fine, the Universities may withstand the threatened revolution. But the corporations will be in danger of becoming mere clubs. Universities are a necessity for the highest walks of professional education in every civilised land. Corporations are not so situated. In the whole Continental kingdoms there is not, and there never has been, anything approaching in constitution to our British Incorporated Colleges. Some, perhaps, may be disposed to ask: "Why, then, should corporations exist in any country?" and a rumour has reached us here that this question has been actually whispered among some vigorous reformers in the South. But I apprehend that such a question will find no resting-place in this Association or in any other public medical body; and I mention it merely to give a little cogency to my fears, that, if the corporations part with their present important privilege, and the most important of the duties for which they were chartered,—that of examining themselves the candidates for their licenses,—they may find they are opening the door for the question being seriously raised at some future period.

Why, then, venture on a complex plan of examination difficult to carry out, far from sure to attain its object, fraught with hidden dangers, and opposed by some of the chief professional bodies concerned? Why not rather take advantage of the present system, itself indeed complex enough, but nevertheless the gradual product of the wants and the wishes of a free people, not, therefore, to be lightly set aside? Why not correct it, and improve it through means which the legislature has not long ago put into the hands of our profession for the very purpose. The present entrance door to the medical profession is not really, though nominally, an University, a Royal College, an Apothecaries' Hall, or a Faculty of Physicians and Surgeons; it is an examination. There is no reason I can discover why the examinations of all these bodies, numerous though they be, may not be brought up to a reasonable standard of equivalence, now that the Medical Council have put forth their strength towards that end. Let their endeavours have a fair trial. Should the result prove unsatisfactory owing to insufficient control, support them in obtaining more direct powers; and allow time for further trial. This surely is a wiser course than to rush upon untried treacherous ground, and daring measures entirely novel, which, though on the surface they promise reform, at bottom threaten revolution.

Allow me, in conclusion, to add a brief word or two on the general question. In this kingdom, three denominations of practitioners are provided by education and examination—1. The ordinary class of general practitioners in town and country; 2. High-class physicians and surgeons, who practise chiefly in cities and large towns; and 3. An intermediate order, educated on the footing of the highest attainable education for the greatest possible number, and whom circumstances may attach, some to the first, some to the second class.

The corporations provide the first class by their license; and most of them, by means of their Fellowship, enable licentiates to pass into the second class, if they please. The two great and old English Universities, through means chiefly of a protracted education, and the London University by elaborate examinations, aim at producing the second class, at least in physic, ready made, so to speak. The founders of medical

education, as well as their successors, in the three Scottish University Schools, and likewise, I think, in those of Ireland, have aimed at supplying the third class, by supplying the highest education attainable by the greatest number.

It is no part of my present undertaking to settle which of the three educational aims is the most important. They are all highly so. It is as little a part of my present undertaking to inquire which of the three objects have been satisfactorily reached by the several bodies entrusted with them. All have undoubtedly been more or less successful; and none can be charged with failure. But I claim for the Scottish Universities, and eminently for the University of Edinburgh, that they have attained the object for which they were destined, by supplying to the greatest number the highest education of which that number can take advantage; that also they enable men of superior original talent or industry to go out from their schools with high qualifications, not inferior to those of the graduates of any of the English Universities; that these results flow from their system of education and examination, the fruit of long educational experience; and that their elasticity is such as to render it easy for them to adapt themselves to the progress of knowledge and of public opinion. It is well known that the Universities' Commissioners, under the Act of 1858, took infinite pains to effect such adaptation at that time. I have put before you the remarkable result. Surely, it is not too much to ask, that the Universities of Scotland shall not be disturbed by further and doubtful innovations during so important an experiment, following recent and serious changes; and I venture to submit, that their neighbours may do worse than watch a little longer the experiment going on here before they venture upon dangerous innovations for themselves.

GLYCERATE OF BORATE OF SODA.—M. E. Gandolphe, according to the *Pharmacie de Lyon*, June 20th, 1875, has remarked that cold medicinal glycerine dissolves its own weight of borate of soda; whilst 100 parts of distilled water dissolve only $8\frac{1}{2}$ parts of the salt, and 100 parts of hot water dissolve 50 parts, of which 41.67 parts are precipitated by cooling. To obtain the desired solution, M. Gandolphe recommends that 100 parts of medicinal glycerine and 100 parts of powdered borate of soda be triturated together in a glass mortar until the solution is complete. The solution of the borate of soda in the glycerine may be accelerated by placing the mixture in a stove, or by introducing it into a flask, and submitting this to the action of the water-bath. In gargles, the borate of soda is generally combined with honey, or honey of roses, or even with syrup of mulberries; that is to say, with products which dissolve a very small quantity of this salt. It would, therefore, be advantageous to compound these measures with equal parts of glycerine and borate of soda. A definite and considerably more active solution is thus obtained; for glycerine mixes well with honey, as well as with syrups.

INTERMITTENT SPINAL PARALYSIS.—In an inaugural dissertation (Halle, 1874), H. Hartwig describes the following case. A sugar-baker aged 23, who was exposed to great heat and sudden changes of temperature while very lightly clothed, had suffered in his eighteenth year for four or five weeks from an attack of tertian ague, from which he recovered. One day he perceived a numbness in his legs, which rapidly attacked his arms also, and finally led to complete paralysis of the muscles of the neck. Speech, deglutition, and respiration were somewhat impeded; the muscles of the eye were unaffected, as were also the alvine and urinary excretions, and sensation. After twenty-four hours, there was a remission of the symptoms; first the neck began to become movable, then the fingers, arms, body, and finally the legs. All this took place in half an hour, and was followed by an increase of perspiration. During the next twenty-four hours, the patient remained free from paralysis, but was dull; after which, the above described symptoms returned. The brain was always free; the cervical portion, especially the upper, was not always equally affected; the movements of the neck were often free; and difficulty in deglutition and respiration, inequality of the pupils, and myosis, were frequently present. The phrenic nerve was always unaffected. When there was not complete paralysis, the affected limbs were generally stiff, and there was contraction of the predominating groups of muscles; when complete paralysis was present, the muscles were soft and flabby. Electromuscular irritability was almost completely absent during the paralysis, and the violence of the muscles varied. Under the use of quinine, the patient's condition was on several occasions quickly improved, but he was not cured. He was under observation for more than six months. The author believes that the case was one of masked intermittent, and that the phenomena were due to hyperæmia of the cord and occasional increase of serous exudation.—*Centralblatt für die Medicin. Wissenschaft.*, June 5th.

ADDRESS IN MEDICINE,

BY
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ANCIENT AND MODERN PRACTICE OF MEDICINE.

WHEN the late distinguished Professor of Logic and Metaphysics in the University of Edinburgh inquired, "Has the *practice* of medicine made a single step since Hippocrates?" and, in vindication of his own belief in the negative conclusion, referred to the recorded opinions of several eminent authorities of modern times in the profession, he put a question which no thoughtful mind within the pale of medicine will be inclined to evade, and the consideration of which, after some sort, may suitably engage our attention in such a meeting as the present.

Sir William Hamilton, in penning the question referred to, had under review "An Account of the Life, Lectures, and Writings of William Cullen, M.D.," the famous Professor of the Practice of Medicine in the University of Edinburgh from 1769 to 1790, by Dr. John Thomson; and having noticed, in terms of well-deserved commendation, the masterly execution of his task by the eminent author of the *Lectures on Inflammation*, and accompanied him in a brief survey of the doctrines promulgated by the renowned triumvirate of the early part of the eighteenth century, to wit, Hoffmann, Stahl, and Boerhaave, he was tempted by a mild reflection of Cullen on the practice of Stahl, which censure, indeed, was judged too indiscriminating by Dr. Thomson, to indulge in a philippic against the modern practitioners of the healing art, quoting what for his purpose appeared to be the apposite phrase of Hoffmann, "Fuge medicos et medicamenta si vis esse salvus", and that of Celsus, "Optima medicina est non uti medicinâ". The vehemence of Sir William Hamilton's denunciation is more fully explained by a note, published in 1853, to the original article, which had appeared in the *Edinburgh Review* for July 1832, where it is shown that the dangers which are to be apprehended in the practice of medicine arise, in Sir William Hamilton's opinion, from the illiterate rashness of its practitioners, for he transfers to his pages, with very evident satisfaction, the statement of Dr. Gregory: "I think it more than possible that in fifty or a hundred years the business of physician will not be regarded, even in England, as either a learned or a liberal profession." If the medical faculty of the University of Edinburgh had in any measure justly laid itself open to the charge of hastening the decadence of learning in the profession, it will be admitted by every dispassionate inquirer that the statutes and regulations of that University relative to degrees in medicine entitle it, at the present time, to be regarded as in the van of those bodies which are striving for the honour and advance of the medical profession. It is, indeed, impossible to read the animadversions of Sir William Hamilton without coming to the conclusion that learning in the practitioners of medicine, by which he evidently understood general culture and, in particular, classical attainments, was, in his opinion, the great desideratum. Between learning of the nature referred to, and usefulness in medicine, as dependent upon ample professional qualifications, there is really nothing antagonistic. Not a few of the most distinguished men in the profession in quite recent times have been accomplished scholars. But, while this holds true, let it be distinctly understood that learning of the kind in question is not supreme: it is secondary in importance to ability in the healing art. I make bold to say that not a few physicians, with no pretension whatever to learning, have served their generation well, and have done much to recommend the profession they zealously cultivated, if they cannot be said to have adorned it. If, therefore, it were necessary to decide between the claims of medicine as a learned or so-called liberal profession and as a useful art, the preference must be awarded to the latter. Let us be thankful, however, that no such issue is before us. Medicine is a liberal profession, and will, doubtless, continue to be so, although the diffusion throughout its ranks of polite learning may have become diminished, a result which is to be in no small measure attributed to the very great enlargement which has taken place in all that is proper to medicine itself. Think of the rapid advances which have been made during the last thirty years in such departments of medicine as animal chemistry, physiology, pathology, and psychology; and then consider how limited is the time at the disposal of him who is expected

to acquire at least a competent knowledge of these sciences, for the cultivation of other subjects, however elevating and attractive. That there exists nothing hostile in the study of medicine, as now pursued, to distinction in other walks, is evident from the circumstance that members of our profession, in no way favourably placed for the study, have achieved distinction in scholarship. Look at the career of the late Francis Adams, toiling as a country surgeon in Aberdeenshire, and yet distinguished as the translator of Hippocrates, Aretæus, and Paulus Ægineta. Who can fail to sympathise with the feelings of that accomplished man when, in drawing his *magnum opus* to a close, he thus expressed himself: "I shall conclude this argument and my present task, by quoting the memorable words in which Cicero apologises for his having spent a certain portion of his time in the cultivation of elegant literature and of philosophy, leaving the reader to apply the same in the case of Hippocrates, and, I may be permitted to add, in that of the humble editor of the present volume, who trusts he shall not be set down as an idle and unprofitable practitioner of the art because he has found leisure, amidst the turmoil and distraction of a professional life, to communicate to his countrymen the important opinions contained in the genuine remains of the Coan sage."

It has been my happy lot to meet with others who, although less distinguished, some indeed wholly unknown to fame, have cultivated, in circumstances quite as trying, their natural taste for classical and other learning.

"Along the cool sequester'd vale of life
They kept the nearest tenor of their way."

In remote districts of the country, undergoing a daily round of fatigue and anxiety, which must needs try the strength both of body and mind to the very utmost, mine, moreover, has been the privilege to meet and have friendly intercourse with men, who were ably discharging the duties of their calling, and were at the same time being leant upon by the whole community in which their lot was cast, not only as the advisers in sickness, but as persons on whose counsel and judgment all reliance was to be placed.

Having formed the acquaintance of such men, I have with pride reflected on the circumstance that the individuals who were the recipients of so much confidence, and whose friendship was so highly prized, were members of the profession to which we have the happiness to belong. It is not the least of the advantages possessed by membership of this great Association, that in our annual meeting the bands of fellowship among us are apt to be greatly strengthened.

The question of Sir William Hamilton, to which reference has been made, leads us, in the first place, to a brief consideration of the practice of medicine at the period of Hippocrates.

Intimately acquainted, as Sir William Hamilton was, with the whole history of philosophy, he knew the close alliance which existed between philosophy and medicine in ancient times. The most renowned philosophers, antecedent to and contemporaneous with Hippocrates, applied themselves to the study of medicine. Numerous are the references to medicine in the writings of these philosophers. Take, for example, the following passage from the *Phædrus* of Plato, in which not only is the relation referred to, but the name of Hippocrates is introduced.

Socrates remarks: Rhetoric is like medicine.

Phædrus. How is that?

Socrates. Why, because medicine has to define the nature of the body, and rhetoric of the soul, if you would proceed not empirically but scientifically; in the one case, to impart health and strength by giving medicine and food; in the other, to implant the conviction which you require by the right use of the words and principles.

Phædrus. You are probably right in that.

Socrates. And do you think that you can know the nature of the soul intelligently without knowing the nature of the whole?

Phædrus. Hippocrates the Asclepiad says that this is the only method of procedure by which the nature of the body can be understood.

Socrates. Yes, friend, and he says truly. Still, we ought not to be content with the name of Hippocrates, but to examine and see whether he has reason on his side.

Phædrus. True.

Socrates. Then, consider what this is which Hippocrates says, and which right reason says about this or any other nature.

(*The Dialogues of Plato*, by B. Jowett, M.A., vol. i, page 605.)

But, while occupied with the study of medicine and engaged in speculations as to the phenomena of disease, it is in the highest degree improbable that these philosophers ever practised the healing art. It is, indeed, worthy of remark that in subsequent, although still ancient, times, the intimate connection which had subsisted between philosophy and medicine was not regarded as favourable to the growth of the latter, and the share he had in effecting their divorcement is held by Celsus as

a reason for eulogising Hippocrates. "Hujus autem, ut quidam cederunt, discipulus Hippocrates Cous, primus quidem ex omnibus memoria dignis, ab studio sapientie disciplinam hanc separavit, vir et arte et facultia insignis" (*De Medicinâ*, liber primus). Medicine, however, had been cultivated after a fashion long antecedent to the birth-time of philosophy. The doctor-priests of the Grecian temples, or Asclepiadæ, had acknowledged Æsculapius as its origin. The Asclepia, or temples, were erected in many parts of Greece, were ruled by the Asclepiadæ, and used in a manner not very unlike that in which hospitals are employed in modern times. To them the sick resorted for advice and cure. In one of the most distinguished of these temples, namely, that of Cos, built on the island of the same name, one of the Sporades, a group of scattered islands, as their appellation denotes, in the Ægean Sea, off the island of Crete and west coast of Asia Minor, Hippocrates, inheriting a recognised position, acted as an Æsculapian priest. He had been born, in all probability, in the four hundred and sixtieth year before the birth of Christ. But Hippocrates had not only the advantage of the most favourable study in the Asclepion of Cos; we know, on excellent authority, that, under the direction of Herodicus of Selymbria in Thrace, he became intimately acquainted with the practice then pursued in the gymnasia, while, through the instructions of Gorgias and Democritus, the former of Leontini in Sicily, the latter of Abdera in Thrace, and himself illustrious as the originator of the doctrine of atoms, he became thoroughly versed in the literature and philosophy of the age.

The foundation of the practice of Hippocrates, with which we are now more immediately concerned, was experience; but this experience of Hippocrates was rational in character, not a mere blind or misguided empiricism. No one could be more convinced of the fallaciousness of a blind empiricism than he was, and his condemnation of it may be recognised in the earliest, the best known, and, perhaps, the grandest of all the Hippocratic aphorisms, "ἡ πείρα σφαλὲς, ἡ κρίσις χαλεπή". "experimentum periculosum, judicium difficile". Hippocrates believed in the existence of a principle, a spiritual essence, the preserver of all things in nature, the restorer of whatever had become disordered. The regulation and superintendence of all the actions of the system were due to this principle, to which he gave the name of Φύσις, Nature. Thus, he was led to consider that the chief duty of the physician consisted in watching the operations of Nature, endeavouring, as might be the case, to promote or restrain these, possibly in some, but these very rare instances, to counteract them. "Our natures", he remarks, or, if not he, one of his immediate descendants, who may reasonably be supposed to be expressing the views of the master, "our natures are the physicians of our diseases". "Νούσων φύσις ἰητροί". It is in reference to this exposition of the function at once of Nature and the physician in relation to disease, that Sydenham, "the chief of English practical physicians", who in many particulars resembled the Father of Medicine, observes: "He it is whom we can never duly praise. He it is who then laid the solid and immovable foundation for the whole superstructure of medicine, when he taught that 'our natures are the physicians of our diseases.'" And, again, "The great sagacity of this man had discovered that Nature by herself determines diseases and is of herself sufficient in all things against all of them". The belief which Hippocrates had in this "vis conservatrix", "vis nature medicatrix", would, in the first place, make him, as we know from his writings he really was, a very close observer of the operations of nature. It would further render him cautious in regard to interference with these, and resolute in his determination, as it has been said, "to have two special objects in view, with regard to diseases, namely, to do good, and to do no harm". There is, however, no ground for concluding that Hippocrates was an inert or purely expectant practitioner. On the contrary, there is abundant proof in the works which bear his name that, in limiting, as Sydenham has expressed it, "the province of medical art to the support of Nature when she was enfeebled, and to the coercion of her when she was outrageous", Hippocrates found occasion to be bold and decided in his method of treatment. His employment of powerful remedies is best exhibited in the instances of diseases which, according to the humoral doctrine promulgated by him, were to be relieved by the discharge of some peccant humour. Evacuants of various kinds were used with this intention, purgatives more especially, but likewise emetics, diuretics, and sudorifics. He drew blood by means of the lancet, the scarificator, and the cupping instrument, but with what careful consideration and thoughtfulness is well shown in the treatise *Περὶ Διαιτης Ὁξέων*, *On the Regimen in Acute Diseases*, in which he remarks concerning the treatment of pleuritis: "But if the pain be not removed by the fomentations, we ought not to foment for a long time, for this dries the lungs and promotes suppuration; but if the pain point to the clavicle, or if there be heaviness in the arm or about the breast, or above the diaphragm, one should open the inner vein at the elbow and

not hesitate to abstract a large quantity of blood, until it becomes much redder, or, instead of being pure red, it becomes livid; for both these states occur." What forcibly strikes the reader of the passage now quoted, and of those passages which immediately precede and follow it, is, as indeed Galen among the ancient and many of the modern commentators of Hippocrates have carefully noted, the manner in which the Father of Medicine commences with the milder means of affording relief from the pain of pleuritis, such as the employment of fomentations, the rules for the preparation and application of which, as laid down by him, are simply admirable; and only in the event of these failing to accomplish the object in view he counsels that recourse should be had to bloodletting and the use of other powerful remedies, including cathartics. In another part of the same treatise, the following rule is laid down for the employment of bloodletting: "Bleed in the acute affections, if the disease appear strong and the patients be in the vigour of life, and if they have strength." Surely, this is a most cautious limitation of the circumstances in which the remedy is, in the mind of the writer, to be advantageously employed. In one passage, however, if not in more than one of the Hippocratic writings, there is reference made to the production of "deliquium animi", "leipothymia", or "leipopsychia", as the Greeks termed it, by bloodletting in the treatment of acute diseases. This rule, which was opposed by the ancient authorities generally, cannot be said to have been invariably acted upon by Hippocrates.

A study of the method of treatment pursued by the Father of Medicine and his immediate descendants exhibits the fact that their rules of procedure were all based on experience. He had the merit of discovering the great truth, that accurate observation in medicine is the real foundation of all knowledge, and he proceeded in the true spirit of the inductive philosophy to generalise solely from the phenomena thus observed. It can never cease to afford material for wonder that through the genius of one man so much was accomplished, when we reflect on the circumstance that in the time of Hippocrates human anatomy had scarcely, if at all, been practised, that physiology was virtually unknown, and the use of remedial agents was almost entirely limited to articles of the vegetable kingdom, and these the indigenous plants of Greece and the neighbouring countries. To the subject of diet and regimen, however, Hippocrates paid the greatest attention. In the Hippocratic writings, there occur terms which exactly correspond with those we so frequently employ: full, ordinary, and low diet. In the treatise *Περὶ Ἀγμάτων*, the following passage occurs: "A diet slightly restricted will be sufficient in those cases in which there was no external wound at first, or when the bone does not protrude; but one should live rather sparingly until the tenth day, as being now deprived of exercise; and tender articles of food should be used, such as moderately loosen the bowels; but one should abstain altogether from flesh and wine, and then by degrees resume a more nourishing diet." And so, not to multiply quotations, in the treatise already referred to, and in *Ἀφορισμοί*, there are many interesting and instructive suggestions to be found regarding the administration of food and wine. It is sufficient, in passing, to make a brief reference to the paramount importance Hippocrates attached to the doctrine of crisis, and to the bearing which this had on the treatment of diseases. The doctrine of crisis, indeed, was an essential part of his system of humoralism, and had in consequence an intimate connection with the method of treatment he pursued. Critical events were evacuations of different kinds, occurring chiefly by the skin, bowels, and kidneys.

With the views he entertained as to crisis, there is further intimately blended the so-called Hippocratic doctrine of critical days. Galen expressly affirms that Hippocrates was the first author who treated of these; but, whether this be true or not, we know that he attached very considerable importance to the doctrine. "Fevors", he remarks, "come to a crisis on the same days as to number on which men recover and die." It was the particular attention given by Hippocrates to the tendencies manifested by diseases to recovery, or, on the other hand, to an unfavourable termination, also to the occurrence of evacuations or of crises in their course, that led to the remarkable care with which he studied the whole subject of prognosis. There is no more interesting or valuable work in the whole Hippocratic collection than the one entitled *Προγνωστικόν*, *Prænotiones*, *Prognostics*; and happily concerning its authenticity, as the undoubtedly genuine work of the Father of Medicine himself, there has never been any question.

Again, we should be doing serious injustice to the Father of Medicine were we not to notice, and that in terms of the very highest commendation, the profound sagacity exhibited by him in the observation of the influence of external agents on men in health and on disease. This is fully exhibited in the treatise *Περὶ Ἀερίων, Ὕδατων, Τοπῶν*, in which the operation of the atmosphere, of particular seasons, situation and dwellings of the people, in the production of health and dis-

eases of different kinds is discussed. Dr. Adams says of it that "it relates to a subject of commanding interest and deserves to be carefully studied, as containing the oldest exposition which we possess of the opinions entertained by an original and enlightened mind on many important questions connected with public hygiene and political economy, two sciences which of late years have commanded a large amount of professional attention". Since this passage was written by Dr. Adams, greatly increased interest has been awakened in these subjects. I venture to affirm that the most enlightened inquirer concerning public health, be he legislator or physician, will find much to instruct him in the pages of Hippocrates.

The narration of individual cases of disease commenced with Hippocrates; he may, indeed, be said to have been the originator of the clinical study of medicine. By way of comparison between ancient and modern medicine, some clinical observations of Hippocrates may be quoted in the first place, and thereafter certain passages cited from a modern clinical lecture not unworthy of being placed alongside of the former. In the first book of the *Epidemics*, *Ἐπιδημιῶν, α*, it is thus written: "Philiscus, who dwelt near the wall, was laid up. On the first day, fever acute; he perspired; night very disturbed. Second day, aggravation of symptoms; in the evening, an injection procured a good stool; night quiet. On the morning of the third day, and up to noon, appeared free from pain; but in the evening, acute fever, with perspiration; thirst, tongue dry; passed black urine; night disturbed; he did not sleep at all; his mind wandered on all subjects. On the fourth day, general paroxysms; urine black; night more endurable; urine of improved colour. On the fifth day, about noon, a little blood escaped from the nostrils; urine varied in appearance with thready clouds resembling semen irregularly suspended in it. The urine did not deposit. A suppository caused passage of some feculent matter with wind. Night distressing; little sleep; talkativeness; delirium; extremities very cold, and could not be warmed; the patient voided black urine; he rested a little towards daybreak; lost speech; had a cold sweat; extremities livid. About the middle of the sixth day, he died. The respiration was throughout large and rare, like that of a person who required to be reminded to breathe. The spleen was swollen, and formed a roundish tumour. The perspiration continued to be cold till the end; the paroxysms were on even days." It is to the description here given of the patient's breathing that I wish particularly to call attention. The words employed by Hippocrates are "Τούτω πνεύμα διὰ τέλειος ἀραιῶν μέγαν". Galen's commentary on the passage justifies the rendering which has been adopted. Further, we know that the word *ἀραιός*, when used by Hippocrates, whether in reference to the respiration or the pulse, invariably signifies "infrequent", "few in number", "with intervals". Before offering a few observations on this clinical history, I shall give an extract, or rather extracts, from a case recently recorded by Dr. Laycock (*Dublin Journal of Medical Science*, 1873). "J. O'H., aged 56, labourer, admitted to hospital November 18th, 1863. No family history obtainable. Previously to admission, was employed in sinking a well, which kept him constantly wet; he has not been a temperate man, but enjoyed good health up to four days before his admission. On that day, he complained of pain in the chest and some shortness of breath. He attributed this to overwork, but it was so severe as to oblige him to leave off work, and he consequently went to bed. Next day, felt better; but the day after he felt very giddy, and was forced to return to bed. On the 17th, about 7 A.M., his wife found him lying half out of bed, and passing urine on the floor; when spoken to, said his left arm felt very heavy, and he could not move it, and that the left leg was the same; he also complained of headache, frontal and temporal, but not severe." There follows a detailed and interesting statement regarding the patient's condition on admission to the Royal Infirmary. I quote the account of his breathing: "Breathing appears calm for the most part, with frequent intervals of accelerated and laborious breathing. When the act of respiration is suspended, the fact of coughing once or twice does not seem to bring it back; but, if the patient is roused and made to speak, respiration is resumed. The cessation appears to be quite regular in point of time, occupying generally about thirty seconds, and respiration then continues for about twenty-five respirations. The heart's action at such times was accelerated and tumultuous." The progress of the case is recorded as follows. "On December 1st, complained of pain in the right side; friction sounds detected; coughs slightly; no expectoration; delirium occurred during the succeeding night; the following morning, said he was better, and the ascending and descending respiration was not observed; friction heard in the right infra-axillary region; the right side moved but slightly in respiration, which was chiefly diaphragmatic; dulness was perceived over the right base posteriorly, where also friction and fine crepitation were heard. On the 3rd December, the respiratory phenomena were less marked; but on the

4th, weeping was observed in the afternoon, although the patient was cheerful about himself, and the peculiar breathing was again manifested. On the 5th, heart's action was calmer; œdema of the left hand commenced. On the 9th, œdema of the lower part of the left thigh; foot and lower part of leg very cold. On the 12th, a fresh pulmonary attack commenced, the left pleura now being the seat. During the three following days, there was considerable delirium; he was very troublesome at night, crying out and groaning. On the evening of the 16th, he had more frequent paroxysms of apœnea; the cardiac action was hurried, about 130 per minute, but regular. On the 18th, the symptoms were found to have subsided somewhat; but on the evening of that day dyspœnea came on, with greatly increased feebleness; pulse about 60, and irregular; respirations hurried and forcible, from 45 to 50 per minute. The pulmonary symptoms had become greatly aggravated, and the patient died about one o'clock on the morning of the 20th. *Post mortem* was not permitted."

The case of Philiscus, as recorded by Hippocrates, is one of great interest. The occurrence of accession of fever towards the evening of the third day, freedom from fever having been noted in the morning, with supervention of several unfavourable symptoms, in particular great thirst, dry condition of the tongue, black urine, delirium, and coldness of the extremities, led Galen, in his commentary, to remark that the fatal issue of the disease might have been anticipated. It is, however, in respect to the peculiar character of the breathing that the case of Philiscus acquires its chief interest, and it is in this particular that a resemblance is to be found between the ancient and the modern clinical examples now quoted. The attention of Hippocrates had been arrested by the peculiar character of the breathing which existed throughout the fatal illness of Philiscus. Surely, it is matter of interest and for reflection that the respiration described by Hippocrates as *ἀραιῶν μέγαν*, "rare and large", and to which Galen has attached the meaning "like a person who forgot for a time the need of breathing, and then suddenly remembered", or "the respiration throughout, like that of a person recollecting himself, was rare and large", has attracted great attention in quite recent times. The expression used by French writers, "besoin de respirer", corresponds in some measure to the meaning which is sought to be conveyed by the Greek words. In Latin, the rendering is, "Spiratio huic perpetuo rara et magna fuit". Daremberg, the learned French editor of Hippocrates, thus translates the passage: "La respiration fut constamment grande, rare comme chez quelqu'un qui ne respire que par souvenir." The relation of this peculiar character of the breathing with which, under the name of "ascending and descending inspiration" of the eminent Dublin physician Dr. Stokes, the profession is now familiar, to lesion of the nervous system, was, of course, unknown to Hippocrates, and for many subsequent ages could not be known to those who were ignorant alike of anatomy and physiology. In recent times, it has been described by the late Dr. Cheyne of Dublin. "For several days", wrote Dr. Cheyne, in 1816, in his account of a patient, aged 60, who had fatty degeneration of the heart, with irregular and intermittent pulse, and whose death was due to apoplexy, "his breathing was irregular; it would cease for a quarter of a minute, then it would become perceptible, though very low, then by degrees it became heaving and quick, and then it would gradually cease again. This revolution in the state of his breathing occupied about a minute, during which there were about thirty acts of respiration." Subsequently, Dr. Stokes connected the peculiar respiration with a weakened state of the heart, "a phenomenon to be looked for in many cases of fatty degeneration". I have never seen it, remarks the same authority, except in examples of that disease. In his description of it, Dr. Stokes observes: "It consists in the occurrence of a series of inspirations, increasing to a maximum, and then declining in force and length, until a state of apparent apœnea is established. In this condition, the patient may remain for such a length of time as to make his attendants believe that he is dead, when a low inspiration, followed by one more decided, marks the commencement of a new ascending and then descending series of inspirations. This symptom, as occurring in its highest degree, I have only seen during a few weeks previous to the death of a patient. I do not know any more remarkable or characteristic phenomena than those presented in this condition, whether we view the long continued cessation of the breathing, yet without any suffering on the part of the patient, or the maximum point of the series of inspirations, when the head is thrown back, the shoulders raised, and every muscle of inspiration thrown into the most violent action; yet all this without any *rdle* or sign of mechanical obstruction." Dr. Stokes refers to the fact of the sighing respiration, which is closely allied to the more formidable ascending and descending respiration, being observed in persons who are labouring under certain forms of gastric and hepatic derangement, and in connection with undeveloped gout, and likewise to the significant fact of Laennec having described a form of asthma with puerile

respiration, while the illustrious French physician attributed the malady to some special modification of nervous influence.*

Dr. Little of Dublin, in an able paper published in 1868, while alluding to the peculiar breathing, as Dr. Stokes had done, with organic disease of the heart, does not admit its special connection with fatty degeneration, but believes it to accompany atheroma of the aorta, valvular lesions, and hypertrophy, as well as dilatation of the left ventricle. Dr. Little has suggested as a theory of its causation, that, in consequence of the existence of one or other of the lesions mentioned, there is an unequal action of the two ventricles. Consequently, the left ventricle is unable to propel the aerated blood, and stops now and then. This blood, therefore, remains in the lungs, pulmonary veins, and left auricle; and, as it has already been fully oxygenated, it no longer stimulates the respiratory centre through the vagus. Thus, the venous blood which is requisite to excite the vagus branches is not supplied, consequently respiration ceases, and the breathing takes on this irregular action. By degrees, the contractions of the ventricle partially free the auricle and pulmonary veins; venous blood is again sent to the lungs, which stimulates the filaments of the pneumogastric and causes respiration to begin. Dr. Laycock, in his valuable contribution to the pathology of the ascending and descending respiration, or, as he terms it, "recurrent brief apnoea", from which I have already quoted, while offering objections to the completeness of the explanation according to Dr. Little's ingenious theory, does not hesitate to concur in the opinion that the vagus system is involved.

It is worthy of remark that, in the case of Philiscus detailed by Hippocrates, sleeplessness was a notable feature; and, although the febrile condition under which the patient laboured may be the explanation of this symptom, it is at least as reasonable to suppose that the neurosis of the vagus on which the peculiarity of his breathing depended was its cause.

Laennec, the illustrious French physician, the modern discoverer of auscultation, he to whom we are indebted for the introduction of auscultation and for the great light which his discovery shed on the diagnosis and treatment of diseases of the chest, has rendered due credit to Hippocrates. To the Father of Medicine indeed, and to Aretæus, among the ancients, Laennec confesses that he was alone indebted for any information on the subject which he has so signally made his own. He expressly states that Hippocrates practised immediate auscultation. "Hippocrate avait tenté l'auscultation immédiate"; and, in proof of his having made trial of this means of diagnosis, he refers to the well known passage in the treatise *Περὶ Νουσῶν, τὸ Δευτέρον, De Morbis*, Liber secundus, a work which there is good reason for believing, although not composed by Hippocrates himself, was written either by one or more of his contemporaries or by some among his immediate descendants in the school of Cos, in which it is made clear that Hippocrates fell into error in supposing his ability to distinguish between the presence of water and of pus in the chest, by the peculiar sound heard on applying the ear. It is in the same chapter, and in close relation to the same subject, that Laennec makes the remarkable statement—a statement which cannot be read without feelings of admiration for the candour and modesty of that distinguished man—that he had read the passage in Hippocrates many years before the commencement of certain experiments in physics, which suggested to him the idea of mediate auscultation, but he never entertained the idea of repeating the experiment of Hippocrates; it passed entirely into forgetfulness; he simply regarded it as one of the errors into which that great man had fallen. But the passage reverted to his mind when he commenced his researches; and he felt surprise that its consideration had not proved suggestive to some readers. The error made by Hippocrates, Laennec further remarks, might have led him to the discovery of many valuable truths. He concludes a remarkable passage in the following words: "But Hippocrates stopped with an incorrect observation, and his successors overlooked its import. This, at first sight, may appear surprising; nevertheless, nothing is more common. No man is permitted to embrace all the relations and consequences of the most simple fact; and the secrets of Nature are more frequently disclosed by accidental circumstances than they are wrested by scientific efforts" (*De l'Auscultation Médiate*, Première Partie, chapitre iii). Under the designation of Hippocratic succussion, we possess, as is well known, a means of physical exploration of the chest, which was practised by the Father of Medicine. In the same treatise as that already referred to, the method of

procedure in the use of this means is laid down. It is directed that, after the patient has been carefully washed with warm water, he is to be placed in a firm seat, and his hands held by an assistant; the physician meantime, taking him by the shoulders, shakes him, and attentively listens in order to determine on which side of the chest a sound is occasioned. Further, the rules for the treatment of empyema by operation are given with precision; it is directed that recourse is not to be had to paracentesis before the fifteenth day from the commencement of the effusion; where pain is chiefly felt and swelling is most conspicuous, the opening is to be made, while a preliminary incision through the integuments precedes the penetration of the pleura effected by a sharper and more pointed instrument, protected by a piece of cloth. In some instances, it is mentioned, the perforation of the thoracic parietes was made, not through an intercostal space but through a rib, a plan revived in recent times by M. Reybard. When a sufficient quantity of pus has been permitted to flow, the wound is to be closed by means of a portion of linen cloth attached to a thread. Daily a similar quantity of pus is to be evacuated. On the tenth day, when the whole of the collection has been allowed to escape, a mixture of tepid oil and wine is to be injected through the opening, for the purpose of cleansing the lung. This part of the operation is to be practised twice daily; the injection of the morning being withdrawn and replaced by a fresh quantity in the evening, and so on. At length, when the purulent fluid has become clear and thin, a metallic sound is to be introduced, the size of which is to be gradually lessened as the fluid itself diminishes; thus, the wound is permitted to cicatrize.

The interest attached to the description now quoted is heightened by a consideration of certain shrewd observations bearing on the same subject, and which occur not in the same treatise alone, but in other of the Hippocratic works, notably in the book of *Aphorisms*. An empyema on the left side, the author remarks, is less dangerous than on the right. When the pus was clear, and studded more or less with sanguinolent threads, that appearance indicated the probability of a satisfactory recovery; but, on the other hand, if, on the first day of its removal, the fluid possessed a colour like the yolk of egg, while on the succeeding day it was thick, having a pale green hue, and emitting a foetid odour, it was likely that the sufferer would not recover, but shortly die. Again, the sufferers from empyema and dropsies treated by incision or by the cautery, certainly perish if the pus or water be suddenly evacuated. Everyone acquainted with the history of paracentesis thoracis knows that it dates from the period of the Father of Medicine. The dogmatic statements which are to be found in the Hippocratic writings may not all be accepted without question in the present day, but it is remarkable how much truth there is in several of these. One of the highest living authorities on diseases of the chest, Dr. Walshe, comments the precept of Hippocrates, that paracentesis should not be performed before the fifteenth day of effusion, unless the accumulation of fluid be so great as *per se* to threaten life; while he questions the accuracy of the observation made in the ancient time, and adhered to pretty closely in subsequent ages, that success is less likely to follow operations when the fluid has been from the first purulent in character than when sero-albuminous (*Diseases of the Lungs*, 4th edition, page 281).

The modern history of thoracentesis is very interesting. Since the writings of Trousseau in its recommendation, and the still more powerful example of our transatlantic brethren, chiefly Dr. Bowditch, the remedy has become one commonly resorted to. In the article Pleurisy, contributed to the third volume of Dr. Reynolds's *System of Medicine* by a physician, whose premature death the profession had recently occasion to deplore, will be found an interesting account of what Dr. Anstie called a new era in the treatment of pleurisy. The new era is, however, signalled rather by the discovery and introduction of such new instruments as the suction-instrument of Dr. Wyman, so efficient in the hands of Dr. Bowditch, and the aspirator of M. Dieulafoy, than by any novel suggestion regarding the treatment of the disease. If, as is not unlikely, we have recently attained to something like perfection in the diagnosis and treatment of pleurisy, a dispassionate review of the history of the disease in ancient and modern times will justify the application of the dictum of Seneca, "Multum egerunt qui ante nos fuerunt sed non peregerunt".

It would be very easy to multiply references to important and suggestive passages in the Hippocratic writings tending to establish yet more fully the truth of the statement that the Father of Medicine was enabled, by the exercise chiefly of his most remarkable powers of observation, to acquire a really wonderful amount of accurate information regarding the causes and progress of diseases as well as the influence exerted by various remedies over them. Enough has, however, been stated to justify Sir William Hamilton in exalting the reputation and praise of Hippocrates. Was Sir William entitled to depreciate the medical practitioners of his own time, which he surely did when ex-

* "Cependant le malade étouffe; et, comme nous venons de le dire, il aurait besoin d'une respiration plus étendue que celle que permet son organisation: ou, en d'autres termes, la expiration est très parfaite, le besoin seul de respirer est augmenté. Ce n'est pas dans le poumon qu'il faut chercher la cause de la maladie; et lors même qu'adoptant en entier la théorie chimique de la respiration, on voudrait supposer qu'un besoin extraordinaire d'oxygénation du sang est la cause de la dyspnée, il faudrait encore remonter plus haut et reconnaître que le mal est dans l'innervation même."

claiming, "Has the practice of medicine made a single step since Hippocrates?" For centuries after the Hippocratic epoch, it may truly be said that little or no advance in medicine was effected. Many learned and ingenious men no doubt did appear in the ranks of the profession, and by them the position which had been achieved for medicine by Hippocrates was, at all events, maintained. In ancient times, by far the most renowned of these was Galen, who, embracing warmly the views of Hippocrates, was the first formally to expound and then systematically to formulate the doctrine of humoralism or humorism. It might be a sufficient answer to the query of Sir William Hamilton to signalise the discovery in modern days of vaccination and the introduction of sulphuric ether and chloroform as anæsthetics; the last mentioned, as the author of *Rab and His Friends* says, "one of God's best gifts to his suffering children". These were unknown to Hippocrates, and surely our possession of them indicates at least one step in advance. But we are able to point to the abandonment of many remedies altogether worthless which were used in ancient times, and to the introduction, as well as much more satisfactory employment, of others: while, owing to the remarkable and altogether indisputable progress which has been made in the prosecution, first of all, of the study of anatomy, then of physiology, and subsequently of pathology, we are justly entitled to conclude that, the more advanced our knowledge of the minute structure of the body becomes, the more extensive our acquaintance with the function and uses of its several parts, and the more refined our understanding of the various morbid processes by which these are altered and destroyed, so much the more thorough and reliable will be our application and adaptation of the means of cure to the treatment of diseases. Any scientific practice of medicine before the physician had been able to acquaint himself with human anatomy was not to be expected; and it is truly marvellous that Hippocrates, Aræteus, Galen, and the Arabian physicians, notably Rhazes, were able to achieve so much, and to hand down to posterity a body of well-observed facts and careful deductions from these facts, wearing so much the aspect of science.

Medicine can, however, be said to have started on a scientific basis when Mundinus, early in the fourteenth century, applied himself with diligence to the dissection of the human body, and published a treatise on anatomy, *Anatomii Omnium Humani Corporis Interiorum Membrorum*, which, till the middle of the sixteenth century, was the recognised text-book of the schools. The statutes of the University of Padua prescribed that all anatomical lecturers were to adhere to the literal text of the Bologna professor. Mundinus died in 1326,* universally respected; and no advances in anatomical knowledge were made after his time till Berenger of Carpi published, in 1521, a commentary upon Mundinus. There succeeded Berenger, Vido Vidius, Jacob Sylvius, and the renowned Flemish anatomist Andreas Vesalius. Of the last named, Hallam remarks that "if he was not quite to anatomy what Copernicus was to astronomy, he has yet been said, a little hyperbolically, to have discovered a new world" (*Literary History*, vol. i, page 467). He was the first anatomist who ventured to emancipate himself, and that thoroughly, from the trammels of Galen, who, up to that time, had been regarded with an altogether blind veneration. Fallopius and Eustachius, two well known names, names not to be forgotten by anyone at all acquainted with anatomy, were the contemporaries, although younger, of Vesalius; and of the same period, or shortly subsequent, were Realdus Columbus, Arantius, and Fabricius ab Aquapendente, the discoverer of the valves in the veins and the instructor of our own immortal Harvey. The splendid discovery of the circulation of the blood was followed by that of the absorbent system, in which Asellus, a professor at Pavia; Rudbeck, a professor at Upsala; and Bartholin, a Dane, were chiefly concerned; while to Pecquet, a professor at Montpellier, belongs the credit of describing the thoracic duct and its uses. Other important anatomical discoveries, and discoveries also in physiology were being made simultaneously, or shortly thereafter, in connection with which the names of Malpighi, Glisson, Wharton, Highmore, Richard Lower, Leeuwenhoeck, Ruysch, Valsalva, and many others start up. The most eminent of the pupils of Valsalva was the distinguished Morgagni, who, following the plan pursued by Bonnet in his *Sepulchretum Anatomicum*, first published at Geneva, the place of his birth, in 1679, described by Haller as "immortale opus", became himself professor in the University of Padua, and was the founder of pathological anatomy (*Der Besondere der Neüeren Pathologischen Anatomie*, Haeser, seite 654). His works *Adversaria Anatomica*, and still more his celebrated treatise *De Sedibus et Causis Morborum per Anatomiam Indagatis*, immensely advanced his favourite science.

* Mundinus, sagt John Adelphus in der von ihm besorgten Strassburger Ausgabe vom Jahre 1513, "quem omnis studentium universitas colit ac venerat ut deum."—Haeser, *Lehrbuch der Geschichte der Medicin*.

While chemistry, about the same time, was advancing towards the dignity of a science, chiefly through the genius of our distinguished countryman the Honourable Robert Boyle, there arose the sect of the so-called chemical physicians. Of this sect, the earliest was François Deleboe Sylvius (*Der berühmteste Vertreter der Iatrochemischen Schule*, Haeser, seite 571), who was born at Hanau in Flanders, in 1614, and, after a time, became professor of the practice of medicine at Leyden. The chemical theory of medicine had, however, passed from Paracelsus, who was born towards the close of the fifteenth century, through Van Helmont, by more than eighty years his junior, to Sylvius. The leading principles of the chemiatic physicians was that diseases owed their origin to derangement in a process of fermentation, which was constantly at work in the human body. While most of the maladies which were produced in this way arose from excess of acid, some were regarded as of alkaline origin. One eminent English physician embraced the doctrine of Sylvius. Thomas Willis was born in 1621, and in 1659 published his celebrated treatise entitled *Diatriba duæ Medico-Philosophicæ: quarum prior agit de Fermentatione, altera de Febribus*. The object of this work was to prove that, in every organ of the body, there existed its own special fermentation, and that disease of every kind resulted from the disturbance of these fermentative processes. Willis was one of the earliest members of the Royal Society, and left behind him the character of an orthodox, pious, and charitable physician.* It is recorded of Dr. Willis that, being consulted regarding the delicate condition of the children of the Duke of York, afterwards James II, he spoke his mind freely, and thereby gave great offence. Bishop Burnet has related that "Willis, the great physician, being called to consult for one of his, the Duke of York's, sons, gave his opinion in the words, 'mala stamina vitæ', which gave such offence that he was never called for afterwards." The reputation of Willis, unquestionably a very able man, has been obscured by that of another English physician, his junior by only three years. The physician in question was Thomas Sydenham, "whose character," as Dr. John Brown felicitously remarks in that delightful essay of his, *Locke and Sydenham*, "is as beautiful and as genuinely English as his name." He was born in Winford Eagle in Dorsetshire, in 1624. A parallel has been drawn between Hippocrates and Sydenham by more than one modern writer. *Wiederherstellung des Hippokratismus durch Thomas Sydenham*, is the title of a chapter by Haeser, the erudite German historian of medicine, and a very instructive one it is, on the life and writings of the English physician. He has frequently been called the English Hippocrates, and, in truth, the appellation is deserved; for, like the illustrious Greek physician, the great aim he set before him was the cure of disease, and, although possessing a mind which delighted in speculative inquiry, he never permitted the theories he formed and ably defended to interfere with his treatment. That was based on a rational empiricism, such as we have seen in the instance of Hippocrates; he carefully watched the operation of the remedies he employed, and from these he drew the indications for further guidance. Sydenham was humoral in his pathology, and he further agreed with Hippocrates in the doctrine of crisis, and the subsidiary views as to coction and crasis. We find him frequently referring to the Father of Medicine, as, for example, when he inquires what is gout? It is a provision of Nature to purify the blood of old men, and to purge the deep parts of the body; such at least is the language of Hippocrates. The same may be said of all other diseases, fully formed, and "That practice, and that alone, will do good which elicits the indications of cure out of the phenomena of the disease itself. This made Hippocrates divine." It was from Sydenham that the school of empirical physicians in England sprung—a term to be used, as Hallam has expressed it, "in a good sense", as denoting the regard its disciples had to observation and experience or to the Baconian principles of philosophy.

Another school of medicine had arisen in Italy through the instrumentality of Giovanni Alfonso Borelli, a profound mathematician, who endeavoured to explain the operation of the various functions of the body on mechanical principles. His views and principles were, through the excessive zeal of his pupils, carried beyond their legitimate length. Of these, Lorenzo Bellini, of Florence and Pisa, was the chief. There were other eminent adherents of the iatro-mathematical school in Italy; while Pitcairne, Freind, and Mead, in their time, were in this country attached to it; and it secured the sympathies of the illustrious nosologist François Boissier de Sauvages in France, in the eighteenth century.

To the chemiatic and iatro-mathematical schools there succeeded a third, of which Van Helmont was the founder. Embracing the views of the former to a certain extent, he made this important addition,

* The Roll of the Royal College of Physicians of London, by William Munk, M.D., vol. 1, page 524.

that all the changes occurring in the body, whether arising spontaneously or produced by remedies, are determined by a specific agent inherent in the living system, to which he gave the name of Archeus. This archeus explained, in Van Helmont's opinion, all physiological actions, and accounted for the maintenance of health as well as the occurrence of disease. Founding on the views promulgated by Van Helmont, although widely differing from him, came the earliest of the three distinguished men to whom a brief reference was made at the commencement of this address. Rejecting the doctrines of the chemical and mathematical physicians, Stahl concentrated attention on what he denominated vital actions. He, too, referred these actions to a dominating principle; and the Anima of Stahl—so he named it—resembles, in some measure at least, the Archeus of Van Helmont. To Stahl belongs the great merit of having pointed out that, contrary to the prevalent opinions of the schools, the operations of the animal economy cannot be explained by either chemical or mechanical laws; that there exists something over and above these; and that something is of the nature of vital action. The anima of Stahl, however, was a hypothetical principle, and he signally failed to gain for his theory any general support. Hoffmann, his distinguished colleague in the University of Halle, and his rival, conferred a lasting benefit on science by pointing out that the actions which were ascribed by Stahl to the government of his "anima" were in reality determined by nervous influence. "It was reserved for Hoffmann," says Dr. John Thomson, "to take a comprehensive view of the nervous system, not only as the organ of sense and motion, but also as the common centre by which all the different parts of the animal economy are connected together, and through which they mutually influence each other." Facts, and many of these most important in their nature, regarding the nervous system, had been recorded before the time of Hoffmann. The renowned professors in the early Alexandrian school, Herophilus, and Erasistratus, and Galen, with others among the ancients, Willis, Vieussens, Mayow, Baglivi, and Pacchioni, much nearer his own day, had laid the foundation for the reasoning of Hoffmann; but, as Cullen has observed, "he was the first who gave any tolerably simple and clear system on the subject, or pointed out any extensive application of it to the explanation of diseases". There is little need for reminding you of the triumphant discoveries in the nervous system which have been made since the time of Hoffmann—such discoveries as have rendered the names of Charles Bell and Marshall Hall in particular, but many others in lesser degree, famous. In no department of pathological inquiry is there at the present time exhibited a greater amount of zeal, or are important facts being more frequently brought to light, than in that pertaining to the nervous system. How signal our advance in treatment also, as determined by that which can alone with any certainty determine treatment: a sound diagnosis! We can distinguish between functional and organic diseases of the brain, spinal cord, and nerves; and use our remedies in a way of which not only the ancient physicians, but many among the moderns, could not have dreamt.

The names of Stahl and Hoffmann, the German professors in Halle, of whom a few words have been said, are inseparably linked with that of the illustrious Dutch professor in the University of Leyden, Hermann Boerhaave. The aim of Boerhaave was essentially eclectic; he culled from the writings of his predecessors all that was valuable, and with these and the results of his own extended observation endeavoured to erect a system of medicine. His system was faulty in ascribing too little importance to the influence exerted by the brain and nervous system generally over the animal functions. The pathology of Boerhaave was as defective as his physiology; his explanations of morbid phenomena were more applicable to the body considered as an inert hydraulic machine, than as an organised living and sentient system. Intellectually and morally distinguished, few greater men than Boerhaave have adorned our profession in any age or country. After his decease, his reputation, which as a living teacher had been of the most exalted description, rather increased than declined. This result was due in great measure to the publication of commentaries on his works by two of his most distinguished pupils, Haller and Van Swieten. The former of these is justly considered as the father of modern physiology. The magnificent researches of Haller regarding development, growth of bone, and the circulation, deserve the praise and gratitude of posterity not more than the impulse of his ardent spirit and example in laborious inquiry, by which the zeal of his associates and successors was kindled. Of Haller's powerful opponent in the controversy regarding irritability and sensibility—Dr. Whytt—I can only make mention. Contemporaneously with Haller, and conferring benefits on the practice of medicine resembling those which Haller rendered to physiology, was William Cullen. A very erroneous impression of this great Scotch teacher has been entertained by many; more particularly, however, by foreigners. By such, Cullen has been

called a purely speculative physician. The condemnation of this opinion is readily supplied by his own words. "There is nothing," he observes, "I desire so much as that every disease we treat here should be a matter of experience to you; so that you must not be surprised that I use only one remedy when I might employ two or three; for in using a multiplicity of remedies, when a cure does succeed, it is not easy to perceive which is the most effectual. But I wish that you may always have some opportunity of judging with regard to their proper effects." Again, he says: "Every wise physician is a dogmatist; but a dogmatical physician is one of the most absurd animals that lives. We say he is a dogmatist in physic who employs his reason, and, from some acquaintance with the nature of the human body, thinks he can throw some light upon diseases, and ascertain the proper methods of cure; and I have known none who were not dogmatists, except those who seemed to be incapable of reasoning, or who were too lazy for it. On the other hand, I call him a dogmatical physician who is very ready to assume opinions, to be prejudiced in favour of them, and to retain and assert very tenaciously, and with too much confidence, the opinions or prejudices which he has already taken up in common life, or in the study of the sciences. Now, I profess to be a dogmatist, but I should be sorry if any person thought me dogmatical; for there are but few theoretical opinions which I have received or offered to communicate with regard to disease, concerning which I am not ready to doubt, and to admit grounds for doubting, as soon as they are offered to me. I know there are no universal rules in the practice of physic; but there are general rules, which all admit of, with more or fewer exceptions, in theory and practice." The foundation of the practice of physic was expressly stated by Cullen to lie in fact and experience. "All our knowledge of Nature consists," he says, "in experience."

To Cullen we are largely indebted for the introduction into general use by medical men in this country of such remedies as the acid tartaric of potash, tartar emetic, hyoscyamus, and James's powder, or the pulvis antimonialis. Tartar emetic Cullen largely employed as an antiphlogistic, sometimes after bloodletting, and sometimes in place of that remedy. He had noticed something of the contrastimulant action of antimony in the form of tartar emetic, described by Dr. Marryatt of Bristol in 1790, and afterwards so strongly insisted upon by Rasori, a professor in Pavia, and by others. A successor of Cullen, one of the most distinguished physicians in recent times, as he certainly was also one of the most benevolent of men, the revered Dr. Alison, who occupied the chair which you, sir, now so worthily fill, when this Association held its former meeting in Edinburgh, he, whom Dr. Stokes has recently described as "the best man I ever knew", and in so alluding to Dr. Alison may be said to have turned many hearts towards himself—for what student who knew Dr. Alison did not venerate him? and who can ever cease to cherish his memory?—when indicating the way by which, in his opinion, the further improvement in the art of medicine was likely to be effected, signalled the two following lines of inquiry: first, in the discovery of specifics which may counteract the different diseased actions of which the body is susceptible, as effectually as the cinchona counteracts the intermittent fever, citric acid the scurvy, or vaccination the small-pox; and, second, in the investigation of causes of disease, whether external or internal—i.e., of the conditions under which either the vital action of the solids or the vital properties of the fluids of the body may become liable to deviation from their natural state. It will be readily admitted by all candid inquirers that, under the latter head, very signal advances have been made during the last half century. Look, for example, at the etiological investigations regarding continued fevers, and the bearing of these upon treatment, with which the names of Jenner, Stewart, Bartlett, Murchison, and Buchanan, are so intimately connected. Again, consider the great advances in knowledge of parasitic diseases—the entozoa more particularly—and their appropriate treatment, for which we are largely indebted to Küchenmeister, Von Siebold, Davaine, and Cobbold. Nothing more interesting or more remarkable in the line of therapeutics has recently appeared than the wonderfully successful treatment of hydatids of the lung by the internal administration of turpentine in the hands of Dr. Bird of Melbourne, Australia.* This is a medicine in estimation of which, were time at my disposal, I could say much, having had occasion to watch its influence very closely when administered in cases of pulmonary gangrene and bronchial affections attended by copious expectoration of fetid pus. In these diseases, I regard turpentine as an invaluable remedy.

* Dr. Bird had formerly used bromide of potassium, twenty grains, with one fluid drachm of tincture of kamela in infusion of serpentry, three times a day regularly. (*On Hydatids of the Lung*. Melbourne: 1874.) I am, however, assured by a recovered patient that, in the treatment of pulmonary hydatids, Dr. Bird now places great reliance on turpentine administered internally.

Of specifics, we still possess but few; while the desire to increase their number is not only legitimate, but is likely sooner or later to be gratified. Of the class of specifics, no remedy better deserves the name than quinine. The potent action of quinine in intermittent fevers thoroughly justifies the application to it of the term specific; and it is to be noted that the curative action in question is to be seen not only in febrile disorders of the intermittent type, but in neuralgias which manifest a similar character. Many ingenious theories regarding the *modus operandi* of cinchona or quinine in these diseases have been advanced; but, up to the present time, we are compelled to admit that we are entirely ignorant respecting the method of action of a medicine in whose power we justly place the very highest confidence. The remarkable effects of quinine in reducing the temperature in pyrexia, and the still more remarkable influence of cold in the same way in hyperpyrexia, of which Dr. Wilson Fox has given some happy illustrations, are noteworthy facts in the recent history of therapeutics.

A remedy of marvellous power and usefulness, the virtues of which we are still only learning, is the iodide of potassium. This medicine was prepared soon after the discovery of iodine by Courtois in 1812, and has been chiefly employed as a deobstruent, alterative, and diuretic. I am satisfied that the diuretic properties of iodide of potassium deserve to be more widely recognised than is generally the case. Its specific action is seen in syphilitic periostitis; for truly the rapidity and completeness with which pain and swelling decline and disappear in instances of enlargements over the tibia and other bones in cases of secondary syphilis are not less remarkable than the readiness with which an attack of intermittent fever or neuralgia yields to quinine. The late Dr. Todd of London remarked: "If there is anything in addition to quinine which deserves the name of a specific, it is the iodide of potassium in syphilitic periostitis". Another remarkable action of this medicine is in aortic aneurism. Iodide of potassium, administered for the most part in tolerably large doses, in this terrible disease exerts a wonderful influence, not only in relieving the neuralgic pains, which are frequently so harassing, but in subduing the local pressure occasioned by encroachments of the aneurism, and in leading, apparently, to firm coagulation within the sac.

It is in the treatment of thoracic aneurism by iodide of potassium that physicians have learned the very remarkable tolerance of the drug manifested by sufferers from that disease. No reasonable suggestion has hitherto been offered regarding the *modus operandi* of iodide of potassium in aneurism. The influence it exerts on the progress of aneurism appears to have been discovered not only empirically, but by the merest hazard, writes Dr. Walshe, "in this point of view, the story of all our really valuable medicines is simply repeated". (*Diseases of the Heart*, 4th edition, page 512.) The names of Bouillaud, Nélaton, and Chuckerbutty are specially connected with the early employment of the iodide of potassium in the treatment of aneurism; while the profession is largely indebted to Dr. G. W. Balfour of Edinburgh for his patient investigation into the subject. (*Edinburgh Medical Journal*, 1868.)

Twenty years ago, little was known regarding the virtues of bromide of potassium. If any standard work on the materia medica of that date be consulted, it will merely be found recorded of this salt that it is diuretic and cathartic, and, like the preparations of iodine, a powerful deobstruent and alterative. Its dose, moreover, is stated in such works, at from three to twelve grains thrice daily. Since then, and more particularly within the last few years, bromide of potassium has rapidly advanced in professional estimation; and, at the present time, it may with confidence be affirmed that there are very few medicines which are more largely employed, and the use of which is attended by more signal benefits. As a calmative and hypnotic, bromide of potassium is largely confided in; but its specific operation in epilepsy is of the most striking description. "It is to be demonstrated, in my opinion," writes Dr. Russell Reynolds, "that there is something specific in the action of bromide of potassium in epilepsy." And the same author observes: "Bromide of potassium is the one medicine which has, so far as I know, proved of real service in the treatment of epilepsy." My own experience of the use of bromide of potassium in epilepsy has been of the most encouraging description. I have repeatedly witnessed cures in the strictest sense result from its employment. Let me briefly refer to one such.

S. A., a bookbinder, aged 50, had for twenty years been subject to severe fits, occurring irregularly by night and by day, often attended by biting of the tongue. The usual interval between the fits had been a fortnight, and on no occasion had a longer period than six weeks elapsed. In January 1870, this patient, whose mental capacity had at that time become considerably enfeebled, so much so as to make it necessary for him to give up his business, began the bromide of potassium, and continued it for eighteen months without any pause. The dose never exceeded twenty grains thrice daily. The result of this treatment was

an entire cessation of the epilepsy; there has been no recurrence of the disease. His mental vigour has returned. He long ago resumed his occupation, and has since been busily engaged in it without any interruption.

I could multiply instances of this kind; and so, I believe, could many practitioners who, in the treatment of epilepsy with bromide of potassium, have been mindful to adhere to the rule upon which Dr. Reynolds insists, that the remedy "should not be discontinued in the treatment of a case of epilepsy because of its apparent failure; but that the dose should be gradually increased, and the exhibition of the drug most patiently carried on for a period of many months, or even years". Epilepsy is a disease which specially attracted the attention of the ancient physicians. It was termed *νόσος ἱερὰ*, the sacred disease, by the Greeks; and Aretæus expressly mentions why the appellation sacred was given to epilepsy "for more reasons than one", he remarks, "from the greatness of the evil, for the word *ἱερὸς* also means great, or because the cure of it is not human, but divine; or from the notion that the disease occurred from the entrance of a demon into the man". Plato, in the *Timæus*, ascribes the use of the term sacred to the circumstance of the head or brain being the part of the body affected in epilepsy. "When the phlegm is mingled", he says, "with black bile, and dispersed about the courses of the head, which are the divinest parts of us, and disturbs them in sleep, the attack is not so severe; but when assailing those who are awake, it is hard to be got rid of; and being an affection of a sacred part, is most justly called sacred." Hippocrates combated the notion entertained by his countrymen that epilepsy was peculiarly a sacred disease, one specially inflicted by the gods. In the treatise *Περὶ ἱερῆς Νόσου*, he emphatically points out that the incomprehensible nature of the malady is no reason for concluding it to be divine; inasmuch as many other diseases, and notably the paroxysms of intermittent fevers, are just as much above the reach of the human understanding. He believes that epilepsy, like other diseases, results from natural causes. The reader of the remarks on epilepsy in the pages of Hippocrates and Aretæus cannot fail to have his opinion of these great men enhanced; but he also cannot fail to reach the conclusion that the moderns, understanding the nature of convulsive diseases, their connection with altered conditions of the blood, with, for example, anæmia and uræmia, their dependence at one time on central, at another on peripheral, irritation of the nervous system, are infinitely better prepared for their treatment than they were; and this unquestionably holds true of epilepsy.

The use of the remedies we have been briefly reviewing has, in the first instance, been adopted either by mere accident or empirically; nor have we, on this account, any cause for feeling regret. We do not know in what the preservative power of vaccination consists; and yet millions of lives have already been saved by this precaution (Esterlen). A recent and very interesting example of the way in which therapeutical knowledge may be advanced is afforded by what has occurred in the Andaman islands. Dr. Dougall, a distinguished graduate of the University of Edinburgh, has apparently discovered that leprosy sores and other ailments attendant upon that disease can be cured by the aid of oil from the Gurgon tree, which is very common in these islands. Take another disease known to the ancients, although its pathology, still to a considerable extent obscure, has been carefully investigated only in recent times. I mean diabetes; and regarding it, we may compare the treatment pursued by Aretæus, for example, and that which we now employ, with the result of feeling thoroughly assured that many steps have been taken in the right direction, and with signal advantage to suffering humanity, since the writings of the distinguished Cappadocian physician. I do not think the opinion unfounded that, owing to the recent advances in the knowledge of tubercular diseases, etiologically and pathologically, we may look forward with confidence to a decided gain in their efficient treatment; but even now may we not be said to possess in cod-liver oil a very potent means of modifying the progress of pulmonary tuberculosis? In the treatment of this disease and of other allied constitutional disorders, cod-liver oil was first employed in the Manchester Infirmary, chiefly by the elder Bardsley, after the commencement of the present century. Previously to that time, however, an oil obtained by ebullition with water from the fresh livers of several fishes, the ling and skate as well as the cod, had long been a domestic panacea in strumous affections and chronic rheumatism. Subsequently to its use in the Manchester Hospital, cod-liver oil was largely used in Germany; but, falling into disuse in this country, its restoration to professional and public favour has followed the publication of Dr. Hughes Bennett's recommendation of its virtues, in his excellent treatise on that subject. Sir Thomas Watson has very happily expressed the characteristic effect of the remedy in phthisis, when he says: "It is antagonistic to a much greater extent than any other drug of the consuming power of the disease." There are probably few medical men who have seen much of this sad malady

who would hesitate to concur in the opinion of a very high authority—Dr. Williams—that cod-liver oil is more beneficial in the treatment of pulmonary consumption than any other agent, medicinal, dietetic, or regiminal, that has yet been employed. We may justly congratulate ourselves on the possession of cod-liver oil; but it becomes us to remember that the ancient physicians used oil inunction in phthisis. This is expressly stated by Aretæus; and he, as well as Hippocrates, lauds the use of milk in the same disease, preferring it to all other kinds of food. "For," says the former, "milk is pleasant to take, is easy to drink, gives solid nourishment, and is more familiar than any other food from childhood. In colour it is pleasant to see; as a medicine, it seems to lubricate the windpipe, to clean as with a feather the bronchi, and to bring off phlegm, improve the breathing, and facilitate the discharges downwards. To ulcers, it is a sweet medicine, and milder than anything else. If one will, then, only drink plenty of milk, he will not require anything else. For it is a great thing that, in a disease, milk should serve both for medicine and nourishment." In fevers, Hippocrates did not allow milk, more particularly in such fevers as were attended by bilious discharges from the bowels. The modern practice is not, in this very important particular, in agreement with the ancient; the highest authorities, as, for example, Gairdner, Murchison, and Parkes, the last mentioned on weighty theoretical grounds, considering milk the best food in fevers.

We have been alluding to the manner in which the practice of medicine has been advanced, and may doubtless be still further advanced, by the simple method of observation and experience. It is true that we cannot entirely depend upon empirical laws. We cannot, for example, feel assured that quinine will certainly cure an attack of intermittent fever, mercury syphilis; or, for that matter, that a dose or doses of any given medicine will exert their thoroughly ascertained physiological or therapeutic action; still, such laws are of the highest value, and we cannot help employing them.

The recent progress of chemistry, physiology, and pathology, has naturally led to the establishment of an advanced school of therapeutics, from whose labours signal benefits may not only be anticipated for medicine, but have already been conferred upon it. To Dr. Lauder Brunton, for example, belongs the great merit of conceiving accurately the therapeutic action of the nitrite of amyl from its physiological properties, and thereby of adding an useful remedy to our armamentarium. And so, also, to Dr. Fraser we are indebted for the elaborate investigations regarding the Calabar bean, which have resulted in a demonstration of its therapeutic value. Care must, however, be taken that the results of scientific inquiry and those of patient, oftentimes laborious, observation in the field of practical medicine running counter, do not interfere with the ultimate grand object of our profession—the healing of the sick.

We are not entitled to withhold remedies because we do not understand their exact nature, nor the minute changes they produce in the animal economy. (Esterlen has well expressed the attitude which, as practitioners of medicine, we are called upon to assume. "The patient requires our aid, and we must decide for or against the employment of a particular medicine, and upon the manner in which to employ it. If we possess sufficient experience, knowledge of the subject, and practical tact, we shall no doubt be able to do all for that patient which circumstances permit.")

Let each one of us be fully persuaded in his own mind. While deeply interested in, and much instructed by, the experiments performed by a Committee of this Association, regarding the use of mercury, for example, I remain as thoroughly convinced as ever that the much abused drug in question exerts a powerful action on the function of the liver, and is to be trusted as a most efficient remedy in controlling not a few of its disorders.

I regard cold as a powerful antiphlogistic, and its external application, already briefly referred to, as a remedy of unquestionable value in the treatment of hyperpyrexia; but my own observation, and the fullest attention I have been able to give to the recorded observations of others, have convinced me that the real reason for the present abandonment of a remedy of superior power—to wit, bloodletting—does not lie alone in the advance of scientific pathology. "The thinking man," writes one of the most philosophical of living physicians, Dr. Stokes, "finds it hard to believe that the fathers of British Medicine were always in error, or that they were bad observers and mistaken practitioners. They, indeed, have rested from their labours, but their works remain; and he who reads the writings of Sydenham, of Haygarth, and of Fothergill; of Heberden and Fordyce, of Gregory, Cullen, Alison, Cheyne, or Graves; must have a very inapprehensive mind if he fail to discover that there were giants in those days; and that the advocacy of such ideas only indicates a state of mind not consonant with the modesty of science."

AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF OBSTETRIC MEDICINE,

At the Annual Meeting of the British Medical Association,
in Edinburgh, August 1875.

By J. MATTHEWS DUNCAN, M.D.,
President of the Section.

CURSORY NOTES ON OVARIAN PATHOLOGY.

THE application of physical methods to the investigation of the diseases of the genital organs, brought to light, first, the most superficial or most easily observed of uterine lesions—the ulceration, as it was called, of the cervix; and it was inevitable that to this great importance should be attached, an importance far beyond what it really possesses. This importance has now, for at least a decade, been rapidly declining; and while it is admitted that the lesion is very significant, and forms an element of the most common disease of women, it is now well known that it has been not only exaggerated in importance, but misinterpreted as to its relation to the discharge; and that the treatment, by applying lunar caustic through the speculum to the visible ulceration, once so very widely used, is only rarely a good or successful method. Great improvements have recently been made in the theory and treatment of diseases of the neck of the womb; but we can only say that great and admirable attempts have been made to improve in a similar manner the theory and treatment of the analogous diseases of the body of the organ. Endometritis, even, is very inadequately described; and the attainment of this, or should be, our first step to knowledge of disease of the uterine body. The influence of displacements and their relation to uterine congestion are not settled matters, after all the voluminous writing which has been zealously devoted to them.

Advancing knowledge of gynecology brings more and more into view the cardinal importance of the ovaries: organs which have, from the earliest times of true anatomy and physiology, naturally attracted a great share of medical attention, and whose extensive pathological influence in the minor ailments peculiar to women Tilt and many others have long tried to demonstrate.

It has been very generally supposed that the ovaries are the *fons et origo* of all the sexual functions, reliance being placed on such evidence as is afforded by the history of their growth and activity and atrophy, contemporaneously with the rise, progress, and decline of menstruation and of childbearing; on the results of disorganising disease of both of them; on the results of their accidental absence, or of their removal, as in Pott's well known case. I do not know that this view of the ovarian influence has been entertained in recent times by professed physiologists; but, at any rate, it has extensively prevailed among practitioners, and has only lately been rudely shaken by the observations of ovariologists as to the continuance of menstruation and the occasional persistence of sexual appetite, or its increase even after complete extirpation of both ovaries. I think that of this occasional result of double ovariectomies there can be no doubt, although care must be taken that, in this human vivisectional experiment, all the conditions are truly fulfilled, the whole of both ovaries being removed, and not merely portions of them, or, instead of them, mere parovarian cysts. In antithesis to this argument from removal of the ovaries, we have evidence to the same effect from their occasional functional activity, as observed by Grohe in the newly born, without any evidence of sexual appetite or possibility of sexual potency.

This dethronement of the ovaries from the supreme position in all departments of sexual activity is, however, as yet, not complete; and there is, no doubt, much truth in the view described as being held by practitioners. The rather vague results of the experimental investigations of Eckhard, Obernier, Spiegelberg, and others, have been greatly added to by the further inquiries of many, including Oser and Schlesinger, Goltz and Freusberg. The researches of the two last-named seem to show that there is in the lumbar spine a nervous centre for the sexual function. The phenomena of erection of the penis and seminal emission are so easily made the basis of this experimental investigation that, as a matter of course, males have been used for it, but it is almost certain that the physiological results are true of the female also. These investigations afford, in various ways, possible explanations of the persistence of sexual appetite and activity after the destruction or removal of the organs in which undoubtedly commences the production of those germs for whose growth and development the whole of the complex generative function is arranged.

These physiological questions, purely scientific or merely theoretical though they may appear, are far from really being so: for already operations have been many times performed whose justification lies in the belief that the removal of the ovaries is the annihilation of all or some of the sexual activities. I allude to spaying, or what is called normal ovariectomy by Battey, who, as well as Thomas and Sabine, have done it with what is perhaps justly called success. The proper attitude in regard to it is to defer judgment till more is known about its theory and practice. The diseases against which its performance is recommended, such as nymphomania, menorrhagia, dysmenorrhœa, are not so dangerous to life as the great ovarian cystoma for which the very dangerous ovariectomy is now an operation everywhere admitted to be at least theoretically justifiable. Spaying must be able to produce better statistics of success than ovariectomy—indeed, a nearly uniform success—to be theoretically equally justifiable, for the diseases against which it is used are not nearly so dangerous as ovarian cystoma.

It will be observed that I introduce with care the words "theoretically" and "practically" when I speak of an operation being justifiable; and it is well worth while to point out the difference between being theoretically justifiable and being practically justifiable; and I am particularly interested in this important distinction, because I have been gravely misrepresented by one or two excellent professional brethren as having changed my mind as to ovariectomy. I have made no such change. It is they who have not properly appreciated the difference between theoretically justifiable and practically justifiable: a difference which explains any apparent, but not real, change in my opinion. My remarks will apply to spaying as well as to ovariectomy; but, to save time, I shall refer to ovariectomy only, which has a history convenient for the purpose.

Ovariectomy is theoretically justified, because the possible success of the operation far outweighs the danger of it and the dangers of the disease combined. But theoretical justification is not a sufficient sanction of its performance in any particular case: is not a practical justification. For that you must have other conditions satisfied, and an operator who may be presumed to have the needful surgical skill, or who has demonstrated that he has it by the statistics of his success. When I opposed the operation, I was, as I am now, living in the midst of surgical ability, and I knew of many ovariectomies; but they were, with scarcely an exception, failures, and failures often under the most terrible circumstances; disaster after disaster. The only justifiable practical cry was that of Syme, Miller, Spence, and myself, for mercy on the poor sufferers prematurely deprived of life. The operation was then and there practically unjustifiable. Sufficient trials had been made, and there was no success, or almost none. Who could justly do anything else than oppose ovariectomy there and then? There are at present, even after Spencer Wells has for a long time flourished, many districts, even countries, where ovariectomy, now happily justified theoretically by the whole world, is still practically unjustifiable, and accordingly little, if at all, resorted to. In such districts or countries, the good physician must say to his patient: "Go to some great ovariectomist. If you can't do that, stay at home and die. The operation is not practically justifiable, or not practically justified by success, here." Fortunately for Edinburgh, there appeared among us a true surgical genius. Long before Thomas Keith had achieved his unparalleled success, he had done enough to make ovariectomy here and now not merely theoretically, but also practically justified. Indeed, since he took up the scalpel, we have never heard a word among us against ovariectomy; and as this silence is logically proper, so was the opposition not only logical, but urgently called for.

I hope I have said enough to show the difference between the theoretical and practical justification of an operation; and I may be allowed to add a word as to the rarity of real surgical talent. I do so with the conviction that there are plenty of young surgeons in whom it may be cultivated; and that, in order to its wider development, encouragement, and ripening, we need not merely invaluable theory and systematic teaching, but also invaluable practical teaching, on the basis of the deficiency of present theory and the still persisting necessary distinction between theory and practice. It is very sad to have to say that operations have in practice to be condemned which are theoretically justifiable and supremely desirable. But it may come to pass that spaying gets recognition as an operation justified both theoretically and practically. It is not so yet.

We may anticipate the time when surgical inquiries shall have been advanced so far as to reveal the conditions essential for success in operations such as ovariectomy. At present, they are not known. We know that one operator has a great amount of success, while another has not; and to a very great extent we do not know the cause of the difference between the two. There is no reason to think that the cause of this difference between operators is beyond our powers of dis-

covery; and it is rational and natural to suppose that, when the discovery is made, it will enhance even the success of those previously most successful. Past attempts to discover this cause of difference have been limited to matters of form of clamps, or kind of ligatures, or dealing with the pedicle, or amount of sponging, or method of draining, or mode of after-treatment, and these are all truly important; but the causes of the differences are as yet not demonstrated. When they are so, then great operations will be rendered practically justifiable over a much wider field than at present. Yet, after all, there will never, within reasonable limits of time, be such progress as to reduce surgeons to a dead level. There will always be room for genius and for zealous care.

The subject of ovaritis, acute and chronic, has recently, through the labours of Rokitsansky and Slavjansky, made some progress; the former describing follicular and parenchymatous inflammation; the latter, parenchymatous and interstitial: a nomenclature which would seem to indicate a greater difference in their views than really exists. But, unfortunately, we have no means as yet of using this knowledge in practice. Our signs and symptoms have to be immensely improved before such a result can be attained. Rindfleisch, indeed, from the pathologist's point of view, and Churchill from the practitioner's, have well pointed out that we cannot tell where ovarian irritation, as it is called, ends, and inflammation begins. But, although this is true, we have now the authority of most of those who have devoted themselves to gynecology in this country for saying that we can, in a very great majority of cases of ovaritis, and especially of chronic ovaritis, and still more especially when adhesions are absent, diagnose, by bimanual examination and otherwise, the existence of the disease, with a degree of assurance that, at one time at least, Scanzoni was disposed to dispute. This diagnosis is a matter of very great moment to the practitioner, not only on its own account, for that is a matter of course, but also on account of the value of its discovery as a contra-indication—to which Nélaton is said to have attached importance—of various other gynecological operations. There are few kinds of cases more frequent occasions for correction of treatment than those that occur under this category. How often is a pessary intolerable because an ovaritis has been neglected! How often is an uterine catarrh inveterate, or a displacement supposed to be painful, or a metritis supposed to be peculiar, when there is an explanation in the neglect of an ovaritis!

Symptoms and physical examination, especially the bimanual, are our reliance for diagnostic purposes; and, in the bimanual examination, a chief point is the size and consistence of the organ. An enlarged, and consequently a heavy and probably a descended ovary, can generally be felt; while a healthy one, or an ovary merely irritated, may escape the most expert bimanual examiner. The size and consistence of the organ were chief points in Boivin and Dugès's practical classification of kinds of ovaritis, and none better has been proposed. But size and consistence, although often well made out, always escape the examiner in two very important classes of cases: those where the ovary is surrounded by adhesions, and those where it has undergone cirrhotic atrophy. After all, I have no doubt that our improved modern knowledge of ovaritis is one of the greatest steps of progress of gynecology; and it is a blessed one, for the disease, although often obstinate and liable to return, is also often distinctly amenable to treatment. Further aid in diagnosis is offered to us by the rectal examination pushed even as far as Simon has recently recommended, or the examination *per vesicam* recently recommended and practised by Noeggerath. But rectal and vesical examination in such cases are not often required.

One of the most striking advances in gynecology in my day has been in our knowledge of hæmatocele, which I think is generally called by the name uterine to distinguish its origin. But it is well known that some eminent pathologists, and among them the great Virchow, bring in new inflammatory productions in the pelvis as the source of the bleeding; and, as no disease leads more frequently to such developments than ovaritis, so we find Klebs connecting this great disease with ovarian inflammation. The matter is of great importance with a view to the proper appreciation of such cases, and consequently their proper management. Upon the question I shall not further enter here, merely remarking that I cannot agree with Klebs in, as a rule, connecting retrouterine hæmatocele with any kind of ovarian disease. I speak of the great majority of cases; for I have myself seen in life, and dissected after death, cases in which disease, especially cystic degeneration, of the ovary was the cause of large pelvic hæmatocele. I believe that the majority of hæmatoceles are uterine, and not directly connected with ovarian pathology.

There is, alas, far more of darkness than of light in the field of gynecology, and I take this opportunity of stating a conviction I entertain which is founded on considerable experience. We all know how

far from uncommon are those simple follicular dropsies of the ovary, seeing them in autopsies as very thin-walled cysts, often less than an orange. Such cysts are, I am sure, the source of much difficulty in practice, and a retrospective diagnosis of them may be formed in this way. A distinct ovarian swelling is found larger than any ovaritis ever grows, clearly diagnosable as an enlarged ovary; but the diagnosis cannot be made more exact. The commencement of an ovarian dropsy is dreaded. After a time, the tumour disappears. Frequently its disappearance is accompanied by adhesive perimetritis. Now, what has happened in these cases? Of course, it may be said that it is a case of mere ignorance, or that the cysts were parovarian; but, to this latter explanation, there is, for me, the great objection that the cases occur more frequently by far than to admit of their being justly so explained. We must suppose, therefore, the bursting of the not infrequent small follicular dropsies. I would further add that the bursting of simple parovarian cysts does not appear to me to be followed by perimetritis, or accompanied by it, so generally in the case of the disease of which I have been speaking.

In connection with parovarian cysts, a great step of good progress in practice has been made, and progress also in pathology. Such cysts used generally to be described as never reaching a great size, but this is not true. They do certainly attain enormous dimensions, so as to be in competition in this respect with true ovarian cystic disease. After death, or when they are removed by gastrotomy, they may, at least frequently, be easily distinguished by characters which Bantock has recently described; chief among them are the non implication of the ovary, the almost invariable unilocularity (not surgical, but pathological or absolute unilocularity), and the easy separation of the peritoneum from the internal coat of the cyst-wall. During life, they are also, at least occasionally, diagnosable by examination of the fluid withdrawn by tapping from examples of them which have never been inflamed. Then we find the fluid to be limpid or very slightly opaline, of very low specific gravity, containing little or no albumen, and having in solution only a little saline matter, chiefly chloride of potassium and of sodium. Such cysts have been long known and partially described. Even yet they are imperfectly described; but it is interesting to note a kind of identification of them in those ovarian cysts which Boinet found to be most readily cured by the once famous iodine injection. Only the important fact is now known that many at least of such cases are far better cured by mere tapping than by that combined with iodine-injection; and the practitioner should always keep in mind these propitious circumstances when he meets with cases of this kind. The subject of parovarian cysts, when fully made out, will be still further interesting and fruitful in gynecology; for already we may presume that the numerous kinds and examples of cures of ovarian dropsy, without resort to ovariotomy, which have been described by many, including the highest authorities, were merely examples of delusion arising from imperfect knowledge. We know no one example of the cure, otherwise than by the operation of Ephraim McDowell, of an ovarian dropsy properly so-called; not one, however many may be found described, or whoever may be the describer. Cures by one or more tapplings, cures by medicines, cures by spontaneous rupture, cures by advancing pregnancy, have been, if not mere egregious mistakes, almost certainly cures of parovarian cysts whose history, as already known, quite accords with and explains such erroneous allegations. These remarks are based chiefly on observations of parovarian cysts that have never been inflamed. The study of inflamed cysts is still in a very backward state. Their pathology and treatment are matters of great difficulty. It must also be kept in mind that simple inflammatory serous collections take place in the peritoneum, and may be mistaken for parovarian cysts.

Ovarian cystoma is the great disease of the ovaries, and improved ovariotomy is the greatest recent step in therapeutics. It is probably to the inspiring influence of the beneficence of this operation that we owe the great amount of scientific exertion that is being made in the field of ovarian anatomy, physiology, and pathology; and already the student may catch glimpses of justly expected practical fruits of this scientific zeal which will enormously extend the utility of the practitioner.

The anatomy and physiology of the ovary, closely connected as they are, have recently received many additions, and more may still be expected from the application to them of the newest methods of investigation. First among these researches comes the histological anatomy of the organ, and here we find the most recent views of Waldeyer receiving, besides verification, addition also and correction by the excellent work of Foulis. Like Waldeyer, this author, beginning with the normal ovary, pushes his studies into the more difficult and more vexed inquiries as to the origin and growth of the multiple ovarian cyst. These points have by many, and frequently, been supposed to be settled; but it is a vain thought, as any one may find who tries to

unravel the divisions and subdivisions of recent pathological writers, and then peruses the most recent inquiries and setting forth of views by such authors as Malassez and Foulis.

To notice the whole of the work that is being carried on in connection with this department, is far beyond my present intention. I shall merely, in conclusion, make brief reference to the difficult questions in connection with the malignancy of ovarian cystoma. The uterus, although far from being an isolated organ, is generally regarded, among others by Walshe, as remarkable for the slowness or rarity of the spreading of cancerous disease from it as a centre, the slowness or rarity of what is now called the infection of neighbouring or distant parts. There is, on the other hand, no organ in the body which is actually more isolated than the ovary, whether in health or disease, at least so long as it has no adhesions; yet many pathologists, especially Klebs, who cites various authors, have attracted attention to cases of apparent infection, especially of the peritoneum, having malignant ovarian cystoma for their source. The diagnosis, especially in their earlier stages of growth, of even large malignant ovarian cystomata, is often a matter of great difficulty, and the examination of the fluids drawn off by tapping is anxiously made with this view, but, as yet, without completely satisfactory results. In fact, we have, in all departments of ovarian diagnosis, more to admire in the zeal and diligence of histologists, in regard to the fluids, than in the exactness and reliability of the practical results they can show. In connection with burst and unburst ovarian cystoma, it is well known that chronic peritonitis of great extent is often set up and long maintained; but the examination of the fluids has led Foulis to the belief that in the bursting of malignant ovarian cysts we have a new kind of evil, an explanation of the infection of other parts, and especially of the peritoneum, with malignant disease. While the diffuse chronic peritonitis is explained, to some extent, by a rude induction of analogies, the diffusion of cancer is less understood. Foulis believes he can identify in the fluids of certain ovarian cysts a peculiar richly proliferating epithelial cell which he regards as the seed sown broad-cast, when a malignant cyst bursts, over the peritoneum, finding in any part of this large surface a suitable soil for its further development into cancerous nodules, such as are seen in the ordinary malignant peritonitis, as it is sometimes called. To the discussion of this subject, Thornton and Lawson Tait have contributed, and we hope that, as a final result, the truth will be elicited. We shall then have ovariologists instructed and guided as to the special urgency and claims of a class of cysts that may be equally important and urgent with those which are in a condition of suppuration.

I might still further enlarge on the present state of ovarian pathology, had I not already overpassed the proper limit of time. Many diseases and many researches I have not even hinted at, and the silence is not to be attributed to neglect or to an estimate of inferior importance.

In opening the section with these remarks, I congratulate you on the promise of interest that is offered by the list of papers to be read, and I can assure you that everything which contributes to increase, improvement, or illustration of our knowledge, will be received with the respectful attention which it ought to command.

AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF PUBLIC MEDICINE.

*At the Annual Meeting of the British Medical Association,
in Edinburgh, August 1875.*

BY THE RIGHT HON. LYON PLAYFAIR, M.P., C.B., F.R.S.,
President of the Section.

I HAVE recently delivered so many speeches and addresses on public health that you will not expect me to do more than give some practical remarks on the recent efforts of the legislature to improve the health of the people. The present session of Parliament has had under consideration several important sanitary measures. Modern sanitary legislation dates from the year 1846, when Parliament carried out many of the recommendations of the Health of Towns Commission by a large and comprehensive Act to promote the health of communities. Since that year, Act after Act has been supplemented on the main one, as the necessities for increased powers arose. And, at last, sanitary laws became so cumbersome and complicated that neither experts in law, nor experts in hygiene, could master the accumulated legislation on public health. A Royal Commission sat a few years ago, under the presidency of Sir Charles Adderley, and recommended a consolidation of sanitary law. The president of that Commission prepared, not without much labour, a Consolidating Bill, upon which the present Government

have considerably improved by judicious condensation; and now an Act has been passed which repeals the numerous Acts of previous years, and consolidates them into one statute. It is rarely wise to attempt such consolidation while law is in flux. Bacon long ago described the danger of such a proceeding, when he pointed out that the conversion into method of changing subjects results in fixing and stereotyping them into a form which resists further change, and therefore arrests their progress. Now, sanitary law is eminently in a state of flux. We have been groping our way very much in the dark as to the means of attaining the ends which we desire to reach. Organisation is altogether deficient. Medical officers of health, who more and more are being made the motive powers of sanitary administration, are appointed at haphazard, without being required to prove their knowledge of, or qualifications for, their important duties. Some of them have a single parish in charge, for which they receive a nominal fee, and probably give nominal work. Others have a thousand square miles, with a substantial salary, but with an area too large for efficient management, unless they are aided by assistant medical officers of health. Again, the sanitary law in regard to the prevention of disease is yet in its infancy. Our knowledge on this subject grows from day to day, and requires continued formulation into accreting law. If, then, the consolidation of law which has been accomplished this session meant, as it usually means, the stereotyping of law for a long period of time, you would join with me in deploring the result. But the responsible minister who introduced it, Mr. Selater Booth, gave the most distinct pledges that it was not to be considered in this sense. And with this assurance, we may well congratulate ourselves that a consolidated statute gives a firmer foundation than the old shifting patches of law, upon which our permanent sanitary edifice may be built. It is in this view alone that all sanitarians will gladly recognise the Consolidating Act of this session as an important contribution to sanitary law. As an amending Act, it is altogether trivial; as a consolidating Act, it is distinctly useful.

Another sanitary measure to improve the Dwellings in Large Towns has also become law. Its objects are excellent, and it has received much attention from Parliament. Will it be productive of much good? In towns animated with the spirit of Edinburgh, Liverpool, and Glasgow, it certainly will. They have already shown by local Acts how much may be done to improve the unwholesome dwellings of crowded populations. Let us hope that there are other towns which will follow their example. I am not confident that as yet many will do so; but the necessity for action will in time force itself upon local authorities. London will certainly use the Act, and root out some of its nests of disease and crime. But it takes a long period to remedy well recognised evils. Recollect how Queen Elizabeth, in her vigorous language, spoke and legislated against overcrowding of cities; and observe how little progress we have made to arrest ills which monarchs and legislators, several centuries ago, recognised as clearly as we do at the present day. The new statute is only permissive, and is limited to towns of twenty-five thousand inhabitants. It must be followed by an Act applicable to smaller towns and country districts, if it is to exert any marked effect on the general evil of overcrowding, which is common to all gatherings of people in civilised communities. In strictly rural districts, as in the Highlands of Scotland, you may have wretched houses, filthy outside and in, crowded and unventilated except by defects in the building; and yet the people have not a high death-rate. In the day they are out in the uncontaminated air of the mountains, and are isolated from epidemic influences. But the more that a community becomes congregated, the more marked becomes the influences of unsanitary homes. You see this especially in savage life. The American Indians on the war-track, daily changing their position, have remarkably small mortality; for the bullets of the whites strike them less surely than diseases do in their permanent wigwams. These Indians in peace die rapidly, not only from that introduction to fire-water which they owe to civilised man, but also from the unsanitary conditions of their dwellings. When things grow too bad, however, they change their encampments, and the mortality lessens. But when the Christian missionary comes among them they are doomed; for they become fixed in villages, with all the traditions of their modes of uncivilised life still clinging to them; and, unable to change their locality, the fatal effects of overcrowding and filth tell upon them with far more severity than the bullets of their enemies in their life of savage warfare. You see all this in a less degree among the inhabitants of country districts who flock into our towns. For this congregation into towns is the characteristic of the age. Hamlets rapidly become villages; villages concrete into towns; and towns become great cities. And with every increase of density of population, there is an increase of the rate of mortality, not as a necessity, but as a consequence of sanitary organisation being defective in the provisions for removing filth and giving an abundant supply of air to accumulating inhabitants. These are the evils which the new statute for im-

proving the dwellings of towns hopes to remove. But a permissive law depends upon a ready formed intelligence for its application, and I confess my misgivings as to the immediate or general utility of the measure.

The law relating to Adulteration of Food and Drugs has been remodelled this session. Its chief changes have been in relaxing its provisions in the interest of traders, and in diminishing the securities which the former law gave to the public. However, the main effects produced by the last law will be continued in the present one, so that the poor will still have the benefit of unadulterated bread and milk. These two staple articles of food are now scarcely adulterated, since detection became easy and certain. There is one kind of vitiation of food and drink at present altogether outside legislative prevention, but which must before long be brought under the dominion of law. I allude to common articles of food being made the vehicles for the transmission of contagious diseases by containing within them particulate contagia. Our evidence as to various articles of food is still inconclusive, but that in relation to water and milk is thoroughly convincing. Our knowledge as to the propagation of contagion is like all other knowledge, passing from occult to simple causation. The human mind seems incapable of accepting the most obvious and simple explanations of natural phenomena, till it has exhausted the most recondite and complex interpretations. So in olden times, and in part at the present day, men looked for sources of contagion above and beneath them, as in celestial conjunctions and in emanations from the bowels of the earth, but not in their own surroundings. When we enter any new field of inquiry, we grope with our eyes bandaged, and traverse it in every direction, from one side to the other, though, when the bandage is removed, we are surprised to see how limited the field is in extent, and how easy it is to take a short cut across. We have reached this stage in regard to food and drink. We begin to see that in any case of common epidemic, such as scarlet fever and measles, we are not only to investigate epidemic waves propelled by some unknown law, but we must examine whether the food of the population may not be infected by some diseased person. Take the case of the epidemic of scarlet fever in St. Andrew's, investigated a few years ago with so much ability by the late Professor Bell. In that small town, the epidemic, though apparently general, was more frequent among a better class of houses. Then the able physician noticed that all the houses attacked were supplied with milk from one dairy. The dairy, on being visited, had scarlet fever on the premises, and the people who milked the cows were convalescents from the disease. A very instructive case of this kind occurred only a few weeks since in London. A member of the present Government had a dinner party, and an evening reception afterwards. None of the guests at the latter observed any particular effects from their visit, but eight of the dinner guests and seven of the household took scarlet fever. All of these partook of a cream which, it is believed, contained the particulate contagium. One or two streets off, there was another dinner party, and four of the guests took scarlet fever. This case has been investigated by one of the medical officers of the Local Government Board, and we may expect an exhaustive report on it. We have already numerous examples of this propagation of disease through food and drink. The Marylebone fever of 1873 is equally instructive. That enteric fever is known to have attacked 143 households, and was clearly traced to infected water, used for dairy purposes, connected with one particular quality of milk, which was distributed in sealed cans. The epidemic was arrested as soon as the milk-supply was no longer distributed. The enteric fever at Armley, in Leeds, was allocated to a particular dairy in the same way, and was stopped by chaining up the pump which supplied water to the dairy. Now, such illustrations of the distribution of contagium are very important, because the source of it may be altogether outside the locality in which the disease is manifested. In the case of the Marylebone epidemic, the polluted well which infected the milk was in Buckinghamshire, and, therefore, might naturally have escaped attention, unless the investigation had been minute and exhaustive. In the cases which I have mentioned of water-pollution, it is usually traced to the most foul of all filth, the intermixture of excrementitious drainage with the water which man uses as a beverage. When introduced into the system as a fluid, though the contagium is not soluble, it seems more certain in its effects than when respired as air. We may err on the side of grandfatherly legislation; but is it possible to allow the law in relation to food to remain as it is at present? You punish a soda water manufacturer if lead be in his distributed beverage; but hitherto he has been allowed to use what water he chose to make aerated drinks. If the water contained sewage, it was found by experience that lemonade would not keep under such conditions; but the common aerated drinks do. In the recent Adulteration Act, we managed to insert a clause requiring the use of pure water for aerated beverages; and this provision of law may become a precedent for future

legislation. For the distributors of food and drink must be made responsible that they do not distribute contagious diseases with them. When, for instance, we had Dr. Frankland's continued reports that the water of one London Company contains distinct evidences of excrementitious matter, the moral responsibility of a distributing water company becomes very serious, and its legal responsibility is only one step forward in the history of preventive hygiene.

We have lately suffered from a powerful epidemic wave of Small-pox; and it will be a matter of great interest to study Dr. Seaton's forthcoming report upon the results of our preventive measures in regard to this disease. If we have failed when we possess a specific preventive remedy in vaccination, we may well be despondent. But I do not think that there has been a failure. Small-pox epidemics are numerous; in fact, they occur at intervals of about four years. But since the great epidemic of 1837-41, there has been none so serious, either in extent or in malignancy, as the epidemic of 1870-3. It travelled as a wave over all Europe; and we are able to compare its attack upon this kingdom as contrasted with that on other countries. In last century, before vaccination was general, the annual small-pox rate of death was 3,000 per million of the population, including non-epidemic as well as epidemic years; as a mean of the late epidemic, it was 928 per million. But that difference, gratifying though it be, tells us little. Compulsory vaccination has only been reached by successive Acts; and the population below five years of age had scarcely been covered by them in 1870, when the epidemic struck us. Previous to these compulsory laws, three-fourths of the small-pox mortality were among children under that age; but, in the recent epidemic, less than a third of the mortality in England, and less than a fourth in Scotland and Ireland, was due to young children. Our compulsory laws gave them a large, though not complete, immunity from the force of the attack. We learned, moreover, by this attack that the protective power of vaccination wears itself out, and that it requires repetition at puberty. The most gratifying result of a general survey is that our protection laws against small-pox, defective as they still are, seem more efficiently administered than those of other countries. In former epidemics, our rate of mortality contrasted unfavourably with them; but, in the late epidemic, this was reversed. While less than 700 per million died in the chief towns of Scotland, and 1,180 in London, Berlin lost 3,448, Hamburg 5,717, Leipzig 6,200, and the large Dutch towns 6,455. The general result of our protective laws against small-pox may be summed up thus: at the rate of mortality in the last century, we should lose 70,000 of our population annually by this preventable disease; whereas our annual average mortality in England is now about 5,000, and was only 3,500 until the last severe epidemic raised the average.

Let us now consider the position of our ministry of Public Health, as represented in the functions discharged by the Local Government Board. That Board has two main purposes to discharge; viz., to superintend public health and pauperism. It is reasonable to join them under one administration, for they are closely connected as cause and effect. But, though both should be made subjects of prevention, pauperism is an existent evil of such persistence, that it is treated chiefly as one of economical administration, and thus it happens that sanitation is viewed in the same light, although its chief relation to public interests is in the prevention of disease. The Local Government Board has never yet fully realised its preventive functions. It looks upon its medical officers of health, much as it does upon its Poor-law medical officers, as curers, and not as preventors of disease. The difference of their functions was well described long ago by Xenophon, in his *Cyropædia*; for he states that ordinary doctors are "menders of garments which are already torn", while sanitary officers have "a care of health of a nobler kind; for it is their duty to prevent the men from becoming sick". As the name of the Central Board implies, it ought to foster and not to discourage local government. But, if there be one thing which local authorities might be expected to possess, without being imparted by a Central Board, it is common sense in the transaction of business; and, if there be one thing which a Central Government ought to give, it is scientific sense which is not common. But here the Local Government Board completely misunderstands its functions; for it crams common sense into local authorities already saturated with it, and refuses them the scientific sense which they cannot be expected to possess. Its estimates already amount to £695,000, of which only £93,000 are applied for all kinds of prevention, including the sanitary officers and inspectors of the Board, the vaccination system, the Alkali Act, the medical officers of health and inspectors of nuisances. The "menders of torn garments", as Xenophon would describe the Poor-law medical officers, absorb £127,000 more; but I am inclined to add that sum to the preventive staff; for I think they do very largely act as preventors of pauperism in the cure of disease. The Local Government Board, by its present and past ministers, uphold powerfully the

independence of local authorities from medical despotism. They think it a gross interference with local authority that the skilled medical experts in London should advise local boards as to their procedure in the eradication of local causes of disease; but they think it no encroachment of central authority when guardians are not allowed to change gruel for arrowroot in a workhouse dietary without the permission of the President of the Local Government Board. If there be some small excess in expenditure in a local authority, down goes one of the thirty-nine Poor-law auditors to audit the accounts. But the idea of auditing the death accounts of the same authority would be deemed to be a wanton interference with the independence of local government. Yet such an audit would be incalculably beneficial, in an economical point of view, both in its relations to the prevention of disease and of pauperism. If one district have a rate of mortality of seventeen and another locality one of thirty-four in the thousand, a rigid medical audit of the death accounts is called for, in order to discover why there is such an unequal local assessment of life, and why one population is taxed so heavily by a double rate of deaths. Such an audit of death accounts involves in its exercise the scientific sense which I have described as uncommon, and which cannot be possessed by the local authority, whose common sense the Local Government Board so rigidly bridles by central interference.

It is quite true that the Local Government Board sends down medical inspectors to localities to investigate diseases when they have become a scandal to the community; and these officers have often been useful in detecting the causes of the prevalent diseases; yet, practically, there are only three medical inspectors available for this duty. Out of 1,588 boards, they managed last year to visit 57, and this fractional aid was not very substantial. What I desire to urge is, that their duties should not be detective, but preventive. No doubt, prevention cannot be effectively carried out until there is a public registration of diseases as well as of deaths; for the former represent the wrecks which strew the shore after the storm has passed, while disease-registration would give us the rising and falling of the barometer required to give ample warning of the coming storms. It may be difficult to obtain full knowledge of contagious diseases in private practice, but there should be no difficulty in organising a system by which all such diseases as are treated at the public expense, in hospitals or by Poor-law medical officers, should be made available for the purposes of public hygiene.

I think that the House of Commons will soon take this matter into its own hands. A new department like the Local Government Board, with an expenditure of nearly £700,000, ought to be looked upon with much public watchfulness. If it have any justification at all in its relations to public health, that must rest in its powers of preventing disease in the localities which it governs. Does it succeed in this primary function? Is preventable disease, other than small-pox, prevented by its agency? I cannot answer these questions either in the affirmative or negative. There are no means for doing so, either in the reports of the Local Government Board or in those of its medical staff. In the latter, indeed, I find important investigations of epidemics which have run their course, and an excellent history of their causation. But I find no accounts of action taken to prevent these epidemics from occurring. I find no action described upon an audit of excessive rates of death. The President of the Local Government Board did tell me, in debate in the House of Commons, that he had quarterly returns of death-rates put upon his table, and that he directed inquiry if he found them excessive. Well, utterly inefficient as such a quarterly examination would be, I want to know the results of them. The nation has a right to a specific answer to the question, Is preventable disease prevented by our great expenditure on a central administrative machinery, and by the constant increase in local rates? For no less object is such expenditure justifiable, or should central interference with local government be tolerated. But all the elements for answering this important question are absent from the information given to us by the Local Government Board. I take this opportunity of giving notice that, as far as the influence of a single member of the House of Commons can be effective, I intend to use my constitutional rights to obtain the information necessary to enable the nation to judge whether the Local Government Board is effective in preventing preventable disease; for no lesser function justifies its existence, either in its relation to public health or to pauperism, which stands in such close causation with the insanitary state of communities. It is by a constant care in preventing the growth, or in removing the accumulations of filth in and about the dwellings of the people, that the watchful public officer of health can hope to prevail against disease. He knows well that pure air, pure water, and pure soil are the main conditions for the health of communities when they are earning wages enough for their comfortable existence. The simplicity of the ends in view is not disturbed by the

complexity of the problem how foalness acts in producing disease. There may be filth without disease of an epidemic sort. King Edward II, when in confinement at Berkeley Castle, was placed in a room contiguous to a well into which carcasses of horses and dogs were thrown, in order to poison him with their effluvia; but the poor monarch would not die, and his entrails were burned with red-hot irons. Yet a sanitarian would know that not only the king, but all in the castle were in jeopardy by the foul experiment; for a single particular microsome of a fatal disease might have planted itself on the filthy soil and multiplied exceedingly.

Even the septic living germs of disease may be wanting under certain conditions; but more generally they are present to attack the bodies of the living and to corrupt the bodies of the dead, if they find a filthy soil suitable to their growth. Though the royal captive escaped the deadly effects of his exposure, prisoners before the time of Howard were notoriously victims to like influences. Tennyson, in his recent drama, thus describes the effects of filth on captive heretics.

"In breathless dungeons over steaming sewers,
Fed with rank bread that crawled upon the tongue,
And putrid water, every drop a worm,
Until they died of rotting limbs; and then
Cast on the dunghill naked, and become
Hideously alive again from head to heel,
Made even the carrion-nosing mongrel vomit
With hate and horror."

Independently of all theories of causation, we know that diseases require filthy surroundings in the air, water, food, clothing, and soil before they become permanently located. A great wave of an epidemic may pass over all our sanitary barriers, though the ordinary and lesser waves are broken by them. The greater and lesser epidemic waves are, like storms in the air, beneficent remediators of a disturbed equilibrium; for pestilences, in relation to whole populations, resemble that angel of mercy who stood in the way of the prophet armed with a sword, ready to smite if he had not turned from his evil course. So, when mankind allows itself to be sapped and undermined by the insidious consequences of sanitary neglect, so that the members of a community lose their manly strength, their morality and liberty, then pestilence falls upon the degenerate society and rouses it to a sense of their danger. When the sanitary neglect is general, an epidemic gathers itself up in a wave and sweeps along till it meets with some barrier, like an outstretching headland, to break it in its course. Certain diseases, in their epidemic form, appear to break up entirely under the improvements of civilisation, or at least cease to travel in their former force. Instances of black death and sweating sickness are still said to appear in remote parts of India and Persia, but, like the typhus gravior of our large towns, are unable to accumulate into the waves which some centuries ago used to sweep all over Europe. The plague of the East, which still gathers itself up into a frowning crest, breaks before the sanitary barriers which the civilised communities of modern Europe have raised against its progress. But as yet these have been insufficient to meet the cholera wave which every few years threatens to pass over us. We have lately seen it pass with more or less strength over our continental neighbours; but it has broken upon our own shores, and has not traversed the country. Is this due to our sanitary improvements? It would be premature to answer in the affirmative; for at the present moment we see another threatening cholera wave gathering itself up in the East, and we will have more reason for confidence if it again break innocuously on our sanitary barriers. The recent serious epidemic of small-pox should teach us that, though we may be better prepared than other countries for such visitations, yet our preventive medicine has much to do before it has exhausted its powers for the protection of the people. It is because I earnestly desire that our State authorities charged with the care of the health of the people should constantly inform us of their successes and failures that I have, through you, to-day urged the necessity of a national audit of death and disease. But this audit should not be a mere central one. The Local Government Board ought, of all administrative departments, to develop a system of local government as distinguished from a central bureaucratic government. When improved local organisation of authorities renders that possible, the Central Board should more and more exert a guiding rather than a controlling influence. Registrars of sickness and death must first be made useful in each locality, for they stand small chance of accomplishing their work of prevention of disease if the whole responsibility for using them be thrown upon the central authority. Thence should emanate the scientific knowledge necessary to apply facts to a general system of useful application; but unless the medical officers of health are trusted by the local authorities as their immediate sanitary advisers, and are encouraged to use the knowledge of sickness and death, gathered in the locality, for the prevention of disease, local government will con-

tinue to be looked upon as an unpleasant machinery for augmenting rates, and not as one for economising the life and resources of communities. And so, in my opinion, not increased central administration, but more effective organisation of local authorities, is the crying want of sanitary progress.

An improved organisation would enable local authorities to obtain more highly qualified medical officers of health than they can possibly obtain at the small salaries frequently offered. Although many of them were appointed without adequate knowledge of public hygiene, there has been much growth of technical knowledge among them, and already about nine hundred furnish specific reports of their labours to the central government. Many of these are characterised by great ability, but their influence extends little beyond their own locality, and hard-won experience is lost for the public good. When local organisation is improved, and the central authority is brought into more effective scientific relations with it, we may see an immense impulse given to preventive medicine.

AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF PSYCHOLOGY,

At the Annual Meeting of the British Medical Association,
in London, 3rd August 1875.

By WILLIAM H. LOWE, M.D., F.R.S.,
President of the Section.

GENTLEMEN,—Allow me, in the first place, to thank you for the honour you have done me by placing me in this chair—an honour, I beg to assure you, I very highly appreciate. I must, at the same time, say, as I glance around me, I feel that you might easily have selected one who would have more ably fulfilled the duties now devolving upon me. As, however, it has been your good pleasure to elect me your President, it only remains for me to do my best to merit your choice. As I have only now for the first time become a member of the British Medical Association, I hardly know what may have been customary by my predecessors in office; but, in the face of this fact, that our secretaries, instead of having to beat up for papers to be read, are, on the contrary, rather embarrassed by their riches, and find it difficult to assign time for the perusal and due discussion of a variety of highly interesting topics, my own remarks will be extremely brief.

I have often contemplated that which I think must be admitted as an indisputable fact; viz., the fashion which obtains in medicine, what I may term the ebb and flow of medical opinion, both as to remedial agents and methods of treatment. For example, it is not long since the familiar antimonial wine was almost universally prescribed; now how little it is employed. Warm plasters to the loins, strengthening plasters to the chest, cupping and dry-cupping, and fifty other things easily remembered, were considered invaluable. I will not say the trade of the leech is gone; but certainly leeches now are scarcely sold; and, to point to a more recent instance of the caprice to which I allude, podophyllum was introduced within the easy recollection of us all by a practitioner of high and well deserved repute, and yet I am told by the druggists that at present it is rarely made up. Even cod-liver oil, as Dr. Bennett reminded us, was not a new remedial agent, only one revived after being out of fashion for an indefinite time. These medicines were not inert, nor the remedies inefficacious; nay, many of them were valuable, and amply bore out the reputation given by those who originally introduced them; still we see they have their day, and are then shelved and forgotten until, by a turn of fashion, they again appear. Nor will anyone, I think, deny that this fashion, this ebb and flow of opinion and practice, has not obtained in that particular branch of medicine which we call the Psychological School. At one time, Indian hemp was said to do wonders; at another, ergot of rye. A few years ago, we heard a good deal of the pack-sheet and Turkish baths, and very many other things we all know have from time to time been extolled, and then, without other reason, as far as I can see, than no longer possessing the charm of novelty, have fallen into disuse, or taken their place as measures to be occasionally resorted to by the intelligent physician; and who dare say but that chloral and bromide of potassium, our sheet-anchors at present, will not in turn give place to remedies themselves to have their day? I am not in the slightest degree depreciating either the remedies or practices to which I have alluded, but only ask how this perpetual revolution of opinion is indicative of progress, and I believe we shall be inclined to admit that ebb and flow may take place without advance; and yet this was all we had arrived at apparently until a few years ago, when something more than a tem-

porary fashion in psychological medicine might be seen to dawn on the horizon. It was, in this country at least, from the slight but brilliant scintillations which emanated from our venerable friend W. A. F. Browne at Dumfries that a truer and more lasting course of study was inaugurated. Psychology is only now in its infancy; happily, the infant is a vigorous one. I hardly know what our venerable friend already alluded to, Dr. Browne, will say to my having thus, in the evening of his days, affiliated upon him this promising infant; but I think we shall all be ready to acknowledge the paternity, and that it is one the distinguished father need not be ashamed of. I need not trace how the little rivulet from these small beginnings has swollen into the stately river, increasing year by year in volume and power; indeed, it would be impossible for me, in these hurried remarks, to trace the progress of psychology from those early shreds of information up to the present ample and systematic course of instruction which is now presented to the student; but those who have thus contributed to this great end are all known to you, and their well deserved merits are reiterated, and fondly reiterated, year by year; for who does not love to record and to dwell upon the successful labours of those so lately passed from among us? If to Dr. Browne belong the first steps in psychological instruction, can we forget the more recent and more systematic teaching of our late friend Dr. S. Rae? But the registration of undoubted facts in pathology, or the observations of experimental physiology, no wave of fashion can obliterate, no ebb and flow of opinion efface; and it is to these the psychological student of the present day applies himself, convinced that aberrations of mind must be connected in some way with lesion of the brain, or at most the nervous system. He devotes himself to these, content, perhaps, with small results, if only the facts observed be true. A very few years ago, the now well recognised disease of general paralysis was scarcely known; now, alas! how little is treatment available, except to prolong "a wretched existence"; but who shall say to what results the pathological observations of that disease, first made, I think, at the Royal Edinburgh Asylum by my friend Dr. Howden, may presently lead? At all events, let us contrast the value of such researches with the speculations and practices of a former generation, when we floated on the opinions of the day, guided by little else but phenomena of the cause of which we were entirely ignorant: with the pathological observations and microscopic structural examinations which now occupy the psychological student. Let me for a moment state what I can recollect, and what is now the case. It is even in my day, and in the remembrance of many here, that our asylums were, many of them, dens, or at best only receptacles for lunatics; they are now, throughout the country, a credit to our humanity and civilisation; and, instead of being dens or mere homes for the insane, each one may be regarded as a School of Psychology. Instead of psychology being tacked to the end of the course of medicine in the lectures of our university professor, public lectures and clinical teaching are provided for any who may desire to cultivate this most important branch of medicine.

If such be the progress made even in the remembrance of myself and many now present, is it too much to predict that, ere many years have passed, we shall see not only extramural teaching, but, in this University, a Chair of Psychological Medicine? This subject will never be justly estimated or fitly taught until this important step is gained. The present professor of medicine, Dr. Laycock, whose efforts have ever been directed in forwarding the science of psychology, will not, I know, be the one to retard its progress.

Were every commissioner in lunacy and every physician of an asylum compelled to produce his diploma in psychological medicine, and were the class at the same time, open to the general student, who can doubt but that this great measure would be realised, and, more, be self-supporting? Perhaps there are those now present who smile at my thus going into detail respecting a chair *in nubibus*; but, if our psychological infant have advanced in thirty or forty years' course of time to present such an aspect as he does this day, and to occupy in this great medical Association a distinct and definite position, constituting a special section in its comprehensive scheme, I believe I am neither too enthusiastic nor too sanguine in believing that in much shorter time than has accomplished the present hopeful state of things the imaginary chair I have sketched out will be attained.

Before sitting down, I shall beg to make one other observation of rather a practical character. It was recently remarked to me by an intelligent and well-educated physician, who had been listening to a discourse on insanity, that he had been deeply interested in it, and regarded the lecture as a most valuable one; but he added, impatiently, "Why can't the man speak in English? I was so occupied in endeavouring to give the just meaning of some of those long words, that I

continually lost the thread of the discourse." I am well aware it is not easy to discuss a scientific subject in words merely Saxon, and that we are driven to employ a few terms more than our mother-tongue has taught us; still, is the exponent of science more learned because he shrouds his subject in language so obscure that his professional brethren cannot readily apprehend it? Will it further a subject, or tend to its more favourable reception, if it can only be understood by the aid of a glossary? At all events, I think we may take the hint from the gentleman alluded to, and refrain from the use of a Græco-Latino-German word where one of plain English will suffice.

With these few and imperfect remarks, we will pass on to the business of the day; viz., a most promising paper by Dr. Clouston, our metropolitan physician, as I will call him, of the asylums in Scotland.

REPORTS AND ANALYSES

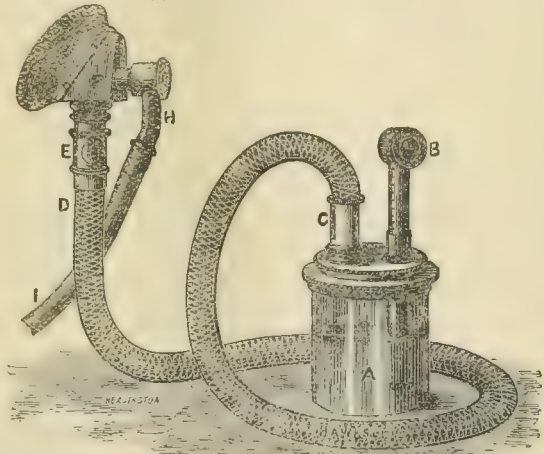
AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

HAWKSLEY'S NEW ETHER-INHALER.

THE apparatus consists of a glass chamber (A) capable of holding ten ounces of ether. The sliding tube of the inlet valve (B) is graduated into ounces for the purpose of measuring the consumption of ether. The pipe (C D) conveys the ether-vapour to the face-piece (F), the edge of which is surrounded by a water-cushion, for the purpose of more closely



fitting the face. The shutter-valve (E) is for regulating the admission of air either at the beginning of an operation or during its progress. The pipe (I) and the valve (H) convey the expired air to the floor. The glass vessel (A) is half immersed in water, heated to 100 deg. Fahr., in order to promote a more rapid and equable evaporation of the ether. For this purpose, the metal case in which the apparatus is carried is used as a bath, the glass vessel being placed in the cell and surrounded by the warm water. The ether boils at about 90 deg. Fahr.; but before the quantity contained in the chamber (A) has reached that point, the temperature of the surrounding water has fallen; and, even were the temperature of the water sustained, the constant circulation of the external air prevents the boiling of the ether. The time required to produce insensibility to pain is from three minutes and a half to four minutes, and about an ounce of ether is used in a quarter of an hour.

This apparatus has been used with great success for nearly three years at the Middlesex and St. George's Hospitals, as well as at various county hospitals and infirmaries, and large numbers have been sent to Australia and America. At present, the apparatus is chiefly made for hospital use, and is capable of containing sufficient ether for five ordinary operations without being replenished.

The expiratory tube has proved of great advantage, for the expired air and vapour being heavier than the atmosphere, remain at a lower level than the air breathed by those about the patient. The inlet valve can be readily observed by the administrator, and indicates whether the patient be breathing or not, and also the number of respirations. By a judicious use of the shutter-valve, the majority of patients become insensible without that violent struggling so often witnessed when chloroform or ether-vapour, insufficiently diluted, is used.

BRITISH MEDICAL ASSOCIATION :
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st, Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, AUGUST 7TH, 1875.

THE EDINBURGH MEETING, 1875.

THE British Medical Association has now, within brief intervals, held three great metropolitan meetings : in London, in Dublin, and, during the present week, in Edinburgh. Of this the last, that which is now in progress, is very far from being the least. It is indeed, in many respects, the most complete expression of the fullest development which has yet been attained of the capacity of the profession for completely united and fully representative action in congress of the three kingdoms.

The meeting of 1875, in Edinburgh, owes its undoubted success to a conjunction of many fortunate circumstances, none of which, however, except perhaps the singular favour of weather of unclouded splendour, is so wholly adventitious or accidental, that they may not furnish useful lessons for the future, as well as agreeable subjects for reflection at the present.

In the first place, the Association is peculiarly fortunate in its President. Sir Robert Christison is a man whom the profession delights to honour ; and, as professional honours are rarely won without high desert and great labour, so it may truly be said that Sir Robert Christison has earned by long years of faithful work, of sincere, unselfish, and unfeared activity, and of unsparing devotion to public interests, the right to all the highest honours which the profession can bestow. In professional and public questions, Sir Robert Christison has shown, for nearly half a century, that he has the faculty of leading ; he is a born "leader of men". And the choice which the British Medical Association has made has since been followed by the British Association for the Advancement of Science. The choice was justified in advance, by the universal acceptance with which it met ; it has been sealed with success in the course of the preparations for, and the proceedings of, the meeting. No other man, we imagine, could so readily have united all parties, so thoroughly have propitiated adverse influences. As Sir Robert Christison intimated, in a truly graceful phrase, during the second day of meeting, there were some among those who desired to welcome the Association in Edinburgh, who were disposed to desire that the invitation should be deferred until the new University buildings were completed, which may not be for some few years. Those, however, who wisely determined in favour of the present year for the Edinburgh meeting, were unquestionably largely influenced by the fact that Sir R. Christison had accepted the office of President ; and in that they saw the pledge of assured success.

The prosperity of the meeting has been largely favoured by the excellent arrangements of the local secretaries and the business committee ; and among these we ought especially to mention, even at the risk of omitting for the moment fellow-workers of high desert, Dr. Matthews Duncan, Dr. Batty Tuke, Dr. Gillespie, Dr. McKendrick, Dr. Bishop, and Mr. Chiene. They have forgotten nothing which the experience of past years has shown to be conducive to the ease, convenience, and good working of the meetings ; and they have added many novelties which will be remembered and adopted in future years.

Every meeting has its own special characteristics ; the Edinburgh meeting will, we think, be remembered as one which was especially

remarkable for its scientific character, for the perfection of its arrangements, and for the serious work done. The great beauty of the city, and the universal hospitality of the profession which crowned the scientific doings of each day served as a setting for the daily work without diverting attention from it.

The general meetings and the Sections have been crowded. The President's address, remarkable as an example of sustained argument and severe thought, gave the tone to the meeting. For a much younger man, it would still have been a remarkable effort. It occupied two hours in delivery ; and it fully maintained the interest of the audience in a close and prolonged argument, which set forth views by no means popular with a great many of the auditory, and which will certainly evoke much discussion before their practical conclusions are adopted elsewhere than in the sphere to which Sir Robert Christison concludes that they are particularly applicable.

The address of Dr. Begbie, which we publish to-day, will be recognised as a masterpiece of polished erudition and accomplished skill. Such addresses supply a desideratum in medical literature, and recall medical thought to the higher spheres of contemplation of secular epochs of progress. The address of Dr. Russell Reynolds last year struck a like key-note of philosophic thought ; and, if a succession of such addresses can be secured from the great modern masters of medicine and surgery, that alone will suffice to secure for the Association a claim to the gratitude of the profession.

The meeting is in progress while we write. We abstain from commenting upon features of its business which are still, in legal phrase, "*choses in action*". The demonstrations of Professors Lister, Otis, Sanderson, and others ; the valuable papers of Drs. Braidwood and Vacher, Caton and Rutherford—early results of the scientific grants—serve to increase the solid value of the work. Already, on Wednesday evening, more than one thousand members had entered their names as visitors ; and the universal verdict recorded is, that the Edinburgh meeting is a complete, a brilliant, and a national success.

PROGRESS IN MEDICINE.

It is difficult for any man, however able, to estimate the importance of the advances which the practice of medicine has made in recent times, unless he be intimately acquainted with the history of the art, and have also that true discernment which originates in and is quickened by practical experience. The erroneous notions springing out of this difficulty Dr. Warburton Begbie has set himself to expose in the very learned and thoughtful Address in Medicine which he delivered before our Association at Edinburgh.

Sir William Hamilton asked the question, "Has the *practice* of medicine made a single step since Hippocrates?" and answered it in the negative. We are surprised that a man possessed of the knowledge and acuteness of Sir William Hamilton should have been content to deny any progress to the healing art. The facts of mortality in civilised countries show that plagues are arrested and diseases are less deadly in proportion as medicine is more scientifically studied. There are not in modern times any diseases of such terrific malignity as the Black Death and Sweating Sickness of the Middle Ages. Even cholera, we have good reason to hope, if it should visit us again, will be deprived of its intense fatality. Small-pox has been brought under control by vaccination. Should it be remarked that these maladies have not been cured or even modified in their progress by drugs, the answer is, that the true physician does not rely upon drugs alone, but summons to his aid all the resources of Nature, of which drugs are only a part. Everything in the wide domain of Nature that can attack disease, its causes, its activities, or its effects, is a constituent part of the *practice* of medicine. If any man should not understand this, or should wilfully close his eyes to it, then he does not comprehend the higher philosophy of the art, as now taught and practised by our most enlightened physicians.

In regarding Nature in this general sense in connection with the art of healing, we touch the very proposition which is at the centre of the Hippocratic philosophy—a proposition on which Sydenham delighted to insist, and which seems to have unduly swayed Sir William Hamilton in coming to his unfavourable decision. There is no phrase, probably, that is more liable to misleading interpretations than this. What do we mean by Nature? Is it the variety of phenomena and agencies external to man? is it the formative and disintegrating forces within the body of man? does it signify mere physical forces? or does it include also that mysterious influence over the animal economy which we call vital or spiritual, according to the hypothesis employed for the interpretation? We say—the whole of these; but, in view of the argument so ably expounded by Dr. Begbie, we limit it to that preservative power which was supposed by Hippocrates to be the restorer of any disorder in the bodily functions—the *vis medicatrix nature*—which was explained by Sydenham to be that Nature which “by herself determines diseases, and is of herself sufficient in all things against all of them”.

There can be little doubt that too implicit a reliance upon this assumed *vis medicatrix* would lead to a negative practice, to an indolent acquiescence in its operations, rather than to an active interposition with the intention of using and guiding them. This principle has lain at the root of many modern fallacies and empirical systems of treatment. It must not be overlooked, that Nature will cause diseases and conduct them to a fatal termination, as well as cure them; and it is the province of the skilful physician to discern the tendency of these actions, and to moderate or quicken them as may seem most expedient. In whatever he does, however, if it be done wisely and thoughtfully, is all in subordination to those forces which are moulding the living structure; and, so far, he is a pupil of the great father of medicine, who was himself, if primarily a servant of Nature, also a prompt and energetic practitioner.

Sir William Hamilton was doubtless charmed by the universality of this proposition. A philosopher himself, he recognised the importance of a law that subjected all art to Nature, and made art only an ingenious application, in special cases, of the forces already pre-existing in Nature. We have always regarded Hippocrates as the most eminent natural philosopher of his time. He was the only man of his age who inculcated as a principle the duty of observing Nature—of founding practice upon experience; and in this respect he was the forerunner of that method of research which we now call the Baconian system. We believe that this will be the conclusion to which every reader who studies the philosophy of the men of that era will come.

But is this all that is meant by the *practice* of medicine? Surely not; and here Dr. Begbie's address is rich in illustrations of the advances that have been made by modern men in all departments of medical science. The science of medicine has for its main end the saving of human life, and every improvement or gain of exact knowledge made in any one of its sections must ultimately have this application. “It might be a sufficient answer,” says Dr. Begbie, “to the query of Sir William Hamilton, to signalise the discovery in modern times of vaccination, and the introduction of sulphuric ether and chloroform as anæsthetics.” But the study of anatomy, physiology, and pathology, has wonderfully advanced, and gone far to put the treatment of disease upon a sound basis. If we cannot predict what will be the effect upon the human body of any particular drug until we try it, we are getting nearer to an exact knowledge of the effects or changes that we should aim at producing in order to correct any morbid action. If we shall succeed in the course of time in determining the “way to do it,” we shall at the same time succeed in making the practice of medicine a science; we shall be able to fix with confidence upon the drug (its operation being already known) that is qualified to produce the results we desire to attain; and we shall know how they are attained. The haphazard of a blind empiricism will be supplanted by a rational and scientific treatment. We believe that we are already far on the road to this consummation. It is quite true that we are in the dark at

present as to the mode of operation of most of our so-called specifics: how quinine cures an intermittent; how iodide of potassium cures syphilitic periostitis; how chloroform annihilates pain; how a minute speck of vaccine lymph prevents an attack of small-pox. These are among the profound mysteries of Nature that will take time to unravel. But, on the other hand, successful treatment depends in a high degree upon a correct diagnosis; and how great have been the advances made in this direction during the last thirty years by original investigation into the phenomena and structure of animal bodies! How much have the discoveries of Bell and Marshall Hall done to help the practitioner in respect of the diseases of the nervous system! Dr. Begbie alludes to these points with much felicity.

What is termed “preventive medicine,” or the study of the etiology of disease, is perhaps the most complete development of the Hippocratic theory that has been made by modern men. The system now in operation in this country transcends any idea of the scope of such a research which Hippocrates entertained. It will be the means, however, ultimately of saving countless human lives. Here, indeed, we get away from the sphere of drugs, and work through the medium of natural forces in their direct action upon the animal economy. This science must be regarded as peculiarly modern; unless, indeed, we join the sceptics, and insist that there is nothing new under the sun, because observations of facts lying on the surface of things have been made before—observations that indicated a correlation that had never been actually made and systematised.

After all, modern medicine is a very different thing from what medicine was in the days of Hippocrates. Our great Harvey, in discovering the circulation of the blood, laid its foundations so firmly, that they can never be overthrown. John Hunter, by his laborious researches, has deserved the proud title of “the father of scientific surgery”. Charles Bell was the founder of a school of investigators who are toilsomely unfolding the complex structure of the nervous system, and leading us nearer to an understanding of its mysteries. Have not the labours of these men advanced the healing art? It seems idle to ask the question. We are all indebted to Dr. Begbie for his erudite defence of modern physic, and assuredly the duty could not have fallen to abler hands.

ALLEGED MANSLAUGHTER BY A SURGEON.

A CASE of much interest to most practitioners was decided last week at the Lincolnshire Summer Assizes. Mr. W. John Haram Wood, surgeon, of Boston, was indicted for the manslaughter of one Mrs. Wright. It appeared that the patient, who had previously given birth to six children, was taken in labour early in the morning of April 6th, two months before her expected time. Mr. Wood was sent for, and attended. The patient had had two very severe labour-pains, and also some hæmorrhage, before his arrival. He found her much exhausted, and, on examination, discovered that the placenta was partially detached; whereupon he intimated to her friends that she needed help, and proceeded to deliver her by turning; one foot being brought down, to which a tape was attached, and the child, which was dead, extracted; the placenta coming away at the same time. The patient was very weak and exhausted. After giving instructions to let her lie about half an hour, he left. The patient never rallied, and sank within three hours of her delivery.

Dr. G. M. Lowe of Lincoln, who made the *post mortem* examination, and upon whose evidence, apparently, at the inquest, Mr. Wood was committed for trial, gave evidence to the effect that there was rupture of the uterus, and “he had no hesitation in saying that the rupture was the immediate cause of death. Such a rupture was a rare thing, and the position of this one was remarkable. This rupture was not the result of natural causes,” because it was below the position of the child in the uterus, and therefore must have been caused by the exit of the child from the uterus. He asserted that ruptures occurring spontaneously were most frequently transverse in direction, and were

usually situated at the fundus, as the walls of the uterus were in that situation thinner, and consequently less resistant, than elsewhere. He admitted that "no care or skill could have saved her life, owing to the rupture and the hæmorrhage, which were said to have taken place previously"; and that "it would have been certain death to have left the fœtus there. It was incumbent upon the doctor to deliver the child. Assuming that it was necessary to deliver artificially, he saw nothing out of the usual course or in any way improper in the conduct of Mr. Wood."

Mr. Justice Lindley, the presiding judge, in his charge to the Grand Jury, remarked that "the case for the prosecution was, that the death did not result from natural causes, but from the criminal negligence and want of skill of the prisoner. It was not denied that, in the first instance, he might have acted properly; but it was urged that he left his patient too soon—that he ought to have stopped longer with her." His lordship, after hearing the evidence of Dr. Lowe that it was incumbent upon the practitioner to deliver the woman, and that no care or skill could have saved her life, even had he remained longer than he did, remarked that it would not be just to convict Mr. Wood, and therefore directed the jury to return a verdict of not guilty. The child was not in a proper position for delivery; and, after Mr. Wood had examined the woman, he found it necessary to deliver her at once. That was his first duty, and it could only be done by using force. Of course it sounds sad to inexperienced people that force should be used; but, had force not been used, the woman must have died; and by using force her life might possibly have been saved.

We are at a loss to understand on what grounds Dr. Lowe asserted that "ruptures occurring spontaneously were most frequently transverse in direction, and were usually situated at the fundus". Any part of the uterus may be the seat of laceration, while the rent in the tissues may take any direction. Considerably more than half the ruptures at the full time occur in the region of the cervix, generally at that part which marks the junction between the uterus and vagina. Next in point of frequency comes the body, and last of all the fundus, which is the site preferred in early pregnancy. These are the *ipsissima verba* of one of our most reliable modern authors, and the experience of most practical men will endorse the statement. In these days of frequent prosecutions for malpraxis, it behoves every man to be extremely cautious in enunciating theories, more especially when they have no foundation in facts. Non-professional people can scarcely be expected to decide when doctors disagree. The profession owe a debt of gratitude to Mr. Justice Lindley for his sensible remarks; and we feel sure that the majority of the profession will sympathise with Mr. Wood, and congratulate him upon the issue.

THE prize of 2,000 thalers for the best work in the Geneva Convention has been awarded to Professor Lüder of Erlangen.

KING ALBERT of Saxony has been nominated "Rector Magnificentissimus" of the University of Leipzig.

THE metrical system is to be used in Hungary in prescribing and dispensing, from January 1st, 1876. The quantities are to be written legibly without abbreviations. A table of the old weights and their metrical equivalents has been published for the guidance of practitioners.

WE regret to announce the death of Mr. John Churchill, the eminent medical publisher, who for many years, originally in Princes Street, Oxford Street, and subsequently in New Burlington Street, has been most intimately associated with the members of the medical profession by the publication of their works. Mr. Churchill died at Tunbridge Wells on the 3rd instant, and was within a few hours of completing his seventy-fourth year. His mantle has fallen upon his sons, who doubtless will continue the same active participation in medical literature which was initiated by their father.

THE *Vakit*, a Turkish newspaper published at Constantinople, states that the cholera in Syria is considerably increasing. According to it, during the past week, the number of cases reached 500, a great part of which were fatal.

AT the assizes at Haverfordwest last week, the trial of Dr. Adler for the murder of Lieutenant Walker, of the Royal Artillery, at Fort Hubberstone, was concluded. The jury, after deliberating an hour and a half, acquitted Dr. Adler of the charge of wilful murder; and, no evidence having been offered on the minor counts, he was discharged.

A HOSPITAL FOR INCURABLES IN VIENNA.

THE brotherhood of St. Michael has lately opened, at Währing near Vienna, a new hospital named the "House of Charity", the object of which is to receive poor incurable persons, without distinction of religion or nationality, who are unfit for treatment at other hospitals, and to maintain them entirely without charge during their life. The hospital at present has accommodation for thirty; but the number will be doubled when the building is completed.

VIVISECTION.

DR. J. CRICHTON BROWNE, Medical Superintendent of the West Riding Lunatic Asylum, writes to the *Times* as follows:—

An advertisement which appeared in your columns yesterday, under the authority of the Society for the Abolition of Vivisection, contains statements which are skilfully misleading, and which call for immediate correction. After giving an inaccurate description of the mode of experiment adopted by Professor Ferrier in his important researches into the functions of the brain, and after quoting a few of his observations adroitly selected, because to the non-professional reader they may seem to justify the unwarrantable conclusion that "intense and protracted agony" was inflicted during their progress, the advertisement proceeds to say:—"It is stated that chloroform and ether were given in some of these experiments; but it appears to have been done with the view of rendering the animals helpless." It will, I think, scarcely be credited that this is the version which the Society for the Abolition of Vivisection thinks proper to give of Professor Ferrier's distinct intimation, made at the outset of the paper in the *West Riding Asylum Medical Reports*, from which the observations are quoted:—"It may be here mentioned, once for all, that before and throughout all the following experiments ether or chloroform was administered."

Every one able to understand the meaning and purpose of Professor Ferrier's experiments will at once perceive that it was essential to their success that the animals employed in them should be unconscious and incapable of feeling pain or of making any voluntary effort. The movements and cries produced by the faradisation of the brain were not expressive of suffering, but simply of the stimulation of a motor centre, and the "intense and protracted agony" of the animals exhibiting these signs of pain was not greater than that of a pianoforte when its keys are struck. Similar signs of pain may be witnessed in an animal without a brain, or in the deepest state of anæsthesia. It is an elementary truth in physiology that the brain-tissue itself is absolutely insensitive, and may be irritated or sliced away without even discomfort being occasioned. All this must have been well known to those who concocted the advertisement referred to, and yet they have not hesitated to deceive the public by representing mere automatic movements as indications of "intense and protracted agony". To such base practices may not ill-judged enthusiasm or a thirst for subscriptions reduce even a benevolent society!

THE MEDICAL PROFESSORSHIP FOR THE AINTAB COLLEGE.

THE HON. ARTHUR KINNAIRD, M.P., speaking lately at the annual meeting of the Turkish Missions' Aid Society, held under the presidency of the Earl of Shaftesbury, at Willis's Rooms, said, that the committee of the Society wanted to raise £5,000 in Great Britain to complete the proposed endowment of a professorship in the medical department of the Christian college at Aintab, in Central Turkey. One of the most pressing wants of the East was competent native medical practitioners. The Society had recently appropriated £1,000—the half of a legacy Miss Harrison, late of Sheffield, had bequeathed to the Society—towards the endowment fund; and it was desired to complete the fund by adding £4,000, in order to place the young and

flourishing college at Aintab on a sound footing. The fund would be placed in the hands of British trustees, and the interest paid bi-annually to the college for the support of the professorship.

EDINBURGH UNIVERSITY CLUB.

The quarterly dinner of this club was held at St. James's Hall on Monday evening last—Capping Day. Dr. Lavies occupied the chair. A small but very genial party was assembled. The Chairman read a telegram which arrived in the course of the evening from Dr. Farquharson, one of the honorary secretaries, giving particulars of the graduation ceremonial of that morning. The usual toasts were proposed and responded to, and the Chairman, Dr. Boulton, Dr. Cock, and Dr. Shears, contributed much to the musical entertainment of the evening.

SCOTLAND.

CAPPING DAY IN EDINBURGH: HONORARY DEGREES.

The annual ceremony of "capping" took place in the Edinburgh University on Monday last. After an opening prayer from the Rev. Dr. Wallace, the degrees were conferred. The first business was the conferring of the degree of Doctor of Law (LL.D.) on Dr. Warburton Begbie, Dr. J. Hughes Bennett, Dr. J. Matthews Duncan, Sir William Fergusson, Bart., F.R.S., Dr. A. H. McClintock (Dublin), Professor W. Pirrie (Aberdeen), Dr. J. Burdon Sanderson, F.R.S., and Dr. Thomas Shapter (Exeter). Each of these gentlemen was introduced by Professor Maclagan, who, in a brief speech, set forth the claims of the candidate to the honour. The degrees of M.B., C.M., and M.D., were then conferred on a number of gentlemen. Degrees in Arts and Laws were also conferred; and the address to the graduates was delivered by Professor Crum-Brown. After the ceremonial, a meeting was held in the University Library, to witness the presentation of a bust of Dr. Hughes Bennett, lately Professor of the Institutes of Medicine. The presentation was made by Dr. Andrew Clark of London, on behalf of Dr. Bennett's pupils and friends. The gift was acknowledged by Principal Sir Alexander Grant. The bust is of white marble, and is the work of Mr. Brodie.

IRELAND.

The salary of Dr. Carleton, Medical Officer of the Delvin Dispensary District, Westmeath, has been increased by £20 *per annum*.

An accident, which resulted fatally, lately occurred to a medical student named Turner, son of Dr. Turner of Tuam, who, jumping off a spring-board at Blackrock, a watering-place a few miles from Dublin, struck his head with such violence (there being only three feet of water at the time at the baths), that death took place in a few hours. We understand that a monument is about to be erected at Tuam, in recognition of his services during a late epidemic of small-pox in that town, to commemorate his humane exertions during that period.

IMPROVEMENTS IN THE DUBLIN HOSPITALS.

The annual polishing up of the Dublin hospitals is going on with more than usual activity; in fact, several are making such extensive and organic changes, that considerable additional accommodation and comfort will be afforded to the inmates. The City of Dublin Hospital is reconstructing its out-patient department. Steevens's Hospital is adding largely to the cubic space of the wards on its upper floor, by raising the roof along two sides of the quadrangle. This improvement was commenced nine years ago, but funds were only available for the reconstruction of one side. The new front of the Coombe Lying-in Hospital is quickly approaching completion, and now presents a handsome façade in red brick and granite to the Coombe. The Fever Hospital in Cork Street is undergoing extensive repairs, and many modern improvements in sanitary and decorative art are being introduced.

FORTY-THIRD ANNUAL MEETING

OF THE

BRITISH MEDICAL ASSOCIATION.

Held in EDINBURGH, August 3rd, 4th, 5th, and 6th, 1875.

TUESDAY, AUGUST 3RD, 1875.

AT 11 A.M. a sermon was preached at St. Giles's Church, by the Rev. W. Lindsey Alexander, D.D., who chose as his text the words, "Honour all men". He concluded with showing how the medical profession carried out to the fullest extent the precept of the apostle.

The first general meeting of the members was held in the Free Church Assembly Rooms, and there were present, besides a very large number of members, the magistrates and Town Council of Edinburgh, who wore their robes of office.

Mr. Fowke, the General Secretary, presented the minutes of the last annual meeting, which were taken as read and unanimously confirmed.

Address of Retiring President.—Dr. COPEMAN said: Members of the British Medical Association, the Baillie, magistrates of the City of Edinburgh, and visitors, I beg to say to you that it is with much pleasure that this Association meets again in the beautiful City of Edinburgh. We have, some of us, a vivid remembrance of our last happy meeting here, and it is with pride that, in this city, I have to yield up the position which, by your kindness, I have held during the last year. I thank you most warmly for having bestowed that office upon me, and I thank the officers of the Association for the cordial attention they have bestowed upon me during my year of office, and for their courtesy towards me at all times. [*Cheers.*] Allow me to congratulate you upon the favourable circumstances under which you meet in this beautiful city—a city as famous for its University and medical school as for its picturesqueness. [*Cheers.*] My duty as President here ends, and shall not intervene between you and the important business which is to follow. I have now the pleasure of asking Sir Robert Christison to take the Chair as your President.

The retiring President then inducted Sir Robert Christison into the Presidential Chair amid the loud cheers of the whole assemblage.

Vote of Thanks to the Retiring President.—Dr. SIBSON proposed the following resolution: "That the best thanks of the Association are due and are hereby given to Dr. E. Copeman of Norwich, for the able and courteous manner in which he has filled the office of President during the year, and that he be elected a Vice-President." He said that the resolution would commend itself to every gentleman in that assemblage, and it was with no little pride that the Association had sat under Dr. Copeman's presidency. Dr. Copeman stood among the most distinguished physicians of England, and was an honour to the profession and to the Association of which he had been President. [*Cheers.*]

Dr. FALCONER (Bath) said, he had equal pleasure to that expressed by Dr. Sibson in seconding the motion.

The motion was then carried by acclamation, and Dr. Copeman briefly returned thanks.

Address of Welcome from the Edinburgh Municipal Council.—The new PRESIDENT, amid loud applause, called upon the first magistrate, in the absence of the Lord Provost, to bid the Association welcome.

Baillie TAWSE said that, in the absence of the Lord Provost, it became at once his privilege and pleasure to welcome the British Medical Association to Edinburgh on this, the forty-third annual meeting. It was with much pleasure that Edinburgh saw again the profession of medical science gathered together in her walls to hold the annual session in which to see what discoveries and advancement had been made for the prevention and cure of disease. This was a subject which was not uninteresting to any citizens, and it was especially interesting to those who were in the position of Town Councillors, for they were charged with the sanitary as well as the social improvement of the people; and, for a large city like Edinburgh, sanitary questions did possess a peculiar interest, and the Town Council and magistrates of the city were glad to be able to express by their presence on the occasion their great interest in the proceedings of the Association, and in the discussions which were to occupy the members for the next three days. Seventeen years had passed since the Association did the City of Edinburgh the honour of meeting within its walls. Then the Association had a distinguished man for its president in the universally beloved Professor Alison. [*Cheers.*] Now, it had another of the esteemed citizens of Edinburgh added to the list of eminent men who had been presidents, in Sir Robert Christison—

[*cheers*—] and there could be no doubt that, acting in the strict paths of science, the meeting would tend to the advancement of the objects which the members had at heart—the interchange of knowledge, the elevation of the profession in character, and the fostering of brotherly love and mutual help—objects which would commend themselves to universal sympathy and respect. [*Cheers.*] Many present were revisiting the scenes of their former studies, where, he trusted they passed time which was neither unprofitable nor unpleasant, and the memories of those times would come back to them again as they stood within the venerable walls of the University, recalling to their minds the instruction they received in the preparation for their future career. They would think again of the voices of their instructors, some of whom had passed hence; but this would not diminish the interest of the old students, and they would be rejoiced to find one still among them in the person of their present President. [*Loud cheers.*] To those who were thus revisiting the old scenes he would say nothing more; but to those who were visiting this city for the first time, he would say that he hoped they would find that it did possess charms worth their notice, and, though they arrived at a time when Edinburgh would be shown at its best, yet it was not with less cordiality that he tendered them a warm and earnest welcome. [*Cheers.*] He added, that if the magistrates and Town Council could do aught to increase the pleasure or comfort of the visitors, or add to the interest of the meeting, they should be most happy to do so. [*Loud cheers.*]

President's Address.—The PRESIDENT added, in his own name and that of the University, to the welcome already expressed on the part of the Town Council and magistrates. After a few introductory remarks he delivered his inaugural address (printed at p. 155). At its conclusion he was also warmly cheered.

Sir WILLIAM FERGUSSON then proposed "That the best thanks of the Association be given to Sir Robert Christison for his able address". He said that he had no doubt the motion would be responded to unanimously. All had doubtless come into this room anxious to hear what a gentleman of Sir Robert Christison's great experience as a teacher, practitioner, examiner, and philosopher would say to an assemblage such as this. The subject he had chosen for his address was one of great importance and interest to all, whether old or young, and he had handled it in such an able manner, that it would be studied by many, very many, more than had heard it this day. [*Cheers.*] The subject was one which had met with the attention of the Association, and no doubt many of those who had thought upon the subject would take into consideration the maxims of wisdom which had fallen from Sir Robert's lips. The Association had just heard an address from one who had passed more than the ordinary term of life of man in one of the greatest institutions in the kingdom—indeed, if it was not the greatest institution—for its numbers, quoted by Sir Robert, showed that it had had a higher educational power than any other. [*Cheers.*] The early part of the address was particularly and peculiarly interesting in the information it conveyed, and one part was striking, that in which the orator pointed out that Edinburgh, at one time, seemed to have ruined itself as a teaching power, there being a great falling off at the time when the success had been greatest. It certainly was a curious fact, that when the success had been greater than ever, the decline should have been sudden and marked. He had himself often thought of that fact, and he had arrived at an explanation of the phenomena, and it was that Edinburgh was so successful a teacher, that it taught its pupils to teach elsewhere, and so there being Edinburgh teachers over the face of the country, there was no such necessity as before for men to come to the City University. [*Hear, hear.*] That could be illustrated further if there were time; but, at all events, it was known that medical schools had arisen in the various parts of the country, and for the teaching power in those schools, he believed that there had to be great dependence upon the men from Edinburgh. In regard to the other part of the address—that of the examining bodies—Sir Robert had to handle a very difficult subject, and he had given his views on a matter with which he was intimately acquainted; for he had had a lifetime's experience to make up his opinions about it. Sir Robert had put before them, in the address they had heard, the result of years of thought—not only of himself, but of others; and though the paper may have seemed long, those thoughts had been given in a briefer form than might have been expected under the circumstances. Looking at the fact, that much more would be heard about it when once it had gone to the public eye and public ear through print, he thought the members would gladly express their thanks to Sir Robert for the address. [*Cheers.*]

Dr. RADCLIFFE HALL (Torquay) seconded the motion in a few words, in which he bore witness to the originality of Sir Robert's genius.

The motion having been put and carried by acclamation, the PRESIDENT returned thanks, saying that he was very deeply indebted to the Association for the patience with which they had listened to him.

REPORT OF COUNCIL.

Mr. FOWKE, General Secretary, presented the following Report.

"Your Council have much pleasure in meeting you, for the second time in the history of the Association, in the city of Edinburgh, which has been for ages so important a centre of medical learning and literary culture.

"Your Council feel assured that the present meeting will largely contribute to strengthen the Association, and enable it with renewed vigour to carry out its important work in promoting professional unity and bringing the English members into closer intimacy with their brethren across the Tweed.

"Your Council have much pleasure in stating that the hope expressed in their last Report, that not only would the debt of the Association be paid off, but that a surplus would be in the hands of the Treasurer to the credit of the Association at the close of 1874, has been fully realised. After paying £200 for scientific grants, £150 for legal expenses incurred in the incorporation of the Association, and £212 balance of debt due in January 1874, there remained a cash surplus of £500. This has been invested, and will form the nucleus of a reserve fund, and your Council have every reason to believe that at the close of the present year a larger amount will be available for this purpose. The thanks of the Association are again due to the Journal and Finance Committee, and to the Treasurer, who have given up so much time and attention to the financial affairs of the Association.

"The total expenditure of the past year shows an increase of £1,404: £603 of this is due to the increased amount paid for the printing and paper of the JOURNAL, which has been increased in size and in the number issued; £390 has been written off of old accounts and bad debts of former years; £113 for increase of salary to the Editor; £98 for an additional clerk in the office, rendered necessary by the increased work of the Association.

"The income of the year is £9,539, against £8,773 in 1873—an increase of £766—principally due to the subscriptions, this item being £6,190 against £5,448 last year. There also appears this year, for the first time in the balance-sheets, £134 discount obtained by payments of cash for the printer's accounts. The amount for advertisements is rather less, being £2,910 against £3,060 of last year, being a decrease of £150."

"Your Council have the painful duty to report, that during the last year seventy-three deaths have occurred amongst your members: this, however, is seventeen less than the number in 1873. The resignations were, for the past year, 117, and there have been 859 new members elected. The number of members now on the list is 6,112.

"The satisfactory progress of the Association has during the past, as in former years, been largely stimulated and aided by the vigour, ability, and success with which the BRITISH MEDICAL JOURNAL has been conducted, and the efficiency with which it has reflected the progress of medical science, and advocated the best interests of the profession. To enable it to meet the increasing demands of a growing Association, which now embraces a large proportion of the profession in the British isles, the number of its pages has been increased, and reports of the proceedings of the principal medical societies of the three kingdoms are given. The BRITISH MEDICAL JOURNAL may now fairly aspire to be considered the representative organ of the profession. The thanks of the Association are largely due to the Editor, Mr. Ernest Hart, for the ability and devotion with which he has for many years directed and developed the JOURNAL. Your Council are glad that the increasing prosperity of the Association, to which his labours have confessedly largely contributed, has enabled them to make a suitable recognition of the value of the Editor's services to the Association by an increase of salary.

"At a special general meeting of members held during the past annual meeting at Norwich, August 13th, 1874, it was decided by a unanimous vote of members present, to incorporate the Association under the Companies' Acts of 1862 and 1867. This has been since carried out by your solicitor, Mr. Upton; and the first general meeting was held in Birmingham, on November 4th last, in accordance with the law and the articles of the Association, which requires a general meeting to be held within four months after registration. The Association was registered on October 21st, 1874. Many members have already signed the Articles of Association; and the Council hope that at the present annual meeting all those present who have not previously done so will sign the necessary forms. The Council trust that by the next annual meeting every member of the Association will have become a member of the corporate body. Such a result will greatly strengthen the position of the Association, and the individual members will incur no liability beyond the nominal one of one guinea.

* The financial statement of the Association, to which reference is made in the preceding report, was published at page 562 of the BRITISH MEDICAL JOURNAL for April 24th, 1875.

"In accordance with a resolution passed at the last annual meeting, a Scientific Grants Committee has been appointed, consisting of Dr. Sibson, F.R.S., Chairman; Mr. Alfred Baker; Dr. Bastian, F.R.S.; Mr. Callendar, F.R.S.; Dr. Michael Foster, F.R.S.; Dr. Sharpey, F.R.S.; Dr. Wade; Mr. Wheelhouse; Dr. Wilks, F.R.S.; Mr. Ernest Hart, Honorary Secretary; and the President of the Council and Treasurer, *ex officio*. Grants to the amount of £165 have been made, and reports of the results will be laid before you.

"Dr. Stewart, who was presented, upon his resignation of the office of Honorary Secretary to the Metropolitan Counties Branch, with a testimonial by his friends and colleagues, has generously devoted £400 of the £500 subscribed to the purposes of a grant fund, to be called the Stewart Fund, for the recognition and encouragement of important researches on the origin, spread, and prevention of epidemic disease. Dr. Stewart's name will always be honourably connected with the Association for his many and long-continued services, and the Association will be asked to pass a special vote of thanks to him for this generous, disinterested, and graceful act on the part of Dr. Stewart.

"Mr. Samuel Wood, of Shrewsbury, the Honorary Secretary of the Shropshire Scientific Branch of the Association, has liberally presented a sum of £25 for competition, for the best essay on Pyæmia. The best thanks of the Association are due to Mr. Wood for his generous gift.

"The Report of the State Medicine Qualification Committee, referred to the Committee of Council by the annual meeting at Norwich last year, has been considered, and will be presented to you in a modified form; and your Council recommend that it be passed and forwarded to the General Medical Council for their consideration. The thanks of the Association are due to Dr. Rumsey, F.R.S., Dr. Tripe, Mr. G. W. Hastings, Dr. Parkes, F.R.S., Dr. Heslop, Dr. Ransome, the late Dr. Anstie, Mr. Ernest Hart, Dr. Stewart, Mr. Michael, Dr. Arlidge, Mr. Ceely, Dr. R. Macdonnell, and the late Dr. Donald Dalrymple, M.P., who have bestowed much time and thought on the subject, for their careful and admirable Report.

"The Medical Reform Committee have to report that the English corporations have been active, during the past session of Parliament, in their efforts to form a conjoint scheme of examination, the Royal College of Surgeons having carried an enabling bill through Parliament with that object. In accordance with the policy exercised by your Medical Reform Committee during past years, which has been always sanctioned and approved by the general body of the Association, they have refrained from urging the Bill of the Association on the legislature during the past session, in order not to trammel the laudable efforts of the English corporations towards the formation of a conjoint board. Your Committee feel that the establishment of the conjoint scheme in England will materially strengthen the position taken up by the Association. Your Committee have been in communication with several leading members of Parliament, and have had the benefit of their counsel and advice, as well as the promise of their support; and the Right Honourable Mr. Childers has been conspicuous by his public approval of the principles on which the Bill advocated by the Association has been based. Your Committee regard the question of medical reform as one of the most important of the day—one which must continue to occupy the attention of the Corporations, the General Medical Council, and the Legislature; and they have to recommend the reappointment of the Committee, with power to add to their number.

"A short Report of the Joint Committee on State Medicine will be presented by Dr. Stewart.

"The Parliamentary Bills Committee of the Association, which includes a representative of every Branch, has continued its labours of former years. Its representations to the First Lord of the Admiralty have been rewarded by a large amount of success. The numerous and influential letters of thanks which have been received from distinguished members of the Naval Medical Service, ascribe great influence to the detailed statement of grievances, and suggestions of redress laid before Mr. Ward Hunt by the Committee. The majority of these suggestions were adopted in the warrant subsequently issued, and under the direction of Sir A. Armstrong it is hoped that a period of increasing contentment and efficiency is now in store for the Naval Medical Service.

"The carefully compiled statement of grievances and suggestions for their remedy, laid before Mr. Gathorne Hardy, the Secretary of State for War, by Mr. Ernest Hart, Chairman of the Committee, on behalf of the medical officers of the army, has not yet produced any overt result; but the minister has more than once stated in Parliament and elsewhere, that he has given to the subject-matter of the statement repeated and studious attention, and that he is now elaborating a scheme by which he hopes to cure many of the evils alleged; meantime the service remains unpopular and dissatisfied, nor is it likely that contentment and efficiency will be restored except by concessions of a distinctly liberal character.

"The influence of the Association has been successfully exerted through the Parliamentary Committee, in amending some important measures of social legislation. The whole of the amendments proposed by the Committee were adopted during the passage of the Artisans' Dwellings Bill through the House of Commons, and the sanitary usefulness of the Bill has been thereby enlarged, while the medical officer of health has been strengthened and protected in the performance of his duties. Material amendments, in accordance with the representations of the Committee, have been made in the Adulteration Acts Amendment Bill, which in its original form threatened to deprive the guardians of the public health of the power of preventing and punishing the falsification of food by the retailer.

"The advisability of legislative restriction for Habitual Drunkards, which engaged the attention of your late lamented Associate, Dr. Dalrymple, has been considered by your Branches, more especially by the Birmingham and Midland Counties Branch of your Association; and at the Committee of Council held on July 13th, upon a resolution presented by the Metropolitan Counties Branch, calling the attention of the Committee of Council to this subject, a Committee was appointed, and your Council trusts that at the next annual meeting they will be enabled to place before you a full report upon this important question, and the steps that it may be considered advisable to take.

"The attention of your Council has also been drawn by a numerous and influentially signed requisition, prepared by Dr. Alfred Meadows and Mr. W. Fairlie Clarke, to the abuse of Medical Charities—a matter of so much importance that your Council desire to treat it with great deliberation, and after taking counsel with the Association at large. You will, therefore, be requested to appoint a Committee to consider and report on the subject.

"The attention of your Council has been drawn during the past year by the Aberdeen Branch of the Association to the inadequate remuneration of civil practitioners acting temporarily in a military capacity as army surgeons; and you will be requested to pass a vote authorising your President to sign a memorial respectfully drawing the attention of the Secretary of State for War to the injustice.

"Your Council, with deep regret, have to report the unavoidable absence, through severe illness, of the President of the Council, Mr. George Southam, and feel sure that you will pass an unanimous vote of sympathy with him, and a hope that he may again be enabled to lend his valuable services to the Association. Dr. Rumsey, who has long been connected with the Association, and has rendered so many and valuable services to the cause of public health during a period of thirty years, is, your Council regret to report, unable, through serious illness, to be present on this occasion, and the Association has through its Branches endeavoured to obtain a public recognition of his great services. A Subcommittee, consisting of the President of the Council, the Treasurer, and Dr. Carpenter, was appointed to draw up a memorial on behalf of the Association to the Prime Minister, urging Dr. Rumsey's claims to a government pension, in consideration of his important services.

"Your Council have again the pleasure to report the formation of new Branches—viz., the Thames Valley Branch and the Southern Branch—by which important districts have been opened to the Association. Seldom has a new Branch increased so rapidly in numbers as the Southern Branch, which has already gained importance by bringing into closer connection with the Association the medical officers of the army and navy. The thanks of the Association are due to Inspector-General Smart, Dr. Ward Cousins, Dr. Langdon Down, and others, for their efforts in promoting the new Branches.

"Two Essays have been received in competition for the Hastings Prize Medal, and your Council regret to report that the medal has not been awarded, as the essays have not, in the opinion of the adjudicators, shown sufficient merit.

"There is much important work in hand for the Association and its Committees. The Council hope that each year will witness the formation of new Branches in districts not yet intimately connected with the Association. By these local organisations, the influence of the Association and its power for the good of the profession is greatly strengthened, and the direct co-operation of the Branches in the work of the parent body is extremely beneficial to both. The Council feel that a noble work is before the Association, in thus developing throughout the United Kingdom numerous Branches, all united in promoting the intellectual and ethical advancement of the profession, in aiding the progress of the healing art, in furthering the prevention of disease, and in amending the social and sanitary condition of the people.

Dr. SIBSON moved that, in consequence of the late hour, the report be taken as read.—This was assented to.

Dr. MACLEOD (Glasgow) moved: "That the report of the Council,

together with the financial statement for the year ending December 31st, 1874, be received, adopted, and entered on the minutes."

Sir J. ROSE CORMACK (Paris) seconded the motion.

Mr. OLIVER PEMBERTON (Birmingham) said that, before the report was adopted, he had a subject of interest to many members to bring before the meeting. He saw the names of two ladies who were to read papers. He presumed that those ladies were members of the Association?

Dr. SIBSON said the question asked was one about which the report had nothing to do, and could be asked at any time.

Mr. PEMBERTON replied that he wished to move a resolution that the Secretary be instructed to issue a circular to every member of the Association, asking his opinion as to female practitioners being members of the Association.

Mr. HUSBAND urged that this was a resolution which could not be brought up at that juncture.

The PRESIDENT said he should not allow the subject to be moved. The question was whether the report should be adopted.

Mr. HUSBAND urged that, as there was not a word about the election of ladies in the report, and as, moreover, the subject could be brought up at any time, the report should be allowed to pass.

A vote was then taken on a proposal that the report should be printed and circulated, and considered on Wednesday. This proposal was negatived.

Mr. LAWSON TAIT (Birmingham) moved that a show of hands be taken on the question, whether or not the report should be read.

This was seconded, and the vote was taken. The number in favour of reading the report was very small; and it was then formally taken as read. The motion that the report be adopted was carried.

Vote of Thanks to Mr. Samuel Wood.—Mr. LUND (Manchester) moved: "That the best thanks of the Association are due, and are hereby given, to Mr. Samuel Wood of Shrewsbury for his liberality in presenting the sum of £25 to be given for the best essay on Pyæmia."

Dr. STEELE (Liverpool) seconded the motion; and said that Mr. Wood was the pioneer in this direction, for it was the first grant the Association had received for prosecuting original research into medical science. He hoped that a resolution of this sort would become a permanent item in the business of the Association, and be seen on the agenda of every annual meeting.

The motion was carried unanimously.

Dr. EDWARD WATERS (Chester) remarked that it would be as well to mention, in reference to the statement of Dr. Steele in regard to this being the first donation for prosecuting original research, that Dr. Thackeray, of the same ancient and loyal city, gave £50 as a prize to be worked for similarly.

Vote of Thanks to Dr. Stewart.—Mr. MCCHEANE moved: "That the best thanks of the Association are due, and are hereby given, to Dr. Stewart for his generous and disinterested grant of £400; and the Association trusts that Dr. Stewart may long be spared to assist in the consideration of its disposal." The mover said the resolution so well expressed the sense of the Association that he should only spoil it if he attempted to dilate upon it; and he should, therefore, content himself with moving it.

Dr. COPEMAN seconded the motion, which was carried with acclamation.

The Army Medical Department and Civil Surgeons.—Mr. MASON (Bath) moved: "That the President be empowered and requested to sign a petition to the Secretary of State for War in accordance with the recommendation of the Council, drawing attention to the injustice of the present rate of payment of civil practitioners acting as substitutes for military surgeons."

Dr. FLETCHER (Birmingham) said that, although he knew very little about questions affecting the army, and was not concerned personally in this matter, yet he knew sufficient to say that it was a matter to which the Government should have their attention drawn. The rate of pay offered to these gentlemen was simply degrading.

The motion was carried unanimously.

By-Laws of the Association.—Dr. SIBSON moved, "That the By-laws, as amended, be received and adopted." He said the Association had now been changed from an ordinary body to an incorporated body, and, under these circumstances, it was necessary that the Articles of Association should be supplemented by By-laws; so necessary, indeed, that the very existence of the Association hinged upon the point. The By-laws in print and before the meeting had been prepared by the solicitor, and presented to the Committee of Council, who had submitted them to the Council. These new By-laws were, in fact, the old laws of the Association put into a new shape, with some two or three changes—changes upon which there would be differences of opinion. There was, however, the fact that, whatever might be the

differences, by notice given, these differences could be removed, if the members thought fit in the future to move, second, and carry such alteration. If the meeting adopted the By-laws as they stood, there would be the year's experience to go on and see how they worked, and, at the end of that time—in fact, at the end of ten months—notice of a proposal to alter them would be given, and an amendment upon them would be taken. It was, as he had said, necessary for the very existence of the Association, that the By-laws should now be carried as they stood. They had been submitted in their amended form to the Association's solicitor, and it was to be hoped that the meeting would waive all opinions upon them, and pass them *en bloc*. If the Association did this, he fully believed that, with the experience of a year, some of the By-laws would have to be altered, and it would be found necessary to fall back upon the old; but, as matters stood, he reiterated, the Association did not legally exist until the By-laws were passed; in fact, the next day's meeting could not be held unless this business was done.

Mr. HUSBAND (York) seconded the motion for the adoption of the By-laws, and stated, as Chairman of the Committee who had had the arrangement of these laws, that the gravest consideration had been given to every point and every detail. Then the Committee of Council had considered them, and they had been before the Council. The conclusion had been come to by all, that these should be the By-laws of the Association, and he strongly supported the arguments of Dr. Sibson, and pressed his suggestion that if these By-laws were passed this year, they would be tried by experience in working, and if found faulty in any respect, they could be amended by the proposed amendments being submitted to the Committee of Council, and by them put before the legal adviser of the Association. It was necessary that the laws should be tried in actual work, and actual work would enable the Association to perfect its laws by showing where they were faulty, and what was necessary to be changed. At this late period of the evening there was no time to discuss words or principles, and he trusted the meeting would have confidence in the Council, and show it by passing the By-laws.

Dr. CHADWICK (Leeds) said, there were very important questions in the By-laws, and it was very unfortunate that the meeting should, upon this matter, be driven into a corner. There were in the By-laws most important points—most important elements, too, of discussion, and the laws, if passed, could not be altered.

Mr. HUSBAND: They can be altered by notice being given.

Dr. CHADWICK said, it was all very well for Mr. Husband to say that they could be altered; but, when once the laws were passed, there would be the greatest difficulty in making any alteration in them. As a species of protest against the By-laws being thus put he now spoke; but he should propose no motion against their adoption, but simply announce his dissatisfaction.

Dr. SIBSON reminded the members that if they did forego their privilege of discussing the laws, they could do it next year. It was not the fault of any member or members of the Association that the meeting was in the position of having to accept these by-laws in this manner, but the position was caused by the Articles of Association. He might say that there were several points in the by-laws to which he was desirous of proposing amendments; but he withheld his hands for ten months, and by that time, after careful consideration, and with full knowledge of the working of the laws, changes, if found necessary, could be made; but, if they were not now adopted, it would be impossible for the Association to be worked. The by-laws, he begged to remind them, were not the preparation of the Committee of Council, or of the Council, but of the legal adviser, working upon the old laws. While they were being formed, a subcommittee was appointed, with whom were associated some eminent members of the Association, and their purpose was to bring before the meeting, in a legal form, the old laws which had ruled the Association heretofore, transformed in nomenclature, but still in substance the old laws. He trusted that, with this explanation, the members would waive all objections to the by-laws, which, it might be mentioned, were published in the JOURNAL two months ago, and accept them.

Dr. CARPENTER (Croydon) said the by laws must be accepted, though it was objectionable to accept them in this way; but it was necessary to accept them in consequence of accepting the Articles of Association last year. These by-laws, if accepted, would be the skeleton upon which to hang some flesh, and in the future some sinews could be removed. Every member of the Association should look carefully through the by-laws, for they quite changed the constitution of the Association. He supported the proposition that they should at once be adopted.

After some further discussion, the motion for the adoption of the report was then carried *nem. con.*

Reduction of Vice-President.—Dr. FALCONER stated that it was

necessary the vice-presidents should be re-elected, as the Association had now become fully incorporated, and the vice-presidents were only the officers of the old Association. He proposed that the vice-presidents, Mr. A. Baker (Birmingham), Sir George Burrows (London), Dr. Chadwick (Leeds), Dr. C. R. Hall (Torquay), Mr. W. D. Husband (York), Dr. G. J. Jenks (Bath), Dr. A. Lochee (Canterbury), Dr. G. E. Paget, F.R.S. (Cambridge), Dr. F. Sibson, F.R.S. (London), Dr. J. R. W. Vose (Liverpool), Dr. E. Waters (Chester), Mr. J. Whipple (Plymouth), Sir Wm. Fergusson, F.R.S. (London), being vice-presidents of the unincorporated Association, be, and they are hereby, elected vice-presidents of the incorporated British Medical Association."

Dr. PARSONS seconded the motion, which was carried unanimously. *Re-election of Treasurer.*—Dr. CHADWICK proposed, "That Dr. Falconer, being the treasurer of the unincorporated Association, be, and he is hereby, elected treasurer of the incorporated British Medical Association."

Mr. LAWSON TAIT seconded this, and it was carried amid applause. *Election of General Secretary.*—Dr. WADE moved, "That Mr. Francis Fowke be, and he is hereby, elected general secretary of the British Medical Association, for the ensuing twelve months."

Mr. NICHOLSON (York) seconded the motion, which was carried. The meeting then adjourned.

In the evening, the President held a reception in the Music Hall, which was attended by a large number of members and visitors, including many ladies.

On Wednesday, the Association met at 11 A.M., Sir ROBERT CHRISTISON, Bart., in the chair.

Brighton was chosen, on the recommendation of the Council, as the place of meeting in 1876; and Sir J. Cordy Burrows was appointed President-elect.

Dr. SIBSON, who had acted as President of Council, in the absence from illness of Mr. Southam, announced that Dr. Falconer had been elected President of Council for the next three years.

The following resolutions were proposed and passed:

"That the best thanks of the Association are due, and are hereby given, to Mr. George Southam, F.R.C.S., for the able and courteous way in which he has discharged the onerous duties of President of Council for the past three years; and that he be and he is elected a Vice-President of the Association.

"That the best thanks of the Association are due, and are hereby given, to Dr. Falconer for the way in which he has discharged the duties of Treasurer to the Association for the past nine years; and that he be and he is hereby elected a Vice-President of the Association."

Mr. W. D. Husband was elected treasurer in the room of Dr. Falconer.

The following resolution was passed:

"That the best thanks of the Association are due, and are hereby given, to Dr. Sibson, F.R.S., for the able and courteous way in which he has acted as President of the Council for Mr. Southam."

The following gentlemen were reported to have been elected members of the Committee of Council for the ensuing year: T. Clifford Allbutt, M.D.; J. W. Baker, Esq.; G. W. Callender, Esq., F.R.S.; A. Carpenter, M.D.; J. Matthews Duncan, M.D., Edinburgh; B. Foster, M.D.; E. L. Fox, M.D.; R. Harrison, Esq.; C. F. Hodgson, Esq.; T. Holmes, Esq.; J. R. Humphreys, Esq.; F. E. Manby, Esq.; E. Morris, M.D.; R. Quain, M.D., F.R.S.; T. H. Smith, Esq.; T. Underhill, M.D.; W. F. Wade, M.B.; A. T. H. Waters, M.D.; C. G. Wheelhouse, Esq.; Eason Wilkinson, M.D.

Dr. WARBURTON BEGBIE delivered the Address in Medicine, which is published at page 164. At the conclusion a vote of thanks was unanimously given to him.

In the afternoon, the business of the meeting was proceeded with.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, July 29th.

Lunatic Asylums (Ireland) Bill.—On the motion for the second reading of this Bill, Earl SPENCER said that it was necessary to strictly guard the powers to be given under this Bill of removing lunatics from lunatic asylums to poor-houses in Ireland. They could be much better looked after in asylums than in workhouses.—Lord LISGAR said he was of a similar opinion, but the power of removing lunatics from asylums in Ireland to poor-houses was rendered necessary from the asylums being overcrowded with cases of chronic lunacy, which could be as well treated in the poor-houses as in asylums.—The Earl of SHAFTESBURY thought

that the great difficulty would be in dealing with chronic cases in asylums. In many such cases, it would be better for the parties that they should be left in the workhouses, where the companions they met with, and the small share they might take in the affairs of the establishment, would tend to their benefit, though not to their cure. If the illness was treated within the first twelve months, there was good hope of cure, though there was but very little afterwards; so that chronic affections were not likely to be cured in the asylums, and the places of such persons had better be occupied by others whom there was a chance of curing.—The LORD CHANCELLOR observed that the clause upon this subject followed as nearly as possible what was the law of England upon the subject. As to the suggestion that there should be some check upon the removal, he could only say that there were already so many checks in the Bill that it was rather difficult to see how anybody could be removed under it.—The Bill was read a second time.

Tuesday, August 3rd.

Vivisection Regulation Bill.—Lord HENNIKER said he would, with their lordships' permission, withdraw this Bill. He had put it off from time to time in the hope that something might have been known of the probable action of the Royal Commission, and so have given an opportunity for a discussion or advance in some degree towards a satisfactory settlement of the question. That was, however, hardly possible then; and, at that late period of the Session, he thought he should best consider the convenience of their lordships by withdrawing the Bill. He hoped the Commission might be able to report in time to legislate on the subject early next year. If not, and it was proper for him to do so when the time arrived, he would reintroduce the Bill, or call their lordships' attention to the question as early as possible next Session. Meanwhile, he hoped some little good might have been done by calling public attention to the practice of vivisection, which he was sorry to believe largely prevailed. The noble lord concluded by moving the discharge of the order.—The motion was agreed to, and the order for the second reading was discharged.

Sale of Food and Drugs Bill.—On the order for considering the Commons' consequential amendments in the Bill, the Duke of RICHMOND moved that their lordships should not agree to the consequential amendment.—The motion was agreed to, and their lordships did not concur in the consequential amendment.

Lunatic Asylums (Ireland) Bill.—This Bill passed through committee.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—The following candidates have passed the recent Preliminary Scientific (M.B.) Examination.

First Division.

Barker, Frederick Rowland, St. Thomas's Hospital
 Baylis, Frederick, Epsom College
 Best, John Henry, University College
 Bredin, Richard, Royal Infirmary School, Liverpool, and private study
 Brooke, Henry Ambrose Grundy, B.A., Owens College
 Brown, George, Owens College
 Cantin, Louis Alfred, St. Bartholomew's Hospital
 Chuckerbutty, William Goodeve, University College
 Clark, Charles Alfred Dagnall, St. Bartholomew's Hospital
 Clarke, Thomas Furze, King's College
 Colborne, William Wriothlesley, University College
 Collier, Mark Percell Mayo, St. Thomas's Hospital
 Crisp, Thomas, St. Thomas's Hospital
 Cuffe, Edward Meade, Epsom College
 Cunnington, Cecil William, private study
 Davies, David Samuel, St. Thomas's Hospital
 Dismorr, Alfred, St. Bartholomew's Hospital
 Dixon, Alexander Campbell, private study
 Edwardes, William Whitfield, St. Mary's Hospital
 Elsdon, James Vincent, private study
 Faulkner, John Thomas, Manchester Medical School
 Fenton, Herbert Alfred Hill, University College
 Fuller, Thomas Warburton, Guy's Hospital
 Graham, Albert William, St. Bartholomew's Hospital
 Greenwood, Major, London Hospital
 Harries, Arthur John, University College
 Harrison, Cecil Reeves, University College
 Harvey, Alfred, Queen's College, Birmingham
 Hayle, Thomas Hahnemann, Owens College
 Herschell, George Arich, St. Thomas's Hospital
 Hewitt, William, Royal School of Mines
 Hine, John Edward, University College
 Hinton, William Bartlett, Guy's Hospital
 Hodgson, John, Owens College Medical School
 Horsley, Victor Alexander Haden, University College
 Hoskin, Theophilus, University College
 Hughes, Richard, private study
 Humpidge, Thomas Samuel, Royal School of Mines
 Jones, William Wansbrough, Magdalen College, Oxford

Ledward, Archibald Prentice, Owens College
Lichenstein, Maurice, private study
Lory, William Manley, University College
McAlpine, Archibald, Royal College of Science, Dublin
McDonald, Greville Matheson, King's College
Meeson, Alfred, Royal Infirmary, Liverpool
Michael, Henry James, St. Thomas's Hospital
Mott, Frederick Walker, University College
Murray, Hubert Montague, Camden Schools, Brighton and Sussex County Hospital

Nankivell, John Howard, King's College
Neale, William Henry, private study
Noble, William James, Keele College, Oxford
Nourse, William John Chudely, St. Mary's Hospital
Palmer, Arthur Maurice, University College
Pasteur, William, University College
Pearce, Walter, St. Mary's Hospital
Penny, Edward, Guy's Hospital
Ponsford, Leicester Cuthbertson, University College
Pughe, Thaelius Wilm Owen, Royal Infirmary, Liverpool
Quelch, John Joseph, New College, Exeter
Raj, Nanda Kumar, University of Edinburgh
Robinson, Frederick, Leeds School of Medicine
Ross, David, B.A., private study
Rushworth, Frank, St. Bartholomew's Hospital
Russell, George Hannah, Guy's Hospital
Savill, Thomas Dixon, St. Thomas's Hospital
Shearman, Percy Edward, University College
Sheldon, Thomas Steele, Guy's Hospital
Silk, John Frederick William, King's College
Smith, Ernest Sutton, University College
Smith, Robert Percy, St. Thomas's Hospital
Squire, John Edward, University College
Suckling, Cornelius William, private study
Turner, Alfred Moxon, Guy's Hospital
Wainwright, Edward Harley, University College
White, William Hale, Guy's Hospital
Willis, Ambrose Robinson, Royal School of Mines
Woodridge, Leonard Charles, Guy's Hospital

Second Division.

Allen, Dennett George, St. George's Hospital
Barton, William Edwin, University College
Bassett, Henry Thurstan, Queen's College, Birmingham
Chillingworth, Andrew, St. Bartholomew's Hospital
Cranstone, William Lefevre, University College
Deane, Arthur Dorman, Guy's Hospital
Eady, George John, private study
Enright, James, private study
Finlay, Thomas, University College
Hagyard, Robert, Leeds School of Medicine
Hayward, John Davey, University of Bonn and private study
Hine, Harry, Guy's Hospital
Hooker, Charles Paget, St. Bartholomew's Hospital
Hurst, George, B.A. Sydney, University of Edinburgh
Jones, Charles Montague Handfield, St. Mary's Hospital
Kendall, Peter Slade, University College
Money, Angel, University College
Nettlefold, Edward, University College
Outhwaite, William, private study
Price, Edward Morris, University College
Rich, Arthur Casswell, Royal Infirmary, Liverpool
Routh, Amand Jules McConnell, University College
Smith, Ernest Frederic, St. George's Hospital
Swale, Harold, University College
Sweeting, Richard Deane Roker, London Hospital
Symons, George Francis, Guy's Hospital
Tait, Edward Sabine, St. Bartholomew's Hospital
Thomas, Walter Duncan, Epsom College
Williams, William Potts Rees, St. George's Hospital
Yate, Henry Wright, Epsom College

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on July 26th.

Messrs. T. C. Mugliston, Plymouth; J. A. Phillips, Guildford; A. de W. Baker, Dawlish; W. G. Dickinson, Hampstead; W. J. Brookes, Westminster Bridge Road; H. Sworder, L.S.A., Luton, Beds; G. H. B. Fisk, Camden Square; H. F. Lancaster, Amersham Park Villas, S.E.; J. R. Leeson, Teddington; J. W. B. Mason, Osnaburgh Terrace; H. I. Crocker, Plymouth; A. D. Brencley, L.S.A., Denmark Hill; A. T. Scott, L.S.A., Camden Road, N.W.; C. F. Newland, Bradeleigh Down, Tiverton; L. Druitt, Strathmore Gardens, W.; D. C. Morgan, Llandriaf Brefi, Cardigan; A. Lucas, L.S.A., Burwell, Cambridgeshire.—J. B. Richardson, L.S.A., Castle Bytham, near Stamford, who passed in Surgery at a previous meeting of the Court, having since obtained a medical qualification, was also admitted a Member.

Two candidates passed in Surgery; and, when qualified in Medicine, will be admitted Members of the College. Five were referred for six months.

Candidates who passed on July 27th.

Messrs. A. G. Ward, Carlton Hill, N.W.; R. W. Greenish, New Street, Dorset Square, N.W.; E. Harrison, Wrexham; H. C. Taylor, L.S.A., Trinity Square, Borough; C. F. Willis, Penton Hook; J. Needham, Victoria Park; T. L. Brown, Camberwell; E. Symonds, Thaxted, Essex; H. C. Burton, Lee, Kent; M. W. Traill, Kinross, New South Wales; H. J. Hind, L.S.A., Twickenham; T. Davies, Barmouth; T. Wakefield, B.A. Cantab., Nottingham Place; C. J. Woollett, Marmouth; L. J. Wilding, L.S.A., Worcester; A. Sangster, M.B. Cantab., Sreatham Hill, S.E.; A. C. Routh, Meyrick Square, Borough.

Two candidates passed in Surgery; and, when qualified in Medicine, will be admitted Members of the College. Six were referred for six months.

Candidates who passed on July 28th.

Messrs. B. Jones, Chorley; E. W. Henley, Derby; R. S. P. Collins, Gower Street; R. Coom, Bournemouth; F. W. Cory, L.S.A., Backhurst Hill; F. G. Harvey, Spalding, Lincolnshire; G. Sibbering, Merthyr Tydfil; C. H. Tamplin, Old Burlington Street; J. V. Farlan, Cliverton Street; W. H. Barker, Brighton; F. Le M. Grasset, M.B. Edin., Toronto; H. C. Noott, Dudley, Worcestershire; C. Curwen, Workington, Cumberland; J. Couldrey, L.S.A., Abingdon, Berks.—Three candidates who had previously qualified in Surgery, having passed in Medicine, were admitted Members: Messrs. W. C. Cooke, Brompton, Kent; J. Hopkins, Northwich; H. Colborn, Wimbeldon.—A. G. Hattie, M.D. Pennsylvania, America, passed his examination under the old regulations, and was also admitted a Member.

Three candidates passed in Surgery; and, when qualified in Medicine, will be admitted Members of the College. Six were referred for six months.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 29th, 1875.

Bernays, Sydney Adolphus, Acre House, Brixton
Leigh, Reginald Heber, Aberdare, South Wales

The following gentlemen also on the same day passed their primary professional examination.

Atkinson, Henry Seymour, King's College
Bouton, George Charles, St. Mary's Hospital
Chant, Thomas, London Hospital
Feltham, William Parsons, St. Bartholomew's Hospital
Gage, William Henry, St. Bartholomew's Hospital
Messum, John Alexander G. B., St. Bartholomew's Hospital
Smith, Thomas Frederick Hugh, King's College
Stelfax, John Bridwall, Owens College, Manchester

MEDICAL VACANCIES.

THE following vacancies are announced:—

ARMY MEDICAL DEPARTMENT—Surgeons. Examination on August 9th and following days.

ATCHAM UNION—Medical Officer for St. Chad's. Salary, £122 per annum, and fees. Applications on or before the 12th instant.

BOROUGH OF ROCHDALE—Medical Officer of Health. Salary, £300 per annum. Applications on or before August 7th.

BOURNEMOUTH GENERAL DISPENSARY—Resident Medical Officer and Secretary. Salary, £120 per annum, with furnished apartments, coals, gas, and attendance.

BURY UNION—Medical Officer for the Radcliffe District.

CHRISTCHURCH UNION—Medical Officer for the Eastern District. Salary, £90 per annum, and fees. Applications on or before August 16th.

DAVENTRY UNION—Medical Officer for the Workhouse and the First District.

DUDLEY DISPENSARY—Resident Medical Officer at Michaelmas.

GREAT NORTHERN HOSPITAL—House Surgeon. Ophthalmic Surgeon. Applications on or before August 6th.

HAY UNION—Medical Officer for the Herefordshire District.

INDIAN MEDICAL SERVICE—Ten Surgeons. Examination on August 9th and following days.

KEYNSHAM UNION—Medical Officer for the Keynsham District.

LEEK UNION—Medical Officer for the Norton District.

LYMINGTON UNION—Medical Officer for the Hordle, Lymington, and Milford Parishes.

MACCLESFIELD GENERAL INFIRMARY—House Surgeon. Salary, £90 per annum, with board and residence. Applications on or before August 6th.

MALDON UNION—Medical Officer for the Southminster District.

NORWICH DISPENSARY—Salary, £120 per annum, with unfurnished residence and apartments.

ORMSKIRK UNION—Medical Officer for the Second District.

PLOMESGATE UNION—Medical Officer for the Aldeburgh District.

ROYSTON UNION—Medical Officer for No. 5 District. Applications on or before September 6th.

ST. IVES UNION—Medical Officer for the Warboys District.

STAINES UNION—Medical Officer for the Shepperton District.

TIVERTON UNION—Medical Officer and Public Vaccinator for the Western District. Salary, £70 per annum. Applications on or before August 9th.

TOWNSHIP OF MANCHESTER—Assistant Medical Officer at the Workhouse Hospital. Salary, £120 per annum, with furnished apartments, fire, light, washing, and attendance. Applications on or before August 12th.

UCKFIELD UNION—Medical Officer for the Maresfield District.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTH.

FERRIER—On August 3rd, at 17, Upper Berkeley Street, Portman Square, the wife of David Ferrier, M.D., of a daughter.

MARRIAGES.

STOKER—GOODMAN.—On August 4th, at St. Paul's, Camden Square, N.W., by the Rev. R. Gordon Cumming, A.M., Alonzo Henry Stocker, M.D., of Peckham House, Peckham, S.E., to Ada Mary Goodman, of The Terrace, Camden Square, N.W., elder daughter of the late Thomas Goodman, Esq.

BURDETT—SHUTE.—On August 1st, at the Parish Church, Greenwich, by the Rev. F. P. Lawson, M.A., brother-in-law of the bridegroom, assisted by the Rev. H. L. Elliott, M.A., Rector of Gosfield, Essex, Henry Charles, eldest surviving son of the late Rev. Halford R. Burdett, M.A., of Gilmorton, Leicestershire, to Helen, second daughter of Gay Shute, Esq., F.R.C.S., of Greenwich.

OPERATION DAYS AT THE HOSPITALS.

MONDAY	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY ..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAY ...	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.
FRIDAY	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.
SATURDAY ...	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M.—Royal Free, 9 A.M. and 2 P.M.

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

AUTHORS desiring reprints of their articles published in the *JOURNAL*, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor: those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

CORONERS' INQUESTS.

SIR,—Nothing is more distressing to a bereaved family than the holding of a coroner's inquest, especially when, as in the case of Sir C. Lyell, a preliminary inquiry might have shown its non-necessity. The Lord Chancellor, in reply to Dr. Hardwick, says: "I cannot but think that if an official application had been made to Dr. Clark (whose certificate was, 'Meningitis, ten weeks; effusion, six days'), he would have given such an explanation as would have rendered a coroner's inquiry unnecessary." These remarks of the Lord Chancellor recall certain suggestions to which you were good enough to give publicity in the *JOURNAL* some years ago, but which, I believe, attracted no attention. When a coroner is paid by salary, it is rare for an inquest to be held unnecessarily—the reverse is more likely to be the case; but when this officer is paid by fees, he is generally ready to act on the slightest intimation, and "death from natural causes" is a common finding of the jury. If the coroner, in all cases of doubt and uncertainty, were empowered first to take counsel with the medical man in attendance, and decide with him upon the propriety or otherwise of a public inquiry, I venture to affirm that many of the inquests now held would be unnecessary. In my own locality this is not unfrequently done, but it places both medical man and coroner in a false position, a conscientious adverse decision involving the sacrifice of fees.

The suggestion thrown out in a former communication was that, where the cause of death did not at first sight satisfactorily appear, a consultation should take place between the coroner and the medical attendant; and, if they were perfectly satisfied, a certificate should be given accordingly, each party charging half his usual fee. Great saving to the public would ensue, and much distress to families be averted.

The present modes of payment by salary and payment by fees are equally unsatisfactory: in the one instance, inquests are too readily avoided, and, when held, medical evidence is too often dispensed with; in the other, inquiries are held which are afterwards proved to have been needless.—I am, etc.,

July 11th, 1875. E. GARRAWAY, Faversham.

We have received £10 10s. from Messrs. Feltoe and Sons for the British Medical Benevolent Fund.

THE TITLE OF "DR."

SIR,—Will you allow me to inform your correspondent L. R. C. P. Lond., that the legal decisions quoted by him in the *JOURNAL* of July 24th have no bearing whatever upon the question of who has a right to the title of Doctor? The object of the Medical Act, under which those decisions were given, is to prevent unqualified persons assuming such a title as would lead the public to suppose that they were legally qualified—i.e., registered. A registered M.R.C.S. or L.S.A. would, therefore, not violate that Act of Parliament by calling himself "Doctor" any more than a man would infringe any other Act of Parliament by calling himself "Earl Jones" or "Baron Brown"; but the former would on that account have no more right to the academic title than the latter to the title of nobility.—I am, sir, yours faithfully,
Hackney, August 2nd, 1875. M.D.

ERRATUM.—In Dr. Ambrose's paper on Concealment of Venereal Disease in the Army, which appeared in the *JOURNAL* for July 24th, at page 99, column 1, line 12, the words "Those of the chancres were cicatrising", should read "Three of the chancres were cicatrising".

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

AN APPEAL.

SIR,—I respectfully invite the attention of the medical officers of the public services to the following particulars of a sad case.

An assistant surgeon, whose name it is not perhaps necessary to give, but which can be given to any subscriber who desires to know it, lost his health in the Crimea, and, after a lingering illness, died from softening of the brain, leaving a widow and five children in circumstances of extreme destitution. This officer's ill health was not brought on by imprudence or bad habits: those who have interested themselves in this case, and whose names are given below, know that his habits and conduct always were such as to command the respect of his friends. It must also be added, that he made such provision for his family as he could, by insuring his life in the Army and Navy Insurance Office, afterwards amalgamated with the European. It is useless to add, that no benefit was derived from this insurance, as this office disastrously failed. When this occurred, the state of the assistant-surgeon's health was such that a second insurance on his life was impossible. For several years before his death he supported his wife and family, and met all the expenses of his long illness, on his half-pay of eight shillings per day. Not having served for ten years, his widow is not entitled to a pension. It is proposed to raise a sum of money for the purchase of an annuity for the benefit of the widow, who at this time depends on the charity of her neighbours for daily bread for herself and children.

The following gentlemen will be happy to receive subscriptions in aid of this fund:—Major-General Lewis, Shirley, Southampton; Lieutenant-Colonel Begbie, Shirley, Southampton; Dr. Parkes, F.R.S.; Surgeon-General Longmore, C.B.; Surgeon-General W. C. Maclean, C.B., Royal Victoria Hospital, Netley.—I am, sir, your most obedient servant,
Netley, July 30th, 1875. W. C. MACLEAN, M.D.

MEDICO.—Taylor's *Manual of Medical Jurisprudence* (Churchill); Scoresby-Jackson's *Materia Medica* (Macdonald's edition); or Neligan *On Medicines*.

THE GOOD-SERVICE PENSIONERS OF THE ARMY MEDICAL DEPARTMENT.

SIR,—Dr. Lush, in his recent speech, might well have called attention to this branch of military medical grievances. There are some twelve hundred or more medical officers, among whom eight good-service pensions are allotted—precisely the same number as given among three hundred officers of the Royal Marines, a corps certainly not over favoured in the distribution of good things generally, yet on whose scale of such pensions the doctors should have at least thirty instead of eight to look to. Let us hope that Mr. Hardy's attention may be turned to this practical grievance. These pensions, be it remembered, are professedly given for "meritorious" as well as for "distinguished" services, and as such are peculiarly appropriate rewards for the skilful, hardworking regimental surgeon, toiling year after year, day after day, in the trying duties of a tropical climate; never off duty; ever in the field against the great enemy, death, and his divisional generals, fever, cholera, liver-disease, and dysentery. Many such officers—men well known for skill and hard work—had their whole prospects ruined by the grievous supercessions of 1858 (from which era we may date all the troubles of the department), and are now pining in the obscurity and semi-penury of half-pay on 18s. 6d. a day—first denied their just promotion, and then shelved for the crime of having attained 55 years of age, without obtaining it. In such cases, a pension for "meritorious service" would be some slender consolation. But while the Horse Guards have shown much feeling in that way for deserving but unfortunate officers, and do not allow any general holding a regiment to retain his good-service pension, the medical authorities seem to act on the Scriptural principle, and to bestow their pensions on their surgeons-general—a rank of officers already highly salaried, and who should not be allowed to retain a good-service pension.—Your obedient servant,
H. P.

DR. SAMELSON will find the literature subject of the Conjugate Deviation of the Eyes fully discussed in the last number of the *Archives de Physiologie*.

PRACTICE IN AMERICA.

SIR,—In reply to your correspondent H. G. D., I write to say that I spent several years in practice in New York, and had some opportunity of making observations on the subject referred to in his letter in your last issue. There was no restriction affecting English qualifications, and the principal safeguard by which I observed the dignity of the profession to be protected was the *esprit de corps* subsisting among its worthy members. I believe British degrees and diplomas are in very high repute; and I experienced the greatest courtesy and kindness, as an Englishman, from my professional brethren and from all classes of American society. I should think a properly qualified practitioner emigrating from this country to the States would be sure of a fair amount of professional success, if he had a good address, common sense, confidence in his own judgment, and the necessary patience and funds to await with dignified composure the development of a judicious plan of action. With regard to the profession being overstocked, I fancy it is so everywhere with a certain class of members, honourable and otherwise; but the field is as fair in America as elsewhere, while the balance of *prestige* is in favour of a foreigner among people who are apt to value their treasures according to the distance from which they have been obtained.—I am, sir, yours truly,
July 24th, 1875. M.A., M.D., etc.

P.S.—I enclose my card, and shall be happy to answer any private inquiries to the extent of my information.

SIR,—In reply to your correspondent H. G. D. on the above subject, I will answer his questions as briefly as possible, and give him the benefit of more than two years' experience in the Western States. English diplomas are recognised in all the States, but in the West a man can practise without any diploma; and, if possessed of sufficient assurance, is often more successful than his qualified neighbour. The social status of the profession is, I am sorry to say, not recognised. A medical man is regarded as a tradesman, and enjoys a position in society equal to his tailor or bootmaker. In all Western towns there are plenty of *soi-disant* "doctors", but a man who could afford to live for the first two or three years partly independent of his profession, and to whom the customs of the country would not be disagreeable, would in the end realise a fair income.—I remain, sir, truly yours,
JAMES P. KEARNEY, L.R.C.S.I., etc.
Much Wenlock, Salop, July 26th, 1875.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

COTTAGE HOSPITALS.

SIR,—M.D. cannot do better than procure a small work entitled *Handy Book of Cottage Hospital Management*, by H. Swete, M.D., and published by Hamilton Adam, and Co., of Paternoster Row; he will therein find every particular he may require as to the expense and practical working of cottage-hospitals.—Yours, etc.,
R. S. P. T.

WASHING OUT THE UTERUS.

SIR,—In the *JOURNAL* of July 17 I notice a letter from A Learner, wherein my name is mentioned in conjunction with that of our late worthy President, Dr. Tilt, asking for information on the subject of washing out the uterus and vagina when any septic matter is contained therein. I shall not allude to the late discussion on puerperal fever at the Obstetrical Society, except to state that not one of the speakers denied, or appeared to doubt, that the contact and absorption of septic poison would cause so-called "puerperal fever". Thus far we are all agreed. The rules I should like to see carried out to prevent the conveyance of septic poison to the puerperal female are these.

1. All maternity hospitals should be isolated, and the strictest attention paid to cleanliness and the immediate removal of all matters likely to become offensive. These should not be hidden under the bedding when the medical officer, etc., goes round the wards; here they are often forgotten, and thus become the hidden source of infection.

2. No one whilst engaged in dissection, or a frequenter of the dissecting-room, should on any account be allowed to attend a woman in her confinement.

3. No medical man engaged in midwifery practice should himself, when it can be possibly avoided, make a *post mortem* examination; and, should circumstances compel him to do so, he should immediately change his clothes, and wash his hands in some disinfecting fluid.

4. No medical man or nurse should, after being in attendance on any case of scarlet fever, diphtheria, small-pox, erysipelas, or any other disease, in the course of which putrid or septic emanations may be present, attend a woman in her confinement without washing the hands in a disinfecting fluid; and in the case of the nurse, in addition, her clothes should be thoroughly disinfected.

5. No accoucheur or nurse should on any account, after being in attendance on a case of puerperal fever, attend a woman in her confinement without taking every precaution to free himself or herself from any septic poison which may have attached itself either to the dress or to the surface of the body. To accomplish this, the accoucheur should wash his hands in a disinfecting fluid, and should, in addition (as I explained at the Obstetrical Society), place a few grains of pure iodine on a plate, and hold under it a spirit-lamp. This of course must be done in a confined space, such as the water-closet, in order that the fumes of iodine should fall over the clothes, etc., of the person to be disinfected, which it will do in small scales, without any injurious effects to the person or clothing, provided the eyes are protected. The monthly nurse should, in addition, change her whole bodily clothing.

That iodine does destroy the poisonous properties of septic matter, I can assert most positively; and, in spite of the antivivisectionists, I will relate how I satisfied myself of the fact. I injected various solutions of putrid matter under the skin of guinea-pigs, and to other portions of the same solutions I added a few drops of tincture of iodine before injecting the solution. In the latter case no injurious results followed, but in the former death always occurred within a few days, with all the symptoms of septic poisoning, afterwards verified by *post mortem* examinations. The stronger the solution, the more intensified the symptoms.

It is scarcely necessary to state that the tincture of iodine is the antiseptic I invariably use if at hand; if not, the permanganate of potassa—Condy's fluid. I prefer the iodine solution for one reason, because iodine is volatilised by the heat of the body, and its vapour inserts itself into every fold of mucous membrane or other tissues penetrating below the mere surface, thus as it were ferreting out the septic poison, and forming with it perfectly harmless compounds (*vide* article Septicæmia, St. Andrew's Graduates *Transactions*, vol. i). There is, then, far less danger of the formation of secondary deposits in distant parts which I have seen follow the use of Condy's fluid. I cannot help mentioning a fact, which will be found very useful knowledge at this season of the year—namely, that tainted or partially putrid meat or game may be rendered perfectly wholesome by washing it in a solution of tincture of iodine, and may be eaten not only with impunity, but with a relish, as all flavour of iodine is removed by the heat of the fire whilst cooking.

We now come to the treatment of the patient suffering from the presence of septic poison in her body. It does not matter whether the septic poison has been conveyed to the patient, and putrefactive fermentation set up thereby in the lochia, or whether some portion of placenta, or blood-clot, or slough, has been retained long enough to become putrid; all that we practically want to be satisfied of is, whether any offensive smell proceeds from the generative organs of the patient. If there do, after removing, as far as practicable, all extraneous matter, wash out the vagina with a solution of tincture of iodine. Three drachms to the half pint of tepid water is the strength of the solution I have been in the habit of using. Keep pumping this up into the vagina with an India-rubber enema until the liquid returns of the same bright colour it had before being pumped up, or, in fact, until there is no further offensive smell. Should the patient not be relieved, and the offensive smell continue, do not hesitate to wash out the uterus, as well as the vagina, with the same solution of iodine. The simplest and most ready way to do this is to attach a good-sized male catheter, by means of a couple of inches of India-rubber tubing, to the pipe of the enema. Introduce the finger up to the os uteri—the attendant, if necessary, pressing down the uterus; guide the point of the catheter into the uterus with the slip of India-rubber tubing attached. Having first charged the enema apparatus with the solution, insert the nozzle of the pipe into the India-rubber tubing, then force the solution steadily up the catheter into the uterus. This must be done gently and regularly, not by jerks, until the solution returns clear, as mentioned before. This process should be repeated twice a day, as long as there is any offensive odour, by the accoucheur, whilst the nurse may wash out the vagina every three or four hours with the solution.

I have only one word of caution as regards the medical treatment: do not be in too great a hurry to check the alvine evacuations, as nature in this way endeavours to get rid of the peccant matter.—Yours, etc.,
A. WYNN WILLIAMS.

June 20th, 1875.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

DISEASE OF THE NAILS.

SIR,—I would strongly advise your correspondent of the 17th July (Dr. Morris) to employ arsenic internally in the case he describes; the indications being, the seat of the affection upon the skin, periodicity and intermission of symptoms, the case being an evident neurosis. Indeed, skin-affections generally, as their true pathology comes to light, are coming to be classed more and more among the neuralgias and other nerve-affections.—Yours, etc.,
ROBT. T. COOPER, M.D.
6, Ludbroke Road, W., August 1875.

SOCIUS SENEX.—1. YES. 2. NO. It is much to be regretted that Socius Senex did not notice the repeated advertisements issued constantly from the office of the Registrar. In accordance with the Act of Parliament, a registered letter sent to the late address must have been returned marked "Address unknown", before the name was taken off the *Register*. The Medical Council expends about £50 yearly in sending these registered letters to practitioners who have changed their addresses.

MR. G. CHATER (Tenby).—*Skin-grafting*, by John Woodman, F.R.C.S. A second edition of this pamphlet was published in 1873 by J. and A. Churchill. Or, Cases of Skin-grafting and Skin-transplantation, a paper by Mr. G. D. Pollock, published in vol. iv (1871) of the *Chlntical Society's Transactions*.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Bristol Daily Post; The Daily Bristol Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Glasgow Herald; The Sunderland Daily Echo; The Carnarvon and Denbigh Herald; The Manchester Guardian; The European Review; The Hackney and Kingsland Gazette; The Worcestershire Chronicle; The Birmingham Daily Post; The Brighton Daily News; The Sussex Daily News; The Glasgow Herald; The Cork Examiner; The Scotsman; The Cork Daily Herald; The Southampton Times and Hampshire Express; The Hampshire Advertiser; The Birmingham Morning News; The Chester Courant; The Metropolitan; The Live-Stock Journal; The Shield; The Grocer; The Shipping and Mercantile Gazette; The Advertiser; The Islington Gazette; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. J. Warburton Begbie, Edinburgh; The Right Hon. Lyon Playfair, M.P., Edinburgh; Dr. George Johnson, London; Dr. J. Matthews Duncan, Edinburgh; Dr. Henry Lee, London; Dr. J. Althaus, London; Dr. Edis, London; Dr. Protheroe Smith, London; Dr. C. B. Fox, Chelmsford; Dr. G. Buchanan, Glasgow; Dr. Woakes, Luton; Dr. Shettle, Reading; Mr. R. Terrance, Matfen; Mr. O. N. Royle, Milnthorpe; Dr. A. Smart, Edinburgh; Dr. A. Mackintosh, Chesterfield; Dr. Lauder Brunton, London; Dr. A. Morison, London; Mr. W. Acton, London; Dr. C. B. Fox, Chelmsford; Dr. A. Robertson, Glasgow; Dr. G. Hunter, Linlithgow; Dr. R. Todd, Dysart; Mr. J. R. Crawford, Eythorne; Mr. G. M. Stone, Brighton; Dr. J. Lowe, Edinburgh; Mr. A. Baker, Birmingham; Dr. B. Foster, Birmingham; Dr. Macleod, Kilmarnock; Dr. W. Husband, Edinburgh; Dr. Cousins, Southsea; Dr. Waters, Chester; Mr. J. Tweedy, London; Dr. A. Macdonald, Edinburgh; Mr. F. S. Palmer, Northlake; Dr. H. Douglas, Dumfermline; Mr. R. C. Lewis, Rainhill; Mr. C. Spinks, Warrington; Dr. J. G. McKendrick, Edinburgh; Dr. James Ross, Waterfoot; Dr. H. Barnes, Carlisle; Dr. J. A. Russell, Edinburgh; Mr. J. Gray, Aberdeen; Mr. E. Fairland, Lucknow; Dr. W. H. Spencer, Clifton; Dr. J. B. Tuke, Edinburgh; Mr. R. Jefferiss, Dalkeith; Dr. T. Dickson, Buxton; Dr. C. E. Underhill, Edinburgh; Dr. J. Wolfe, Glasgow; Mr. H. Bigg, London; Dr. Wm. Yeats, Bankfoot; Dr. E. J. Tilt, London; Mr. Cowell, London; The Secretary of the London Necropolis Company; Dr. Richard Caton, Liverpool; Mr. P. Maury Deas, Macclesfield; Mr. James Thompson, Leamington; Dr. Maclean, Netley; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar-General of England; Mr. P. Brotherton, Alloa; Dr. David Page, Westmorland; Dr. Stewart Locock, Carlisle; Mr. William Adams, Edinburgh; Mr. Thos. Worth, Nottingham; Mr. Robert Slade, Dorchester; Dr. Robert T. Cooper, London; Dr. Hardie, Sale; Dr. Long, Hackney; Dr. Sysons, Huntingdon; Dr. George Bland, Macclesfield; Dr. Lee, London; the Secretary of the University of London; the Secretary of the Manchester and Salford Sanitary Association; Mr. Ralph Hardley, Stoke upon-Trent; Mr. John Berry, Leyland; Dr. T. O. Dudfield, London; our Dublin Correspondent; Mr. G. W. Callender, London; Mr. W. Wadham, London; Mr. E. Noble Smith, Crawley; The Secretary of the Edinburgh University Club; Mr. G. M. Evans, Bridport; Mr. T. Kay Gray, Darlington; Messrs. Davies and Co., London; Dr. Lowe, Edinburgh; Mr. G. Chater, Tenby; Mr. Eastes, London; Mr. S. Woodman, Ramsgate; Mr. E. Owen, London; Socius Senex; Dr. John Roberts, Chester; etc.

BOOKS, ETC., RECEIVED.

A Manual of the Diseases of the Heart: their Pathology, Diagnosis, Prognosis, and Treatment. By R. H. Semple, M.D. London: J. and A. Churchill. 1875.
On Poisons in Relation to Medical Jurisprudence and Medicine. By A. S. Taylor, M.D., F.R.S. London: J. and A. Churchill. 1875.
Report of the Sanitary Commissioner for Bengal for the year 1873. By Surgeon-Major C. J. Jackson, M.D.
Common-Sense Management of the Stomach. By J. D. Drewry, M.D. London: Henry S. King and Co. 1875.
Baldness: its Causes and Cure. By Michael Corlin. Heywood and Sons, Manchester.
Essays and Papers on some Fallacies of Statistics. By H. W. Rumsey, M.D. F.R.S. London: Smith, Elder, and Co. 1875.

ADDRESS IN SURGERY,

DELIVERED AT

THE FORTY-THIRD ANNUAL MEETING OF THE
BRITISH MEDICAL ASSOCIATION,

Held in EDINBURGH, August 3rd, 4th, 5th, and 6th, 1875.

BY

JAMES SPENCE, F.R.C.S. Ed., F.R.S.E.,

Surgeon in Ordinary to the Queen in Scotland; Professor
of Surgery in the University of Edinburgh.

MR. PRESIDENT AND GENTLEMEN,—When I was honoured by the request of your Council to give the Address in Surgery, I asked to be allowed a short time to consider how far I would have leisure to prepare an address worthy of the occasion; for, in addition to my winter's avocations, I was engaged in a work which it was necessary to finish before the commencement of another session. I knew, moreover, that addresses were not my *forte*, and that any attempt of mine must fall far short of the elegance in composition or the eloquence which had characterised the addresses to which you were accustomed. But, on consideration, I felt that my position as Professor of Surgery in this University, the long experience I had enjoyed as Surgeon to the Royal Infirmary, and the length of time I had been connected with the Edinburgh Medical School, demanded that I should not shrink from the duty of doing my utmost in response to the invitation with which I was honoured: I consented the more readily, that I felt sure that the members of the Association would; as practical men, look rather to the matter than to the manner of my address.

Having accepted the situation, I had not much difficulty in choosing my subject. My avocations as a hospital surgeon and teacher of surgery necessarily forced on my attention the changes taking place in our views of disease and in the practice of surgery. I decided to review the progress of surgery in relation to its past, limiting myself necessarily to a few departments, from the impossibility of overtaking the whole range of the subject.

I believe it is only by reviewing the advance in relation to the past, that we will be able to estimate what real progress our science has made, and in what that progress consists, whether in the discovery of something absolutely new, or in modifying and improving methods of treatment, the intrinsic value of which had not been fully appreciated, or which had fallen into disuse owing to the imperfect method in which the principle had been carried out. In regard to things absolutely new, we might almost echo the saying of Solomon: "Is there anything whereof it may be said, See, this is new? It hath been already of old time, which was before us."

Looking at some of the more prominent recent changes in surgical practice, a superficial observer might almost imagine that instead of progressing, our science moved in a cycle; and were he inclined to be cynical, he might suggest that we had revolved back to the period of sheer mechanical forces, complicated dressings, and red-hot knives. A nearer and more appreciative examination will show us, however, that even in cases where the principle is not new, the method of applying it has been so modified and improved as to constitute a real advance and addition to our resources. Let me take as an example of this, a method of treating fractures of the lower extremity now much used—*extension by weight and pulley*.

The great tendency to shortening and deformity in cases of fracture of the thigh-bone, owing to the contraction of the powerful muscles which surround it, could not but attract the attention of those called upon to treat such injuries; and hence, from the earliest times, surgeons were naturally led to try to overcome the displacing causes by opposing force to force by means of *extension* and *counterextension*. The principle of extension is now almost universally admitted to be best in these fractures; but the method by which it is applied makes all the difference. Those who first applied the principle seem to have had in view rather what mechanical forces could effect, than what the living body could bear. You have only to look at the formidable machinery they employed for the purpose, such as the bed of Hippocrates, the "organon", and the various forms of glossocoma, different kinds of racks and windlasses, in fact, to understand how a revulsion of feeling in the profession should have at one time led to the abandonment of the extension treatment in fractures of the thigh-bone, and to the adop-

tion of the method of laying the limb on its outside, with the leg bent on the thigh, and the thigh bent on the pelvis—a principle of relaxing powerful muscles which had proved most useful in fractures of the leg, but which, for obvious causes, proved most disastrous in those of the thigh. The abuse of a power is not a reason for abandoning its use: we would do better to examine into it, and try whether it be not capable of improvement. I fear, however, human nature has a bias to extremes; and so we often miss making improvements on methods of treatment until they suddenly reappear as novelties, and are accounted, and properly so, as marks of progress. Mr. John Bell, in his great work on *Surgery*, speaking of the machines used in treating fractures, says: "I may, perhaps, do you some service by explaining the simple principles of this department of surgery; and then you will be able to enter the magazines of Scultetus, Hildanus, and Pareus, filled with engines not unworthy of the chambers of the Inquisition, without being tempted to bring out along with you any of their lumber." Accordingly, he does enter the magazines of apparatus, and criticises them with his usual scathing sarcasm. Amongst other "lumber", he unhangs from the walls of the magazine of Hildanus a weight with circle and strap for hanging from the ankle, and drags to light a bed with a surcingle or perineal band of horse-girth for fixing the body to the upper part of the bed; and on this rude apparatus for permanent extension he makes ironically laudatory remarks. Mr. Bell would have been better employed if, when he exhibited the rude apparatus of Hildanus, and admitted its power of maintaining permanent extension, he had thoughtfully considered how its defects might be removed, and it might be converted into a simple and effective means of treating fractures of the lower extremity. Let me again take the dust off this bed and weight of Hildanus, and place them alongside some modern surgical upholstery, and see how like they are. Here is the weight and pulley method copied from a recent work on surgery. How very like! The perineal band or surcingle fixing the patient; the weight hanging from the foot through the pulley fixed at the foot of the bed. But how is the weight hung from the limb? No longer by a circular strap round the ankle, acting on one part only, and so unendurable, but to long plasters fixed to and embracing a great breadth of the limb from immediately below the fracture, and so diffusing pressure that the patient feels no inconvenience, and is scarcely sensible of the extending force. That makes the difference. But something is still wanting to its perfection. Can we get rid of that perineal band, which proves so troublesome to patient, and surgeon, and nurse? How can we dispense with it, and maintain a counteracting force to the extension from the foot? Tilt up the lower end of the bed; place blocks of wood below the feet of the bed; take off the perineal band, and let the body be the counterextending force; and there you have the simplest, least irksome, and most perfect method I know of treating fractures of the thigh, and, if possible, still more useful in treating oblique fractures of the tibia. Until a comparatively recent date, I seldom used anything but the long splint for the purpose of extension and counterextension; and several years ago I drew special attention to what I considered essential to its proper use, *viz.*, maintaining a moderate amount of extension during treatment, more especially when the fracture was oblique; and, so far as the results of my practice were concerned, I had little reason to abandon the long splint for any other method. But it is impossible for any one who has had much experience in its use not to feel that it had defects, and that much care is required to prevent troublesome results, and to overcome some difficulties. I may mention, for example, the tendency to fretting and excoriation of the soft parts, caused by the perineal band or extensor, and by the handkerchief which was generally used for fixing the foot to the splint. Nay, unless great attention was given, the pressure of the handkerchief sometimes gave rise to sloughing, especially in old or very young patients. Indeed, for some years before I began to use the pulley-extension, I had used plasters as the means by which I fixed the foot to the lower part of the splint, so as to obviate the bad effects of the handkerchief round the ankle and instep, and also as maintaining extension in a more direct line, and preventing any eversion of the foot; and I would strongly urge this modification whenever the long splint is used. But there still remained the inconvenience and irritation caused by the perineal band, and the frequent necessity of changing it for cleanliness; and when this band is removed, of course all extension and counterextension cease for the time, unless kept up by assistants; and there is risk of displacement occurring. Another troublesome though less serious effect was the stiffness of knee when the splint was removed at the end of six or seven weeks; and, in some patients of rheumatic diathesis, or those who would not tolerate early passive motion being used, I have known a considerable amount of stiffness remain for years. My predilection for, and my favourable experience in the use of, the long splint, made me very un-

willing to abandon it; but, having to treat a compound fracture of the thigh where the wound was so placed that even the bracketed long splint could not be used, I tried the extension-pulleys, and found that method so effective, that I tried it in ordinary cases, and have found it so simple and effective, so much more comfortable for both patient and surgeon, that I now rarely use the long splint—almost never, except for clinical instruction, that students may see more than one method of treatment. Now, after some years' experience in the use of the extension-pulleys in fractures of the thigh in very young children and in adults, in fracture of the neck of the femur in old persons, and in long oblique fractures of the tibia, I unhesitatingly commend the method to all who may not have tried it. Of course, in fractures of the shaft of the femur, lateral splints are required, just as when we use the long splint, and also for lateral support in fractures of the leg. When there is much bruising, however, I merely use sand-bags to prevent lateral displacement; and I also prefer deep sand-bags to prevent rolling of the limb outwards in fractures of the thigh, to a long lateral splint, as used in America. In fact, the full advantages of the extension-pulley method are only secured when we abandon the perineal *lacque* and long lateral splint, and make the body the counterextending force.

Looking at the extension method, as thus improved and simplified, I think we may fairly reckon it as progress in a most important department of surgery; but, whilst we congratulate ourselves on our advance, and replace the bed and weight of Hildanus in the *armamentarium antiquorum*, let us regard it not as "lumber", but reverently with the homage due to the perception of a true principle, however rude in design and execution the apparatus may be.

The use of plasters, as enabling us to fix apparatus, is capable of numerous applications; and in transverse fractures of the patella, I have used it with advantage to enable me to approximate and retain the fragments, by means of Malgaigne's hooks, without penetrating the skin.

The Process of Union in Fracture has been long a subject of discussion. The old Arabian physicians wrote of the ossifying juices poured out from the broken bone—the *callus*; and surgeons long exercised themselves how to restrain within due bounds the exuberant supply by bandaging-friction, and even by scraping, as recommended by Abulcasis. Speaking of the ideas regarding the exudation of new material for repair of fracture in his day, Mr. John Bell says that many certainly regarded it as "something poured out like lead from a plumber's ladle"; and really if we look to some expressions used, and views held, in our own highly scientific age, I hope I will not be considered uncharitable if I cannot help thinking some such views still exist. What, for example, about that beautiful provision of Nature, provisional callus, figured and described in not a few modern works? Does it exist as a necessary part of union if the broken bone be properly adjusted and carefully retained in position? Is it true that the fibrine of the blood, extravasated from the vessels of the broken bone and the torn tissues, is valuable as a concrete, which is to become organised and ossified, and make the broken part, to use a common expression, stronger than before? I would not venture utterly to deny the correctness of such views and such beautiful provisions of Nature; but this I know, that I have had a few opportunities of examining very recently united fractures in persons who died suddenly from other causes, and in such cases I have never seen trace of the changes described. A little thickening and vascularity of the periosteum, a narrow line of new ossified material, barely perceptible between the broken surfaces, were all the changes visible in the injured bone; but in these cases the fractures had been properly adjusted and retained in position from the first. Might I hint that, to some extent at least, the views to which I have alluded are the result of misinterpreted facts, observations of experiments on animals, or of what is seen in badly or irregularly united fractures?

When the femora of rabbits or dogs are fractured, and the animals killed to ascertain the changes which occur at different periods after the injury, great extravasation of blood into the tissues, and around and between the broken ends of the bone, is a very marked condition in that early stage; and, somewhat later, inflammatory infiltration of the intermuscular connective tissue, and amongst the fibres of the muscles, is superadded, giving rise to consolidation of the parts around the broken bone and for some distance beyond. These phenomena are the result of the laceration of texture and irritation produced by unrestrained movements of the broken fragments. Every movement excites spasmodic muscular action, and, consequently, more laceration and irritation, until the extravasation of blood and until inflammatory infiltration interfere and prevent the muscles from acting, and, at the same time, serve as a sort of retentive apparatus to the fractured bone. In badly adjusted fractures, when there is overlapping, or in comminuted fractures, when the fragments render the fractured surfaces irregular, the new material is furnished in larger amount to fill up the inequalities; but even in such cases, not to the extent that the feeling of

the mass in the limb would lead us to suppose, for the bulk of that is chiefly due to overlapping; and it not unfrequently happens that, in comminuted fractures, partly detached fragments become imbedded in the muscular or connective tissues of the limb, and the new ossific matter so deposited has led some authorities to assume that the extravasated blood has become organised and ossified. Now, whilst the conditions seen in the experiments on animals or in irregularly adjusted fractures may, if you like, be termed provisional, inasmuch as they help Nature's unassisted efforts towards repair under disadvantageous circumstances, I do not believe in such provisional callus being formed when the fracture is well adjusted and retained in position, and muscular action prevented. Nature is not capricious: the healing process is the same in bone as in other textures; the smallest amount of new material is used for reunion. Just as a wound of the soft parts heals with a fine linear cicatrix, if its surfaces be carefully adjusted and retained and undue excitement prevented; whilst a similar wound, left to itself and subjected to irritation from movement or other causes, inflames, suppurates, and heals by broad irregular scar; so in fracture, if properly set and treated, there will be no ferule or mass of provisional callus at the fractured point.

Refracture in Badly Set Fractures.—Refracture and readjustment of a badly united fracture, when the bone has thoroughly consolidated, is a proceeding which, although popularly believed to be frequently resorted to by surgeons, is one which has been rarely practised since the beginning of the present century. Readjustment, however, by bending over the knee, or by pressure and counter-pressure in the case of deformed and recently united fractures, has often been effected; but interference with a badly united fracture, after months have elapsed, has generally been regarded as improper, and likely, from the force required, to lead to serious risk, with little chance of restoring the limb to better form or usefulness. Yet in early surgery, refracture seems to have been a common proceeding amongst Arabian surgeons. Abulcasis, who objected to the practice, reprobrates it in strong terms: but if his remedies for softening and diminishing exuberant callus failed, this same Abulcasis had no hesitation in recommending resection of old fractures. "If the distortion be old and firm", says he, "cut across the bone and saw off all that is superabundant, whether of the bone or callus." And he further remarks to his pupils, "that study and practice will make them very expert in the operation". Here, again, we find ourselves coming back to old methods, for amongst our most recent advances, more especially since subcutaneous and subperiosteal operations have been introduced, resections to remove deformity resulting from ankylosis or badly set fractures have been practised with much advantage. The operative proceedings have been varied—sometimes weakening the point wished to be broken—by drills or narrow saws or osteotomes, sometimes by direct section by saws or chisels. Even yet, however, the cases are rare in which surgeons have ventured to break thoroughly consolidated fractures by direct force to remove deformity. No doubt, when we think of the degree of force to be applied, and look at the apparatus necessary for the purpose, a feeling of repugnance arises in the mind; but some things look worse than they really are. I make these remarks in reference to a method of refracture and readjustment of old badly set fractures of the femur, introduced to the notice of the profession by Mr. Butcher of Dublin. Mr. Butcher's case was a fracture of the thigh, attended with great deformity and shortening, in a young man who had met with the injury upwards of six months before he consulted Mr. Butcher. Any one who looks at the photographs of the limbs in that case before and after the operation of refracture, will, I think, agree with me, that it is a triumph of surgery. But when you look on the actual apparatus by which this triumph was obtained, you might be inclined to use the language of John Bell in reference to some ancient apparatus, that it was "an engine of torture fit only for the Inquisition". I have, however, had an opportunity of testing this apparatus, and can state to you that it produced none of the torture or bad effects its appearance might suggest. It happened that at the time I received Mr. Butcher's account of his case of refracture, I was considering that of a patient who had come from the backwoods of Canada to consult me, and ascertain if I could do anything for deformity and great shortening of the limb, resulting from a fracture of the femur he had sustained about two years before. The limb was four inches shorter than the sound one, and a large knee of bone projected, giving rise to great deformity; and, what was worse, the peroneal division of the popliteal nerve had suffered, and the extensor and peroneal muscles were paralysed. The case was most unfavourable, both as regarded the form of the fracture and the length of time it had been consolidated, whilst the paralysis of the foot made me doubtful of any interference; but, seeing that he had come a long distance as a last hope, I determined to try what could be done.

By using galvanism after dividing the tendo Achillis, some increase

of muscular power and development was obtained, and I had made up my mind to partially resect the fracture with a narrow saw, and then break it through, when the report of Mr. Butcher's case was opportunely sent me. On carefully and anxiously studying it, and communicating with Mr. Butcher, I had his apparatus made and refractured the bone; and though, owing to the unfavourable nature of the case, the result will not compare with Mr. Butcher's, yet the operation has greatly improved the length and form of the limb, whilst the patient has suffered no constitutional disturbance, and scarcely any local irritation from what seemed an application of great and direct force. That the apparatus admits of much modification and improvement to adapt it for acting on different forms of fracture, I doubt not; but its efficiency and safety even in its present form has, I think, been proved, and, although the necessity for such operations is daily diminishing, owing to the advance of surgical skill, yet, in cases such as those fractures which occur when the patients are at a distance from medical aid, it is well to have it in our power by simple and safe means to remedy these terrible deformities even after some time has elapsed.

Operations for the Cure of Ununited Fractures cannot be mentioned either amongst recent acquisitions or revivals of surgical resources, for such operations have long been practised. Many improved methods, however, have been introduced in comparatively recent times, such as Dieffenbach's method of resecting and pegging the resected ends of the bone, a method which has been specially successful in oblique fractures of the tibia. In a case recently reported from the practice of Professor Volkmann of Halle, a very neat and ingenious adaptation of this method has proved successful in an ununited fracture of the femur, in which the ends of the bones after resection were chiselled into a step-like form on their opposed surfaces, and so were accurately fitted to each other and pegged. Success in resection of the femur or humerus in such circumstances has not, however, been eminently successful. Even in cases where constitutional dangers were avoided, the reunion has not often taken place. In 1854, I proposed and carried out successfully a modification of resection in an ununited fracture of the humerus, by cutting down upon and merely separating the fibrous texture between and around the broken ends of bone, and snipping them off only to a small extent with strong bone pliers, carefully avoiding the use of the saw, or complete protrusion of the bone during section, so as to have as little disturbance of parts as possible, that the action on the ends of the bone should resemble the nature of fracture, and that the amount of bone removed should be merely enough to open up its texture. Since then I have, on several occasions, used this form of resection successfully. There is, however, a method of treating ununited fractures, especially at an early period, which I do not think has had sufficient notice taken of it, nor been sufficiently or fairly tried; I mean the plan proposed and practised by my predecessor in this University, the late Professor Miller. The method consists in entering subcutaneously a long narrow but strong knife; passing it on to and between the ends of the ununited bone, dividing freely the fibrous union, scraping the ends of bone, and slightly separating the periosteum; then the limb is carefully firmly bandaged and placed in appropriate splints. I know that this plan has never had much favour; perhaps it seemed too simple to effect the purpose, and it was derided and declared to be inefficacious by some who professed to have tried it. But I also know that I have frequently used it and have generally found it successful when the knife has been effectively used, and the after treatment carefully carried out. I have, indeed, so strong an opinion of the efficacy of this method in comparatively recent cases, that I do not think it warrantable to proceed to severer measures until this simple one has been fairly tried, and I purposely mention it here to press it on the attention of the profession.

The Subperiosteal Method.—From the progress in the surgery of fractures, I am almost inevitably reminded of some of the most brilliant improvements in surgery arising from our advance in the knowledge of the anatomy and physiology of the periosteum and the nutrition of bone. With the progress of this department of surgery the name of Ollier of Lyons must always be connected, as the man who has given it the greatest practical impetus; but those who recollect the experiments of the late Professor Syme, and the memoirs of the late Professor Goodsir on the structural anatomy and nutrition of bone, must credit these eminent men with no small share of our advance. The practical application of the subperiosteal method of operating is perhaps seen to the greatest advantage in such operations as that for closing the cleft in the hard palate, and in partial removal of bone in some conservative operations.

In excisions of joints, I think the subperiosteal method must be used with discrimination. In cases where, as in the lower extremity, a firm solid support, and not a movable joint, is desired, its value is at once evident; and perhaps in some excisions of the upper extremity, in which we require to remove a very large amount of bone. In ordi-

nary excisions of the upper extremity, we are more troubled with redundancy than with deficiency, and generally require to remove a considerable amount of bone to prevent ankylosis from occurring; but in truth, in a great many cases, the question is settled for us by the disorganised state of parts on which we operate.

There is one class of cases in which subperiosteal surgery seems likely to achieve some brilliant successes: I mean cases of acute necrosis, as they are called; in other words, cases in which inflammation of the dense shaft of a long bone has been so rapid, general, and violent, that nutritive changes seem arrested; and the bone separated, or nearly separated, from the investing periosteum, is exposed, with its surface bare, smooth, and white, as if dead. Although in such cases the constitutional disturbance, at first from irritative fever, and subsequently from hectic, always places the patient's life in great jeopardy, and though the tendency of the local action to spread to the epiphyses and involve neighbouring joints is very great, we have hitherto been content to wait patiently, often most anxiously, for nature to separate between the dead and living bone, before interfering. In cases where the state of the patient seemed to point to amputation as the only chance for life, the results have been so unsuccessful, that I think it scarcely warrantable. Now, however, by separating any remaining connection of the periosteum, and resecting and removing the diseased portion of the shaft, the long process of separation is avoided; the constitution is saved the tax on its powers from discharge, irritation, and hectic; the periosteum which is left furnishes new bone to take the place of that removed by the surgeon; and the limb gradually assumes its normal form and usefulness. Here, it would seem, we have clear advance in the treatment of disease; and I believe it is a real and great progress. Still we must look at it carefully from different points of view, so as to make sure of this, and avoid injury to the method from its being practised indiscriminately, or in improper cases, or during unfavourable conditions. We must remember that, in what we call acute necrosis, the loss of vitality seldom extends to the whole thickness of any great length of the bone; that, whilst the periosteal sources of nutrition may be largely or entirely cut off, the vascular supply and nutrition of the medullary canal and the ossific centres may not, and rarely are so to the same extent; and hence we can never be sure for some time how much of the affected bone may really perish, whether there may be a large portion to separate ultimately, or merely superficial exfoliations; or, as I have known, the whole surface of a long bone like the tibia may be exposed bare and white, and yet granulate and heal without a vestige of exfoliation occurring.

But, whilst I think it right that these things should be kept in mind, lest we interfere ultroneously and remove texture which natural processes would have saved, on the other hand, looking at the matter practically, when we see a patient suffering from hectic or occasional hemorrhage from ulceration of vessels near the diseased bone, and when we consider how long he must be exposed to such sources of debility before the dead bone separates, and the risk of the implication of neighbouring joints occurring and necessitating amputation, I am shut up to the conclusion that resection and removal of the affected bone must be often indicated; and that, if the cases for its performance be judiciously selected, and the operation be properly effected, this method will be found to be a most valuable addition to our resources.

The important question, no doubt, arises, How far can we trust to the reproduction of new or substitute bone from the periosteum, when the whole thickness and nearly the whole length of a long bone like the tibia has been removed by operation? And this question not unnaturally suggests itself, because we know from experience that under the expectant plan, when large and long sequestra were removed, the thickness of the shaft was never renewed to its full extent, although under that method we had both bone and periosteum to furnish new material. Here, for example, is a specimen, showing a large sequestrum removed when loosened by Nature, and a cast of the leg showing the appearance of the limb after the cure was completed. During last winter, Dr. MacDougall of Galashiels, now of Carlisle, exhibited a child to the Medico-Chirurgical Society of Edinburgh, in whom he had resected the tibia in a case of acute necrosis, and the thorough reproduction was well seen, and the use of the limb was perfect. In April last I operated on a similar case, and resected the shaft of the tibia close to the epiphysis at each end, after separating the periosteum. Here is the portion removed; and as the case is still in hospital, the members of the Association can judge of the probable result, so that I think we may trust to the periosteum for entire reproduction of the part removed.

To these and similar successful cases it may be objected that in cases of compound fractures, when the broken bone protruded, divested of periosteum, resection of the denuded bone was and is frequently practised; but experience has shown in such cases that, when the portion of bone so removed is large, reunion is almost never perfect; the ends of

bone are atrophied and joined together by a tough fibrous material; or, in the case where there are two bones, as in the leg and forearm, the ends of the resected bone approximate and unite with the other bone. A little consideration, however, will show that there is really no parity between such cases and resection for acute necrosis, because in the case of compound fracture the periosteum is not merely separated, but is generally so torn and bruised that its vitality is destroyed, or so impaired that its reproductive powers are rendered very imperfect; whereas in necrosis its vascularity is increased, the membrane thick and flesh-like, and it almost invariably carries with it small nuclear portions of bone-tissue.

Passing to the consideration of the *Surgery of the Articulations*, a wide field opens before me, but I must limit myself to one or two points. In regard to excision of joints, now so firmly established as a conservative measure, and so obviously an advance in the right direction, I shall not enter on it here; but I cannot leave this department of operative surgery without directing attention to a method of excision of the condyloid end of the humerus in cases of ankylosis of the elbow resulting from injury, proposed by my distinguished hospital colleague Dr. Watson. It consists essentially in resecting and removing the condyloid end of the humerus without cutting the attachment of the triceps to the olecranon, or that of the brachialis anticus to the coronoid process—in fact, without removing any part of the articular surfaces of the ulna or radius. By this method the natural movements of the elbow are preserved, and the tendency to recurrence of the ankylosis is prevented. (Paper in *Edinburgh Medical Journal*, 1873.)

Dislocations.—The manual method of reducing dislocations of the hip has been revived and used with great success; so much so, that the reduction of these luxations, which formerly entailed much trouble and the expenditure of great force, can now be effected in recent cases as if by magic. I have said that the use of the rotatory or circumduction method has been revived: perhaps I should rather have said revived as a general practice, for, in truth, it has never really been altogether abandoned. We generally hear it spoken of as the American method, and undoubtedly it is to the writings of Drs. Reid and Bigelow of the United States that we owe the more general use of the practice in this country; but it is not a little curious that it has been so little known or used, seeing that it is mentioned and described in some of the principal French works on surgery—not old black letter, but modern books, in the possession of most of us. Thus in Nélaton's *Pathologie Chirurgicale*, published in 1847-48, there is the following statement in reference to dislocations of the hip. "In 1835, M. Deprés made known a method which cannot be too highly recommended on account of its simplicity and the real services which it has rendered in certain difficult cases. . . . This method consists in flexing the leg on the thigh, the thigh on the pelvis, to exaggerate even the movement of flexion and adduction of the limb, then to exercise with it a gentle movement of rotation outwards, whilst at the same time it is abducted." This method, says Nélaton, is described by Pouteau in his *Mélanges de Chirurgie*. M. Chassaignac, in the second volume of his *Opérations Chirurgicales*, 1862, speaks of this method of reducing dislocations of the hip, and quotes the text of Pouteau as follows. "Surgeon-Major Maison Neuve, of the Regiment of Maugiron, a man of great merit, and trustworthy, assures me that he has reduced such luxations without the assistance of any extension. He first flexes the thigh at a right angle with the body; he then executes with the thigh a movement of rotation, which makes it approach the belly as nearly as possible, then carries it out towards the haunch, and returns it immediately by drawing it down towards the sound thigh." Pouteau adds that this method was known to the ancients, and that it is mentioned by Hippocrates and Paulus Egineta. The diagram to which I point is an enlarged copy of an illustration from a French work on Bandaging and Surgical Appliances, by Dr. Goffrés, published at Paris in 1859, and shows the surgeon in the act of using the manual method of Deprés. For this I am indebted to my friend Dr. Paterson, formerly of Bahia. M. Chassaignac enters very fully on the principle of the method; and there is a curious sort of coincidence in terms between his use of the letter Y, to assist his description, and the use made of the same letter by Dr. Bigelow, to mean a totally different thing. Dr. Bigelow speaks of the Y ligament as playing an important part in the rotatory method, describing the ilio-femoral ligament under that name, on account of the divergence of its fibres at their attachment to the femur. Chassaignac describes the leg and thigh, when bent, as representing a pair of compasses opened at a right angle, the lower or horizontal branch represented by the leg, the upper or perpendicular branch by the thigh—this latter divided at its upper extremity into two parts, like the letter Y, one part being fixed, represented by the ilio-femoral ligament, the other movable, represented by the head and neck of the femur; and then he proceeds to demonstrate how, by using the leg as the arm of a bent lever, whilst the ligament,

being fixed, forms a pivot, the movable part—the head of the femur—is forced or directed to the acetabulum. Here we have an example of advance by the attention of the profession being directed to a method which had been practised from an early period, and which has never been altogether obsolete.

Bloodless Surgery.—It is in connection with operations with necrosis and the excisions of bones and joints that what is termed "Esmarch's bloodless method" of operating is seen to the greatest advantage, and these subjects suggest to me the consideration of that and other methods of "bloodless surgery". The bloodless methods may be divided into two kinds; first, those that have for their object the prevention of loss of blood during the progress of operation; and, second, those by which the surgeon is enabled to divide textures by means of apparatus which, by the very mode of division, prevent the escape of blood at the time, and also act as permanent hæmostatics.

The method of Esmarch, though another example of a great improvement in carrying out a principle, can only be looked upon as a revival, not as new. The principle was clearly enunciated by the late Sir Charles Bell; and the mode of carrying it out by bandaging the limb from below, and then rapidly screwing tight the tourniquet, is described when discussing the value of the tourniquet in amputations, in his *Great Operations of Surgery*. But it is not in amputation that the method is most useful or seen to most advantage; and hence it had generally fallen into disuse. The method of Esmarch, by using the India-rubber roller to expel the blood from the part of the limb to be operated on, and the strong India-rubber tubing to constrict the limb and act as compressor, effects the object in view perfectly, and hence enables us to see the parts on which we operate as in a dissection, and prevents all loss of blood during the operation. It is a most valuable assistance to us in such operations as those for necrosis and resections of bones and excisions of joints. In many cases of removal of large sequestra, or resections of the shaft of a bone especially, we can, by stuffing the wound with oiled lint, and applying a compress and bandaging the limb before removing the circular compressor, render the operation absolutely bloodless. In excision of joints where we require to tie arteries after the operation, I prefer the tourniquet to the India-rubber as a circular compressor. It is equally effective in restraining bleeding; and, by loosening or tightening the screw, the vessels can be secured with less loss of blood than when the India-rubber is employed. Indeed, in many amputations, whilst the incisions are completed bloodlessly by Esmarch's method, the sudden and general oozing from the cut surfaces which follows relaxation of the India-rubber entails more loss of blood eventually than when the tourniquet alone is used. I have repeatedly amputated at the thigh and at the hip-joint, using only the tourniquet or manual compression, with the loss of not more than three or four ounces of blood; and in one case of primary amputation of the hip in the country by candlelight, in which I had the blood carefully collected from the tiled floor, as there seemed to be a large clot, I found, to my astonishment, that it barely amounted to half a teacupful. In many cases of amputation, owing to the septic state of the tissues, or the malignant nature of the disease for which we are operating, I consider it inadvisable to repress the blood and other fluids, such as unhealthy pus or cancer-juices, into the parts above. In such cases, I draw a band of India-rubber tubing, pressing on the limb from above downwards, and tighten it immediately above the part to be removed. This, of course, saves no blood to the patient; but it renders the operation bloodless in another sense, and is especially useful in private practice, as avoiding soiling of the floor or furniture. In cases of excisions of joints, where the parts are loaded with pus, I constrict above and below the point to be operated on, and thus secure a nearly bloodless operation without risk of repressing the unhealthy fluids into the textures higher up. I cannot see the advantage of the Esmarch method in such operations as ligature of the femoral artery. I have had frequent occasion to perform operations of that kind, and also of seeing them performed by others; but it is rare to see any bleeding; and I think it better that the artery and vein should be left in their natural condition, that the operator may see and deal with them. An empty and collapsed vein would, I think, run greater risk of being injured than when seen full, its natural relation to the artery. I make these exceptions because I think that this form of bloodless surgery is liable to suffer from its indiscriminate use, and from over-laudation; but I have already said that I consider it a most valuable aid in proper cases, and it seems as if it were revived now with special relation to the progress of conservative surgery.

The bloodless surgery comprised under the second head consists, as I indicated, in division of parts by means of the various apparatus which prevent bleeding during the process, and permanently. It includes cauterising agents, whether red-hot knives or galvano-cauterics, and crushing divisors, such as the different kinds of *dériseurs*. In regard to

the use of the cautery to stop hæmorrhage, I need hardly say we cannot claim that as new, or as a discovery of the present time. Indeed, I referred to this as one cause that might lead an observer to suppose that we were revolving back to primitive surgery. Before the general use of the ligature, no small ingenuity was used to invent instruments which would sear and arrest bleeding as they cut the textures; and some surgeons, when they ventured to cut through living textures, used the summary method of applying hot pitch or tar over the face of the stump to arrest the bleeding. I am old enough to recollect seeing the result of an amputation of the thigh which had been thus treated. The man had been injured on board a whaling vessel; and, for lack of other aid, the ship's carpenter amputated. Whether from his acquaintance with ancient surgical authorities, or simply acting on the rules of his craft, he "paid" the stump with hot pitch. The man recovered well, possibly owing to the antiseptic action of the pitch, and subsequently eked out his means of living by exhibiting himself at the surgical classes as an ancient mariner and a connecting link with antique surgery. Although heated knives are again being used, I cannot and I do not think the profession will hail their revival as a mark of progress in surgery. But, in regard to the use of the galvano-cautery for the purpose of dividing very vascular textures, or for removing tumours in situations where we cannot reach and tie divided vessels, or where there is danger from the blood entering the air-passages during an operation, as in some operations on the mouth, I think there can be but one opinion of the value of such means, and also that modern surgery has made advances, and I trust is destined to make farther advances in this direction. The chief difficulties to be overcome are in the cumbrous nature of the apparatus and the difficulty of getting a galvanic power in moderate compass to heat a platinum wire of sufficient thickness. In the surgical manipulations, habit of using the wire requires to be attained to keep it in constant and close contact with the tissue to be divided, because, at any point where the wire does not touch and give off its heat to the tissue, it fuses and gives way under the action of the electric current. Those of us who have been accustomed to use the knife will find it advantageous to acquire the mode of manipulation necessary for proper use of the wire. From the very few opportunities I have had of seeing or using the galvano-cautery, I am hardly warranted in expressing an opinion; but I think we require to modify the heat so as to divide the parts more slowly, because a large vessel cut across rapidly by a wire at a white heat will bleed at once as if cut by a knife. The *écraseur* is another means by which bloodless severance of textures can be effected, and it has even been employed for the amputation of limbs. Its real value, like that of the galvano-cautery, lies in its application to operations where the parts to be divided are so situated that we cannot tie the vessels or command bleeding during section of the parts. Its utility in such cases, more especially in operations on the uterus and tongue, has been longer and more largely tested than galvanic cauterisation, and, as compared with our present means of applying the last-named method, it is more simple and more easily managed; but it seems to me that, from the nature of the wound left after the use of the *écraseur*, it is more liable to unhealthy action than that resulting from the cautery; and, if that method could be rendered more manageable, I believe it would gradually supersede the *écraseur*. Meanwhile, however, the *écraseur* is an instrument of great value for the class of cases to which I have alluded, and forms another addition to the resources of our art.

Closely allied to the galvano-cautery—a modification of it, in fact—is galvano-puncture or electrolysis. This agency has been used in the treatment of aneurisms beyond the reach of ordinary surgical operations; and, although from the nature of these cases it has not effected any positive cures, it has, in the hands of my hospital colleague Dr. John Duncan, and others, delayed a fatal issue in cases where external hæmorrhage was threatened, and shown its power as producing coagulation of the blood in the sac.*

It is, however, to the uses of galvano-puncture or electrolysis in certain forms of vascular erectile tumours that I wish more especially to direct your attention, as a most valuable addition to our means of treating these often formidable growths. I do not speak of it as a general method, you will observe; for there are many forms of nævi and erectile tumours, in truth a majority of that class of diseases, in which other methods are more rapidly effective.

Galvano-puncture is specially indicated in those cases in which the erectile tumour is deep-seated and covered by healthy undiscoloured skin. Until a few years ago, our interference in such cases was limited to dissecting off and reflecting the superimposed textures, so as to expose the tumour without touching it with the knife, and then strangulating it by strong ligatures, and, when the growth had sloughed and

separated, replacing the flaps of skin; or by ligature of large arterial trunks indirectly connected with the growth, as, for example, ligature of the carotid artery for orbital erectile growths. The former method was attended with grave inconveniences and dangers, and the latter, besides entailing risk, was most uncertain in its effects, as you can readily understand from the nature of the disease. More recently, injections with the perchloride of iron took the place of these methods, and, in a great number of cases, answered very well, but in others a very considerable amount of sloughing took place before the rest of the tumour had been consolidated, and in such cases severe hæmorrhage occurred, and the life of the patient was endangered. In some cases also the injections of perchloride were attended with a rapidly fatal issue, apparently from thrombosis. I must, however, say that I never saw such a result, though I have long used and continue to use the perchloride of iron injections, and I can only attribute such accidents to the neglect of tearing up the texture of the tumour before injecting the perchloride.

Contrast of the results of different methods is perhaps the most effectual way of impressing their comparative advantages, and shows what advance our science in making; let me, therefore, bring under your notice the following cases from my own practice. An infant, six weeks old, was sent to my care on account of a deep-seated pulsating erectile tumour, occupying the palm of the hand, and extending up the wrist. The tumour had been growing rapidly, and at one point the skin was thin and discoloured. I used injection of perchloride of iron, and part consolidated. Again, it was used, and the consolidation was followed by inflammation and the separation of a small central slough. From the ulcerated surface bleeding took place, and, though arrested by local application of the perchloride, it returned from time to time; and as the child's life was thus endangered, and the growth seemed rather to increase than diminish, I was forced to amputate in the forearm, when the infant was eight weeks old. She made a very rapid recovery, but with the loss of a hand. I show you here the cast of the hand of an infant affected with deep-seated pulsating erectile tumour very similar to the former. In this case I applied electrolysis during three months, while the child was under my care in hospital, and by several applications of the battery the growth began to consolidate and contract, whilst, except at the time of an application, the child suffered no irritation. As it was inconvenient for the mother to remain in hospital, I asked Dr. Connel, of Peebles, who had sent the case to me, to conduct the remainder of the treatment. As the child's parents lived at some distance from Peebles, the applications of electrolysis could only be made at long and irregular intervals. Here is a cast of the hand when the cure was completed; and, when you contrast it with this preparation of the amputated hand of my former case, you will, I think, agree with me that the result is a triumphant vindication of the value of electrolysis in such cases. I have used it also in other cases with advantage, especially in an enormous erectile nævus of the face of a girl. It is of importance that it should not be applied indiscriminately to all cases of nævus or erectile tumours. I think its use should be restricted to cases where the erectile growth is covered to some depth by healthy skin. The needles are coated to a certain length with a nonconducting material, which protects the healthy superimposed texture, whilst the uncovered points passed into the growth act on it at different parts. If needles be applied to a superficial erectile spot, they cauterise and leave more mark than other methods, such as application of nitric acid, perchloride of iron, or iodine. Thus, in treating the large erectile nævus of the face, the electrolysis was only used to the deep-seated portions, while the superficial discoloured marks were treated by applications of perchloride, iodine, etc.

These references to bloodless methods of treating surgical cases remind me that for some time back the medical profession has been trying like Lady Macbeth to wash its hand from all stain of blood. "Ecclesia abhorret e sanguine" was the decree of the Council of Tours, with how much truth let history say. "Medicina abhorret e sanguine" is apparently the watchword of expectant medicine; and so, except in the hands of a few hardened heterodox individuals, venesection has become almost obsolete. What has led to this great change? May I put the question to the seniors present, What led you to abandon general depletion? Was it from the dire effects you had seen of its use? Was it change of type in disease? Or could it be change of fashion?

It has, I know, been fashionable for some time to decry the practice of general blood-letting, and hence any views to the contrary will probably be considered very heterodox. I do not feel inclined, however, to withhold an opinion which my own experience in the past satisfies me is practically correct. The opponents to general depletion denounce the practice as being unscientific, and urge that it is so (1), because it is not in accordance with pathology, and (2) because it diminishes the vital powers of the patient, and thus interferes with Nature's efforts

* I find that Dr. Duncan has had successful results in large cirsioid aneurisms.

to overcome disease and restore healthy action. They ask us: "Can depletion remove the inflammatory infiltration which has taken place, and which constitutes the most formidable part of the diseased action?" Most decidedly not—and no one would suppose for a moment that it could do so directly; but, by relieving the preceding phenomena of exciting action and congestion, it will tend to prevent further infiltration, organic change, and functional disorder, and thus leave less mischief to repair. I hold that general depletion is quite in accordance with the pathology of inflammation, so long as we view that action in its progress as a whole, and do not limit our ideas to one part or one result of the action. The second objection is in great part pure assertion, and what grain of truth there is in it is drawn from an experience in treating a class of patients whose previous health or habits, or both, render them unfit to bear even moderate depletion, or patients who have been admitted into the hospital when the inflammation (say pneumonia) was far advanced and extensive. Surely, the employment of venesection in improper cases is no good argument against its judicious use. As to the exaggerated pictures sometimes drawn of the slow and imperfect recoveries, the permanent debility, and the wasted and anæmic forms of the victims of blood-letting, I can only in charity suppose that they are sketched by those who have had no opportunity of seeing the practice they condemn, and who, therefore, draw largely on their imaginations to describe what they suppose should be the results. Although I have seen a good deal of the use, and also, I have no hesitation in saying, the abuse of the lancet, when venesection was practised indiscriminately, and when it was customary for people to be bled periodically as a preventive to disease, I cannot recall any of these fearful results; but I can remember many a case where relief from suffering was afforded and cure of acute disease effected by the prompt and judicious use of blood-letting. It should not be forgotten that the continuance of the intensely febrile state, which is symptomatic of the local inflammation, is a far greater source of exhaustion of the vital powers than the timely abstraction of a few ounces of blood.

From the subject of bloodless surgery, I might very naturally pass to the subject of arterial lesions and aneurisms, and their treatment in the present day as compared with the past. The subject is undoubtedly inviting, and one of the most important in surgery; but there are two reasons why I think it advisable merely to touch on it: first, because there has been so much attention directed to it of late by special series of lectures; and secondly, it is one of my "hobbies", and that kind of equitation does not answer when time is limited. I may, however, briefly state that, though I have successfully employed both flexion and compression in the treatment of true aneurism, and although, as I have pointed out elsewhere, I hold these methods generally advisable in the early stage of aneurism, considered even as a preparation for ligature, and as in many cases effecting a cure. I do not believe either of them will take the place of ligature. The vessels in which it would be most desirable to avoid deligation, viz., the great arteries at the root of the neck, are just those in which efficient compression is not easily secured, and flexion is out of the question; whilst in the arteries of the extremities, my own experience has not impressed me with any great risk if the operation for ligature be carefully performed.

There is one form of aneurism, to the treatment of which I drew attention some years ago.

Traumatic Varicose Aneurism of the Femoral Artery.—In all the cases which I could collate, and they were few, I found the results had been anything but satisfactory. In cases where the direct method had been adopted of opening the sac and tying the artery above and below the wounded point, the inevitable interference with the wounded femoral vein led to its obstruction, and gangrene followed; whilst in cases where the femoral had been tied on the Hunterian method, the operation failed to effect a cure. In the case which led me to consider the subject, I first tried compression and flexion for some time, but without the slightest advantage, and then I decided to tie the femoral above and below the false sac without interfering with or opening the sac, thus avoiding all interference with the wounded vein, and at the same time preventing retrograde circulation into the sac; and I carried my plan into execution successfully. I see that Mr. Holmes, in his lectures before the College of Surgeons of England, whilst he considers my method the best if operation is to be performed, speaks hopefully of compression as likely to obviate the necessity for operation. But, in the case which I published, compression and flexion combined were carefully and persistently carried out for some time without the slightest effect; and when we consider the communication between the false sac and the artery and vein, and consequently the want of limitation to favour coagulation, I cannot speak so hopefully of compression proving successful. If Mr. Holmes considers the operation I adopted somewhat difficult in execution, what would he say to the latest method of treatment published, where the

surgeon, after tying the femoral in Scarpa's triangle without effect, cut out bodily the false sac and the vessels communicating with it as a last resource?

Tumours.—The subject of tumours in the present day has two aspects: a pathological one, purely scientific; the other a clinical or practical one. Doubtless a time will come when the labours of pure pathologists in investigating the anatomical structure of tumours will have more evident relation to practice than now; for as yet the bearings of pathological research, and the various classification of tumours founded on it in regard to practice, are not marked. It is evident, I think, that, for the practical surgeon, any classification which does not proceed upon a study of the clinical or vital manifestations of the growth in its origin or during its progress can be of little service. However valuable a knowledge of the situation and the growth may be, that can only be ascertained after its removal; whereas the surgeon is naturally desirous of facts and observations which will guide him in the diagnosis and treatment of the tumour whilst it still forms a part of the organism. The attempts which have been made to apply the knowledge of the structure of tumours to diagnosis, by examination of small portions of their solid or fluid constituents removed prior to operation, are very imperfect, and might often mislead. It has happened to me in several instances that nothing has been found but blood-discs entire or broken down, or a little granular or amorphous matter, when the structure of the tumour after removal exhibited most marked characters of malignancy; so that practically I have little faith in such explorations as an aid to diagnosis. On the other hand, experience derived from the study of the vital manifestations and tendencies which characterise growths as divided into the "simple and malignant", enables the surgeon from experience to judge of the propriety of interfering or abstaining from operation in certain cases. Thus, if, from the history and examination of the case, he satisfies himself that the growth belongs to the simple class, he knows that, from the limitation of such tumours, he can be sure of effecting its complete removal, although its anatomical relations may be intricate and important; whilst, from the absence of constitutional cachexia, the prognosis of the result is favourable. Until a comparatively recent period, it used to be laid down as an axiom, that removal of tumours of the neck situated under the sterno-mastoid muscle should not be attempted; and we were directed to the failure in result when such attempts had been made; complete removal of the growths having been found impossible, and their rapid reproduction being the consequence. In a case of an enormous deep-seated tumour of the neck which was sent to my care from Lancashire twelve years ago, the objections to which I have alluded were pressed against interference by the late Professor Syme, and I was referred to cases in which John Bell and Mr. Liston had been forced to leave portions of the tumours owing to their connections; but I had examined into these cases, and felt no doubt, from their history, that they were both of malignant character, and, in fact, that even in these cases the tumours were all but removed. I pointed this out as an encouragement for operation where the tumour was of simple character, and therefore limited in its deep relations; and, relying on the character of the tumour, I decided to remove it, and did so successfully. I suppose no surgeon would now hesitate to operate in such cases; but interference with deep-seated malignant tumours is a very different matter, and, I think, should be avoided. There is another feature in the characteristics of tumours in which I have great faith; viz., that a growth originally of simple character, as evidenced by its originally slow development, consistence, etc., however much it may at a later stage degenerate locally and manifest many of the symptoms of malignancy, never does become truly malignant, constituting a diathesis, so to speak, as in cancer or encephaloid growths; and that, therefore, we may remove such tumours with every prospect of success under circumstances where it would be unwarrantable to interfere were the growth truly malignant. In the huge osteo-fibroma of the bones of the forearm which I removed nearly thirty years ago, you have an instance of what I state. It had at first grown slowly, and without bad effect on the health; but latterly, from the pressure caused by its bulk and consistence, the soft parts had ulcerated; local applications had increased irritation, until at last it assumed a fungating surface, wasting the patient by the pain and discharge. When I saw her, she was considered a hopeless case. She was pale; the skin was of a yellowish tinge; and she was so anæmic, that she appeared cachectic; and there were enlarged glands in the axilla and above the clavicle. But, trusting to the original character of the growth, I amputated the arm at once, and in less than three weeks she was able to be out; all bad symptoms disappeared, and for many years she continued to enjoy the most perfect health, and, so far as I know, is still alive and well. I point to these cases as examples of the value to the surgeon of the classification of tumours founded on the study of their clinical history and vital manifesta-

tions; but at the same time I am far from undervaluing the study of the structural anatomy and development of tumours in its proper place.

It must be allowed that the introduction of anæsthetics has given facilities for surgeons performing operations for the removal of tumours which could hardly have been attempted formerly without great risk, owing to the movements of the patient. My colleague Dr. Watson has now on several occasions excised the entire thyroid body successfully, an operation the feasibility of which had often been discussed formerly, but never accomplished until the present time, so far as I am aware. The success which now attends the performance of ovariectomy is, I believe, also greatly due to the leisurely and careful manner in which the steps of the operation can be accomplished, together with the advances which have been made in the accuracy of ovarian diagnosis. The success which has attended the operations of modern ovariectomists must excite admiration and congratulation on the relief afforded to suffering; but, when we contrast the advantages under which the operation is now performed with the conditions under which it was first performed in this city by John Lizars, we must be struck with the self-reliance and undaunted courage with which that bold surgeon carried out what was then a very formidable operation, in the face of opposition from the principal medical authorities of the time; and I think too little credit has been given him in regard to the work he did and the success he obtained under great disadvantages.

Air-Passages.—In the important department of the injuries and diseases of the air-passages, great advances have been made both in regard to diagnosis and to treatment. The use of the laryngoscope in cases of chronic or subacute disease of the larynx, and for enabling us to ascertain how far the symptoms depend on organic changes, or merely on paralysis or spasm affecting the vocal cords from diseased innervation, or for discovering the position of small foreign bodies entangled in the larynx, or of intralaryngeal growths, is an invaluable accession to diagnosis, and in determining the question of operation and plan of procedure in different circumstances.

The operation of tracheotomy has also been extended to a class of cases in which it was formerly considered unsuitable; and new operations, such as the partial or even complete excision of the larynx, have been successfully performed; and in one case by Professor Billroth, an artificial substitute was adopted, which enabled the patient to speak and read intelligibly.

Having had a very considerable experience in operations on the air-passages for injury or disease, I desire briefly to draw attention to some practical points. First, as regards injuries. There are some conditions not sufficiently insisted on in surgical works as to their dangers, or the practice to be adopted, where action requires to be prompt. Thus the danger from emphysema of the loose connective tissue of the neck is seldom adverted to; and yet I have seen a patient all but suffocated from this cause from a small oblique wound of the larynx inflicted with a penknife. In that case, I had to perform laryngotomy, and was obliged to make numerous incisions to afford relief; when a simple enlargement of the wound, in the first instance, would have allowed the air to escape externally. Again, in tracheotomy for removal of foreign bodies, it is generally considered unnecessary to use a tube after the foreign body has been expelled, but merely to allow the incision to close at once. The consequence is that a good deal of trouble often results, for the wounds in the trachea and the superimposed parts do not correspond, and air and mucus escape into the cellular tissue, sometimes giving rise to considerable emphysematous swelling of the neck, and often leading to deep-seated irritation of the wound. In my own operations after removal of foreign bodies, I insert a tracheotomy tube, and retain it until the surface of the wound is glazed by the effusion of lymph; and then approximate the margins of the wound by strips of plaster, so as to avoid all risk of confinement of air or mucus in the tissues in the vicinity of the trachea. Another point of importance is the question of exhibiting anæsthetics in operations for removal of foreign bodies. Many years ago, I drew attention to this, and pointed out that when the foreign body was loose in the trachea or bronchus, the exhibition of anæsthetics interfered with the force of the expulsive powers which usually eject the foreign substance; and, as happened in one of my own cases, the foreign body may be carried back by the incoming current of air, occlude the bronchus, and cause collapse of the corresponding lung. In other cases, as when the body is impacted in the bronchus or larynx, anæsthetics are most useful in enabling us to search for and remove the foreign substance. In doubtful cases, the rule should be to open the trachea without using anæsthetics; and, if the foreign body be not expelled by the natural forces, then to administer chloroform to enable us to deal with it effectually. When, as in the case I have alluded to, a foreign body, such as a plum-stone, is impacted, and fairly occludes the bronchus, being carried before the inspired air, it follows that, the lung beyond being col-

lapsed, there is no force behind to eject the substance. In such circumstances, it is well to avoid trying too much to displace it by means of bent probes or other instruments, unless the end of the instrument can be passed over and beyond the body, so as to tilt it out or allow air to pass to the lung beyond. Our continued efforts, besides exciting local irritability, are very likely to impact it more thoroughly; and I would therefore counsel the surgeon to abstain from useless efforts, and allow the patient to breathe by the sound lung, and wait the loosening of the foreign body by vital dilatation caused by its presence, when air will gradually pass beyond and expel it.

In hollow or tubular foreign bodies, the case is different; they can be easily removed if we take the proper method—one which I practised some thirteen years ago, in a case where this trachea-tube had slipped down and became impacted in the left bronchus. Instead of trying to open the forceps and seize the edges of the tube, I passed the forceps closed into the tube, and then, on expanding the blades and maintaining them expanded, the foreign body was withdrawn with the utmost facility.

The propriety of tracheotomy in cases of threatened asphyxia from œdema glottidis, arising from swallowing boiling fluid or inhaling the steam of boiling water, would seem so evident as affording the only chance for life, that we would scarcely expect any difference of opinion; and yet I find it is by some considered unwarrantable, because the average results of such cases show few recoveries. Now, in the first place, I doubt if we have statistics so extensive or accurate as to warrant such a conclusion; but allowing that the recoveries are few, we see that the want of success is mainly due to the fact that these injuries implicate other structures, such as the pharynx or œsophagus, or are complicated with the shock and other conditions of general scald. If, however, in such injuries, œdema of the parts about the glottis threaten asphyxia, it is evident that the patient has no chance of life, except by the operation; whilst no one will venture to deny that tracheotomy has, in many such cases, rescued the patient from impending death.

The value of tracheotomy in the acute and chronic affections of the larynx in adults, whether to afford relief from suffocative paroxysms or as a precautionary measure, is now so generally admitted that I need not occupy your time with that; but I desire to draw attention to two classes of cases in which this operation is sometimes performed, as affording temporary relief from suffocative paroxysms or impeded respiration. I mean (1) cases of aneurism or tumours pressing upon the laryngeal nerves, and causing spasm of the glottis; and (2) aneurismal tumours of the aorta or innominate impeding respiration by direct pressure on the trachea at the root of the neck. In the former class of cases, I consider that the operation is not only warrantable, but advisable, or even imperative, because it gives relief from impending suffocation, and also alleviates conditions which tend to increase the aneurism, or even to hasten its rupture; so that tracheotomy prolongs life with comfort to the patient. In the second class of cases (aneurismal tumours at the root of the neck, pressing directly on the trachea), I cannot see the principle on which the operation is recommended. In such cases, the tumour is lower down than where we can open the trachea; and if we use a tube long enough to pass beyond the aneurism, we are in great risk of rupturing the sac, which generally, in such cases, presses upon, and causes absorption of, the tracheal fibro-cartilages, and projects the mucous membrane. Indeed, as pathological specimens shew, the tracheal textures become incorporated, as it were, with the sac, and the aneurism generally thins and tends to ulcerate towards the trachea. Hence I cannot see how an opening in the trachea on the distal side of the impediment can relieve the breathing, whilst there is very evident risk of killing the patient by wounding the projecting and attenuated sac in opening the trachea, or rupturing it in trying to pass the trachea-tube beyond it. Here is a preparation from a case in which I made a very narrow escape from being involved in a most unpleasant predicament. I was asked to see a lady who had long suffered from bronchitis and asthmatic attacks, and in whom laryngeal symptoms seemed to indicate commencing œdema glottidis. As the medical gentleman informed me that the late Dr. Begbie had been seeing the patient, and as I understood that the laryngeal symptoms were not very urgent, I suggested that Dr. Begbie should be first asked to see the patient; and if he considered tracheotomy advisable, I would come and operate. I heard nothing farther until, meeting the medical attendant a day or two afterwards, I inquired about the case, and was informed that, after Dr. Begbie had examined the patient generally, he proceeded to examine the throat and mouth by gently depressing the tongue; this caused retching, followed by a fearful gush of arterial blood, which proved instantaneously fatal. If I had operated, the insertion of the tube could scarcely have failed to have ruptured the sac, and I leave you to conceive the situation. I think I have said enough to show that I am decidedly opposed to operation in cases of this latter class. But

should anyone be inclined to operate, I would advise the use of a large-sized, bulbous-pointed, soft gum catheter, with an enlarged opening, to pass beyond the tumour, instead of the metallic tube.

Although from an early period tracheotomy was occasionally resorted to in croup in children, it is only of comparatively recent date that it has been recognised as a warrantable operation in such cases. In this city and in Leith croupous affections used to be very common, and yet the operation of tracheotomy was so rare that I never saw it performed for croup when I was a student; indeed, so great was the prejudice against it, that I have been informed that in 1820 a medical gentleman of high standing in this city, who was anxious to afford a chance of relief to two of his children affected by croup, could not prevail on any of the principal surgeons to perform tracheotomy. At his urgent request, Dr. Brice, a gentleman in general practice, operated on one of the children, without ultimate success, as both the children died. This strong prejudice against operations in croup arose, I think, from somewhat erroneous views regarding its pathology. In *post mortem* examinations, the false membranes extending from the larynx into the trachea and bronchi, and often found in the form of complete tubular casts—a condition so different from the laryngitis of adults—led to the idea that the trachea was affected in the first instance, or at least simultaneously with the larynx, and the disease was named “cynanche trachealis”, in contradistinction to laryngitis. Hence most physicians and surgeons considered it improper to operate when the disease, as they thought, was situated at and beyond the part where the aperture in the trachea could be effected. From what I have noticed of the progressive symptoms of croup, and seen of the state of the diseased parts in cases when children died in the early stage, and especially from the immediate relief from impending suffocation afforded by tracheotomy even in cases which subsequently proved fatal by extension of the false membrane, I feel satisfied that the disease always commences in the larynx, and only extends downwards as it progresses; and hence I dismiss the objection that the disease is from the first situated too low down for tracheotomy to afford relief. The principal objection to operating in croup is undoubtedly the tendency of the disease to spread downwards after the operation. We owe it to our continental brethren, especially to Trousseau, that tracheotomy in croup has now become an established operation. I must confess that from early teaching I was strongly prejudiced against the practice; but, fortunately for me, it happened that a child was brought to me in the agonies of suffocation, so that I could not but try to relieve it. The relief was immediate and the result successful, and thus I could not deny the like chance to others. I have now performed tracheotomy for simple croup and diphtheritic croup one hundred and three times, and saved thirty-four out of that number, or an average of about one life saved in three cases; and it must be remembered that at first I only operated as a last resort, and even yet I do not see my way to operate quite so early as some French surgeons seem to do. I think, however, that there should be no delay when the character of the breathing and the contracted state of the thoracic parietes show that the lungs are not being distended with air. By operating early, we avoid the risk of œdema or congestion of the lungs, and of the effects of non-oxygenised blood circulating in the brain.

I think it right, however, to warn my younger brethren that it will require some effort to bear up against discouraging results. I know of no class of cases in which the experience is so painful: an average gives little idea of it. You may have five or six cases in succession, all proving fatal, before you meet with one redeeming success; but then you have the temporary relief almost invariably afforded to the little sufferer; the resuscitations in some cases apparently dead; and, if you persevere, the average of success will come. Above all, we must recollect that, however disagreeable or unpleasant the operation may be to ourselves, we are bound to lose sight of that, and give the patient the only chance for life.

In speaking of operations in croup, I have used the terms simple and diphtheritic croup; and I have done so advisedly, because, whilst the average results of my operations have been as good in the one disease as in the other, I consider them as essentially different diseases, and I do not believe that an extended experience would give the same amount of success in diphtheritic as in simple croup. It has been with no small amazement I have read some of the views recently propagated, that croup and diphtheritic croup are identical. I can hardly conceive two diseases more different, whether we consider them in their causation, symptoms, or sequelæ. In one feature, doubtless, there is similarity, because when in diphtheria the air-passages become affected, the presence of the membrane exuded necessarily gives rise to the same physical symptoms as to sound of voice, breathing, and asphyxiating paroxysms, as the false membrane in simple croup does. But in diphtheria, the exudations in the larynx or elsewhere are the local expres-

sion of a special blood-disease, which may and often does destroy life without affecting the air-passages at all, whereas in simple croup the false membrane is the result of a local inflammation. The causes or circumstances in which the two diseases originate are, according to my experience, very different. Ordinary croup almost invariably arises from exposure to cold, or occasionally from some source of local irritation, leading directly to inflammation of the mouth, as dentition. It is most frequent during cold moist weather, and specially during the prevalence of easterly or north-easterly winds. The late Professor Alison used to say that, according to his observation amongst the poorer classes, the affection most frequently occurred between Saturday night and Monday morning; and he attributed this to the custom of washing the floors of the rooms on the Saturday night after the children were in bed. Diphtheria, on the other hand, prevails at all seasons and during all kinds of weather—sometimes as an epidemic, and then generally coincident with scarlet fever, but always more or less connected with, or influenced by, the effects of sewage-emanations or imperfect drainage. Hence we meet with it more frequently amongst the better classes and in houses with modern accommodations, such as fixed wash-basins and water-closet accommodation in immediate connection with nurseries or bedrooms.

Diphtheria is undoubtedly infectious both by direct contact of the sputa with a healthy mucous surface, as has been too often proved by members of our profession and by mothers, or by emanations from the affected person, as evidenced by the manner in which it spreads in a family. Simple croup, as I have been accustomed to see it, has no such contagious or infectious character. In dispensary practice, I have frequently seen a child affected with croup lying in a confined room amongst other children; but I never knew the disease to spread as diphtheria does. The peculiar nervous affection, the paralysis which follows diphtheria, has no counterpart in ordinary croup; nor, in cases of simple croup, were we accustomed to see the white leathery pellicle on the tonsils or fauces, though it was a very common disease in Edinburgh and its vicinity. I know that in France the fauces were always examined, and that false membranes or pellicles were considered symptomatic of croup; but that only leads me to believe that the disease in France was always of a different type—diphtheritic, in fact.

Certainly, in this country, croup, as we used to meet with it, is rarer, whilst diphtheritic croup is more frequent, and met with under different circumstances. From 1828 until about twenty-five years later, diphtheria seemed to have ceased, though simple croup was common; but, when nearly a generation had passed away, the disease was unhesitatingly recognised by some who had seen the previous epidemic; and I would refer you to the interesting paper on Diphtheria and its sequelæ by the late Dr. Begbie, in his work entitled *Contributions to Practical Medicine*, in corroboration of what I say. Considering the two diseases from a surgical point of view, even in successful cases, the constitutional conditions are marked in diphtheria by paralytic complications affecting the pharynx and larynx, by albuminuria and the asthenic state of the patient, and by the tendency of the wound to take on the diphtheritic action. But it is in the fatal cases that I think the distinction between the two forms of disease is most marked by the mode of death. In a case of simple croup, the result is decided within two or three days; indeed, generally in a shorter period, by the false membrane extending beyond the opening and tube. In diphtheria, I have on many occasions lost patients eighteen days or three weeks after the operation, and when the tube had been removed for some time, from asthenia and gradual failure of vital powers, or from paralysis of the pharynx, preventing swallowing, and so leading to imperfect nutrition; and, in other cases, I have known it prove fatal from sudden failure of the heart's action and syncope.

I drew attention to these differences many years ago in a paper read before the Edinburgh Medico-Chirurgical Society, and subsequently published; and, looking back on large experience in croup and diphtheritic croup, I think the distinctive characters are too marked to allow me to consider the diseases as identical, merely because they possess one feature in common.

The bold operation for complete removal of the larynx for malignant disease, successfully carried out by Professor Billroth, and the adaptation of an artificial substitute, so ingeniously constructed as to enable the patient to read and speak, has not, so far as I am aware, been yet practised in this country, though I understand other successful results have been obtained on the Continent. Looking at what has been done, may we not anticipate a time when operative skill and mechanical ingenuity proceeding *pari passu* may reduce the dangers of the operation to a minimum, and advance the powers of the artificial substitute to the maximum; and so enable an unfortunate ungifted with the power of song to get rid of his unmusical larynx, and suit himself with one, à la Mario or Lablache, according to his taste?

Treatment of Wounds and Surgical Dressings.—I could not properly conclude an address on Surgery in the present day, without some remarks on a subject which is attracting so much attention as the treatment of wounds and surgical dressings. The history of surgery contains no stranger chapter than the singular changes which from time to time have taken place in regard to the treatment of wounds. If we go back to the quasi-scientific age, when learned physicians laid down rules for dressing wounds *more canonico*, we find it was considered essential that every wound should undergo certain regular stages, "digestion, mundification, and incarnation", and no wound was allowed to heal by first intention. After amputation by the circular method, the cavity of the stump was stuffed with charpie soaked in aromatic spirits, or balsamic lotions, to prevent putrescence; and, in flap amputations, the section of the limb and the flap were dressed separately until granulation took place. Into every deep wound tents or leaden tubes were thrust, to keep open a track for discharge to escape. We are at first apt to wonder how or on what principle such treatment could have been adopted, and how, in only a somewhat modified form, it continued to hold its place until the time of Hunter, and, in some places, until a much more recent period. Yet its first beginnings were probably the result of observation of certain cases or forms of wound, and used exceptionally until, in course of time, from mere routine practice it became exaggerated and used in all cases.

Most practical surgeons will admit that, in wounds implicating textures possessing different degrees of vitality and physical conformation, as in amputations, it can hardly be expected that all the divided structures should heal with equal rapidity, or in the same way. Whilst the skin and softer textures generally do so speedily, the denser and less vitalised textures, such as bone and tendon, must undergo changes of slower character; and, situated as these are deeply in the wound, serous and bloody discharges are liable to collect around them, and, when the soft textures have united throughout by first intention, these bloody or serous discharges, being prevented from escaping, may, and often do, lead to deep-seated irritation and suppuration, and hence the revived use of drainage-tubing in many cases in the present day. Such considerations probably at first led to the use of tents and the other parts of the system; and the amount of discharge arising from the method of dressing seems only to have served as an argument for the necessity of keeping the wounds open to allow its escape. Then we must recollect that at that time surgeons acted merely as hands to the learned doctors, and to have ventured to have gone against the canonical authority was to be branded as a quack; and so the men who saw most of the dressing of wounds either kept silent, or became the itinerant operators to whom we owe no small debt for the simplification of dressing wounds and of operations.

Even when the simple method of healing wounds was introduced, it was seldom professed openly. It was always ornamented with a judicious touch of the mysterious or philosophical as it was called. Perhaps no truer enunciation of the principles of the treatment of wounds has ever been made than that of Paracelsus, who was one of those who ventured to oppose the orthodox physicians. "It is the nature of flesh," says he, "to possess in itself an innate balsam which heals the wounds. . . . Nature hath her own doctor in every limb; and wherefore every chirurgeon should know that it is not he, but nature who heals. What do wounds need? Nothing. . . . So the surgery of wounds is a mere defensive to prevent nature suffering from any accident from without, in order that she may proceed unchecked in her operations." Yet Paracelsus thought it necessary to invent a sympathetic powder to recommend this method to the public. Mr. John Bell, in his remarks on wounds, says, "We find no one surgeon in Europe who ventured to unite wounds directly by adhesion, without pretending to have learned from some eastern sage, or to have found out by deep studies in philosophy and alchemy, a sympathetic, or as they often called, a philosophical cure of wounds," and he is very severe on what he denounces as pretences of philosophy or science "To make sure of rousing at least one-half of the learned world to combat in their behalf." Perhaps he is too severe in denying them the title of philosophical. If "The proper study of mankind is man," then assuredly on that important study these men had founded their philosophy. They had noticed that patients in general feel rather flattered by something special being done, some little halo of mystery to brighten their sufferings, and give importance. They saw that for one "Good Hezekiah" who meekly submits to so simple an application as a "poultice of figs", they would meet with a dozen Naamans "ready to turn away in rage" if there were not "some great thing" done, or some fuss made about their cases; and so, whilst they treated the wounds simply or left them to nature, they amused and distracted the attention of their patient by enacting various little incantation scenes or mysteries. Some, like Paracelsus and Coldbatch, applied their sympathies locally to

the wound in the forms of vapour, powder, or constrictive plasters. Others still of higher philosophical type, like Sir Kenelm Digby, did not trouble themselves to see the patient, but merely some blood-stained rag from the wound, or the weapon that inflicted it. On these they bestowed all their care and attention, merely requiring that the patient should keep his wound "clean and cool". They had their failures like others, but their philosophical theory enabled them to account for them. Something had been overlooked in bringing them the bloody rag or weapon, and so "the finer spirits had escaped", and, of course, the failure was an accident, and no fault of the system. Were I the patient, I would decidedly prefer that the surgeon should bestow his attention on the blood-stained rag, leaving the wound "clean and cool", or swathe the knife which had inflicted the wound in any amount of cabalistically prepared bandages, rather than he should wrap up and overheat the wound with fold after fold of dressing and greasy cerecloth bandages, compressing the parts and confining the bloody and serous discharges. In a word, I would rather that his incantations were performed on something else than my wound. The truly philosophical views of the adhesive process, taught by John Hunter, gradually led to clearer notions as to the requirement of wounds and the principles on which their treatment should be conducted; and nowhere were these views more fully and intelligently carried out into practice than in this city, mainly through the influence of the writings of John Bell, and subsequently by the treatises of Liston and Syme on the treatment of incised wounds. The principles laid down were simple: thorough cleansing of the cut surfaces, waiting until all oozing had ceased and the surfaces glazed with lymph, before uniting them finally by sutures: cold applied for some hours to moderate excited action, then light dry dressing, and no interference with the wound except what was required to keep it clean. But, at the same time, great attention was paid to the general state of the patient. The results obtained were excellent, and, until recently, this has been the system in use here. But simplicity has sources of failure, for it is apt to lead to carelessness in dressing. We are again in a transition state in regard to the treatment of wounds. The antiseptic method (as it is termed) of my esteemed colleague, Professor Lister, is being pressed in some quarters to the exclusion of conditions which I think, at least equally, if not more, important in the treatment of wounds and operations. This is not the place, nor is there time, to discuss the theory as to production of putrescence by germs from without, or whether that condition may not also arise from within owing to certain states of the blood and general system; nor yet as to the comparative value of the different antiseptics at present contending for pre-eminence. But some of the statements advanced in favour of the antiseptic system so ignore the success obtained by simple dressing and treatment of wounds, or assert such an amount of infallibility as to the curative powers of the special method, as to require notice. When I read statements to the effect, "that the antiseptic method is to be regarded as one of the most important contributions to modern practice, inasmuch as it makes wounds heal by first intention, instead of going through the painful process of granulation and suppuration", I can only regard such statements as arising from want of experience in, or misrepresentation of, the simple method of treating wounds; for, assuredly healing by granulation is neither the object nor yet the general result of that treatment. Suppuration, I believe, is not unknown under the antiseptic method, whilst the average duration of treatment is certainly not lessened. But when I find a German professor and hospital surgeon stating that, after a year and a half's experience of the antiseptic treatment, he is able to guarantee with certainty a perfectly successful result to his operations, such assertion challenges closer examination, demands proof, and forces me to ask the question, How far, apart from other conditions, do different modes of dressing stand in the relation of cause to successful results? The answer to this important question must rest on sufficient data and carefully weighed statistics. It will not suffice to point to some brilliant results in individual cases, because all methods of treatment can produce that kind of proof; nor will it do to state that no deaths from pyæmia have occurred under the system. At one time, that term was never met with in the bills of mortality, and it is rapidly disappearing now. The statistics for proof must indicate the nature of the disease or injury for which the operation was performed, and the cause of death in fatal cases (for deaths still occur), not by a conventional term, but by giving the symptoms during life, and the organic lesions found after death.

With extensive statistics of this kind, we would be better able to judge of the comparative advantages of different systems of treatment. At present all is assertion or reference to special cases, or to the not very definite statistics of foreign hospitals, and it is not a little curious that we hear most of the success from abroad. I think sufficient time and scope have been given to the antiseptic system in this country to

enable those who use it to furnish statistics such as I have indicated, and thus to enable us to judge more dispassionately of its real merits. In comparing of late the results of my own hospital practice, I have been struck with the success which attended very simple treatment, and this leads me to question our progress in departing from such treatment for more complicated methods. Thus I find that, during a period of three years, out of sixty-three major amputations for disease, there were only three deaths; and of twenty-three cases of excision of joints, only two deaths, at a time when the treatment consisted in thoroughly cleansing the cut surface by pouring tepid water over it, and occasionally applying tincture of iodine alone, or diluted, on the flaps; whilst the dressing consisted merely in laying a veil of lint or thin muslin over the stump. Again, when preparing statistics of my amputations for my published lectures, I found evidence that certain conditions, such as the nature of the disease or injury necessitating the operation, had most important influence on the result; such influence, indeed, as I could not have supposed until the statistics brought it distinctly before me, and my later statistics corroborate my former; so that I cannot accept the statement that any method of dressing, however good, will ever enable us to guarantee success. Whilst I speak of the antiseptic system, meaning the special method, I need hardly say that all surgeons have for their object the avoidance of putrescence, though their views may differ as to the best way of attaining their object.

I cannot close without recommending to notice the advantages obtained in treating lacerated wounds and burns of the extremities by continuous immersion in the tepid bath. The avoidance of all meddling with the injured part, and of the agony of the patient caused by changing dressings, is thereby so completely obtained, that the method requires only to be fairly tried to shew its advantages. In the case of burns these advantages are most conspicuous, for the constant moisture keeps the cicatricial tissue pliable, and motion of the parts can be effected gradually, whilst the limb is immersed in the bath. The water may be rendered antiseptic by carbolic or boracic acid should that be considered desirable.

In conclusion, I think the retrospect I have taken shows that when true principles have been disregarded or lost sight of, they have ultimately had their value recognised, and, modified and improved, have become the advances of the present day; and so for the future I feel confident, that all that is true and good in any system will emerge with greater beauty and usefulness for having been purged of its dross by the tests of observation and candid criticism.

NORTHAMPTON.—In Mr. Haviland's report on the sanitary condition of the borough of Northampton, it is stated that during 1873 the death-rate was 20.3 per 1,000 living, whereas in 1872 it was 29.7, one of the highest death-rates in any of the large towns and cities of England and Wales. Last year, the death-rate was 21.5 per 1,000. The reduction in the mortality for this town from 25.1 during the decennial period 1861-70, to an average of 20.9 during the past two years, is a matter of considerable satisfaction, for it indicates a saving of as many as 172 lives *per annum* out of the total population; and it is to be hoped that the town council will do all in their power, by carrying on their sanitary work, to facilitate and render permanent this downward movement of the death-rate. In this direction, there is undoubtedly yet much to be done. Thus, whereas throughout England and Wales the infantile death-rate is 184 per 1,000 infants living, it is 223 in Northampton; and this mortality has, to a large extent, been brought about by diarrhoea and other diseases which are so far preventable that their prevalence may, to a considerable extent, be controlled by efficient sanitary administration. Although there is also room for improvement as regards the "fever" death-rate, it is satisfactory to note that, whereas it was formerly unduly high, it is now less than the average for the country generally; and this result Mr. Haviland in a large measure attributes to the general use of the Northampton Waterworks Company's water, which has taken the place of the contents of shallow wells, which for ages had become polluted by their close proximity, in a porous ironstone, to filthy receptacles of sewage of every description. The epidemic of scarlet fever which occurred in so many parts of our country last year caused a considerable mortality in Northampton; and, in urging upon the town council the provision of proper hospital accommodation for the isolation of those sick of this and other allied diseases, Mr. Haviland calls attention to the beneficial results which attended the construction of the small-pox hospital a few years ago. The lessons to be learnt from the death-rates prevailing in this town were rendered the more plain to the sanitary authority to whom this report was addressed by the use of Mr. Haviland's now well-known maps, in which the geographical distribution of the various diseases referred to was rendered easy of comprehension.

ADDRESS IN PHYSIOLOGY,

WILLIAM RUTHERFORD, M.D., F.R.S.E.,

Professor of the Institutes of Medicine in the University of Edinburgh.

MR. PRESIDENT AND GENTLEMEN.—In the medical schools of Scotland physiology is still designated the Institutes of Medicine. This somewhat ancient title has the advantage of continually keeping before the minds of our students the fact, that physiology lies at the very foundation of scientific medicine. Much, indeed, has been done in Germany and elsewhere to detach physiology from medicine, and to develop it as a branch of purely natural science. Such a development, however, gives to physiology an aspect somewhat different from that which it wears when we regard it as the Institutes of Medicine; and, therefore, this title is useful to the teacher, inasmuch as it constantly reminds him that he is more especially to dwell on those facts of physiology which are of value to the practitioner of medicine.

Physiology is—I need scarcely remind you—an experimental science. Apart from those which are the result of artifice, experiments of great physiological significance are being continually wrought for us by accident and by disease. Physiology owes much in the past to those who, like you, are engaged in the daily study of these pathological experiments; for, was not the function of the spleen an enigma until the effect of one of its diseased conditions was observed? Has not psychology been revolutionised by a study of brain-disease? Did not Hughlings Jackson, with singular sagacity, apprehend from a study of disease, that convulsive movements may spring from the cortex of the brain; a fact which, as you know, has since been demonstrated by laboratory experiment? Was not the crossed action of the cerebrospinal axis revealed by the study of disease? and, indeed, was not the very foundation of nerve-physiology to a large extent based upon a study of nervous disease by Charles Bell? Assuredly we cannot afford to detach physiology from medicine; for, without a doubt, in the future as in the past, the study of those bodily conditions that are abnormal will throw much light on those that are normal.

But, on the other hand, need I remind you of the difficulties you encounter in the analysis of these experiments of disease, as you endeavour, for example, to determine the nature and the seat of some malady—say of the brain; the cause of a dropsy; the indication of some change in temperature, in the state of the pulse, the respiration, or some secretion; and, need I aver that, in this difficult task of pathological analysis, your labours grow less as physiology advances; and, if you look around you, is it not evident that those whose knowledge of physiology is the most profound, are precisely those who are most able to conduct this analysis with skill and with success.

At the present time, there is reason for some feeling of anxiety with regard to the manner in which this much-needed knowledge of the Institutes of Medicine is to be attained by our students. In recent years, the teaching of physiology has made a great stride in this country. Laboratories duly appointed have been, and are being, organised. The method of physiological instruction has, in most instances, passed from the mere prelection, illustrated by diagrams, to an experimental exposition of the subject. Very many of those whom I now address, had doubtless an experience of physiological tuition similar to my own. I remember well how much we were told about the action of the bodily organs, but how little we were shown of such actions. We were lectured about the action of the heart and its valves, but the motions of the heart we never saw, the operation of its valves was never shown to us. We heard about the manner in which the blood-pressure might be measured, and we were duly apprised of the number of pounds and ounces of pressure on the square inch, but this fundamental experiment we never saw, nor did we even see the instrument that was used for the purpose. We heard about the chemical transformations which the food undergoes when affected by the saliva and the gastric juice; but of the manner in which it might be demonstrated that these changes really do occur we knew nothing. The bile was said to contain certain acids and pigments; the urine had urea, uric acid, etc., but all demonstration of these great facts was neglected. In alluding to these defects in the tuition of physiology from which some of us have suffered, I would not have it supposed that I desire to cast reflections upon the teachers; such is far from my intention, for I know the difficulties against which they had to contend, and I know the success with which they finally overcame them; but I merely desire to remind some of you how much

you, like myself, were crippled in the study of practical medicine, by the sadly imperfect manner in which we learned the cardinal facts of physiology.

At this moment there is a distinct danger of a return to something like this miserable mode of instruction, in consequence of the fanatical clamour of a number of persons excited, it must be admitted, by one or two members of our own profession.

I cannot suppose that any member of this Association entertains the idea that experiments on the lower animals are not justifiable for the discovery of new truth; but I am aware that there are some who entertain the idea that vivisection is not necessary when it has for its object the mere demonstration, for educational purposes, of facts already known. Those who hold this doctrine, appear to me to forget that physiology is an experimental science, and that no right conception of the subject can be obtained unless the student be shown the experiments that are necessary for the demonstration of certain facts. No language, however clear, can depict the movements of the heart or the circulation of the blood, so as to call forth a picture so vivid and true, as that which without an effort springs forth the moment these things produce an impression through the organ of sight. The manner in which the blood-pressure is affected by retarding the heart's action, by dilating the arterioles, or by muscular contraction; the changes which follow division of the sympathetic nerve in the neck; the action of the chorda tympani on the submaxillary gland; the result of stimulating the cortex of the cerebrum; the reflex power of the spinal cord; the tetanus from strychnia; the paralysis from curara; these and other equally great fundamental facts in physiology give rise to nothing more than vague and feeble conceptions unless they are witnessed. Has not every teacher repeatedly observed the altogether different mental attitude which the student assumes the moment you pass from a mere description to a demonstration of phenomena? You far more forcibly arrest his attention, and far more deeply imprint upon his mind the facts which you would bring home to him. He is apt to forget that which he has merely been told, but the impression of that which he has seen is with difficulty effaced.

There is, however, a great deal more than this. It is not enough that the student of medicine should be crammed with so many facts about the bodily machinery—it is of infinitely greater importance that he should be really *educated* in a knowledge thereof. He cannot be educated unless you assume that he has a right to question your statements, and to demand from you a demonstration of the truth of what you say. It is not enough that you merely state to him, in an *ex cathedra* manner, that this or that is so; you ought on all possible occasions to *prove* to him that it is so. You ought to appeal to him as an individual, who can and who ought to think for himself, and, therefore, as an individual who is not merely to be crammed, but to be convinced.

Every examiner in physiology must have repeatedly observed how glibly the student may repeat to you a statement of fact, but how sorely puzzled he often appears when you ask him for the evidence upon which his statements are founded. Moreover, every one must have noticed how often the student lacks knowledge that is definite: he mingles together things that are certain and things that are uncertain, because he has not been sufficiently trained to examine experimental evidence. Of how little avail is this unreasoning and indefinite knowledge when the student comes to thread his way through the difficult analysis of disease! He either believes or he doubts too much. He oscillates from one extreme to the other, because he is wanting in definite knowledge, and because his critical power has not been sufficiently developed.

Now, I maintain that this definite and critical knowledge regarding the bodily mechanism cannot be attained unless our students be shown experiments on living animals; and I hold that those authorities who seem to be of opinion that this method of tuition may be dispensed with, are entirely overlooking the vast importance—not only to the student himself, but to our whole race—of an experimental manner of laying the foundation of a knowledge of the institutes of medicine.

It is, I believe, too much to assume that those who advocate a flimsy and superficial method of teaching physiology, are altogether actuated by feelings that are termed humane. I fear that there is lurking behind this disposition a feeling of indifference to what are the true principles of medical education, or, what is more likely, there is an incorrect appreciation of these principles. It must, however, be admitted that, notwithstanding the vast importance of physiological experimentation in the teaching of medicine, the circumstances under which it is possible demand serious consideration.

No one can deny that animals daily suffer pain in order that they may be eaten by man, and also in order that man may not be eaten by them. If it be thought necessary to put countless animals to a painful death for the purpose of keeping the human race alive, may not the

physiologist inflict pain, not only for the discovery of new truth, but also for the right education of those who have to spend their lives in preventing and in healing disease? Is the one object less important than the other? Indeed, is not the object in both cases precisely the same? Why, then, this clamour against physiologists? The pain produced in all the physiological experiments performed in this country in the course of a year is, I believe, as nothing when compared with that inflicted upon animals by the members of her Majesty's Lords and Commons on an autumn holiday.

I would not, however, for a single moment speak lightly of the production of pain, for it is the function of those who pursue medicine to alleviate pain and suffering. Our students would, indeed, be badly trained for the pursuit of a calling so humane as that of medicine, if they did not find us on all occasions carefully avoiding the giving of pain that is not absolutely necessary. Therefore it is our duty, for this as well as for other and obvious reasons, to use narcotics in our experiments upon animals whenever it is possible. It is not necessary for a sound physiological education that our students be shown *all* the experiments that are needed to demonstrate physiological truths. We probably do enough if we show them experiments on the cardinal points of physiology; and I aver that all the experiments on the higher animals that are really required for the purpose of education can be performed with the aid of narcotics.

Seeing that this is so, why should it be that some have become convinced that, in consequence of the present inflamed state of the popular mind on the subject of vivisection, the right education of medical students must be abandoned? The popular mind has been abused by inaccurate and misleading statements regarding both our motives and our actions. I maintain that a great and deplorable error was committed when the unreasonable clamour of the antivivisectionists was met in the spirit of compromise, instead of the spirit of stern resistance. I believe that the unfortunate vivisection Bill that was laid on the table of the House of Commons conferred a dignity upon the policy of the antivivisectionists which, but for that Bill, it would probably never have possessed. It is true that there has been a withdrawal of that singular Bill, according to which we were to have been fined fifty pounds, or to have been sent to prison for two months, if we had dared to show our students any experiment even upon a narcotised animal; but the effect of the Bill is not effaced. The increased boldness which it has given to the pretensions of the antivivisectionists is only too evident. All that we can now hope for is, that the good sense of our legislators will in the end prevail, and that they will do nothing to hamper the education of our medical men.

I have felt, sir, that in an address on Physiology I could not pass over in silence this, the leading topic of the day. I have alluded to it but briefly; for, although it is of the deepest importance, there is another subject to which I would ask your attention.

Nine months ago, in an introductory address given in this University, I had occasion to review the present aspects of physiology (*Lancet*, Nov. 1874). Having nothing further of a general character to say thereon, I have selected a special subject in physiological pharmacology which will, I trust, prove interesting to the practitioner of medicine.

The remainder of the address was devoted to a report of a large number of experiments on the biliary secretion of the dog, by Professor Rutherford and Monsieur Vignal. As this part of the address was illustrated by a large number of graphic representations of the results of the experiments, and as the expenses of the research have been defrayed by the Scientific Grants Committee of the Association, a full account of the experiments, with woodcuts of the curves shown in the lecture, will be published in the *JOURNAL*. The following is a brief *résumé* of this part of the address.

It has been shown by Professor Hughes Bennett's Committee appointed by the British Medical Association, that in dogs with permanent biliary fistulae, and living upon a fixed diet, that "spontaneous diarrhoea, dysentery, and purgation produced by blue pill, calomel, corrosive sublimate, and podophylline, always diminished the solid constituents of the bile, and, with one exception, the fluid portion of the bile also".

More recently, Röhrig performed experiments on the action of cholagogues in fasting curarised animals with temporary fistulae, and found that large doses of croton-oil greatly increased the secretion of bile, and that a similar effect, though to a less extent, was produced by colocynth, jalap, aloes, rhubarb, senna, and sulphate of magnesia, the potency of these agents as hepatic stimulants being in the order mentioned. He found also that castor-oil had little effect, and that calomel, while it seldom recalled the biliary secretion, nevertheless somewhat augmented it when it was taking place slowly.

In Dr. Rutherford's and M. Vignal's experiments a modification of Röhrig's method was adopted. Dogs which had fasted for eighteen hours were curarised, and artificial respiration maintained. A cannula was tied in the common bile-duct; the cystic duct was clamped. The bile flowed from the cannula into a finely graduated cubic centimeter measure, and the quantity secreted was recorded every fifteen minutes. It was shown that this method of continuous observation yielded results far more reliable and instructive than that adopted by Röhrig.

Two experiments on the secretion of bile in dogs that had fasted for eighteen hours, and which received nothing more than the doses of curara used in all the experiments for the purpose of keeping the animals at rest, showed that the biliary secretion was not affected by the doses of curara given; that the biliary secretion, on the whole, somewhat diminishes in the course of an experiment lasting from six to eight hours, but that the chemical composition of the bile remains almost exactly the same.

The curara was always injected into a vein; the various substances hereafter mentioned were injected directly into the duodenum; for this purpose, the wound in the abdominal wall was opened, and the substances injected through the wall of the viscus.

Three experiments with croton-oil showed that, although it produced violent irritation in the alimentary mucous membrane in all cases, it increased the biliary secretion in only one instance. A high place is, therefore, not assigned to this substance as a stimulant of the liver.

Six experiments with podophylline proved that this substance greatly increases biliary secretion. A definite statement regarding the composition of the bile before and after podophylline will be given in the report.

Röhrig's statement that aloes deserve a high place as a hepatic stimulant was confirmed by three experiments, in which the extract of Socrotine aloes was employed. The analysis of the bile (not hitherto given), however, showed that after aloes the bile is more watery; nevertheless, the velocity of secretion is so much increased, that it certainly causes the liver to excrete more biliary matter.

Three experiments with rhubarb proved that it is a far more important hepatic stimulant than Röhrig has stated it to be. Doses of rhubarb were given nine times in the course of the experiments, and they never failed to excite the liver within half an hour after they were given. Analysis of the bile before and after rhubarb in all the three experiments proved the remarkable fact that, notwithstanding the greatly increased velocity of secretion after rhubarb, the bile-solids secreted by the hepatic cells are not diminished. The rhubarb apparently calls forth an increased secretion of normal bile.

Three experiments with senna proved that its power as a cholagogue is far below that of rhubarb. The bile is rendered more watery.

Four experiments with the aqueous extract of colchicum proved that it is a very decided cholagogue. The bile was rendered more watery, but the increase in the velocity of secretion was such that the amount of biliary matter excreted by the liver was certainly increased.

Two experiments with the solid extract of taraxacum proved it to be a cholagogue, though not a powerful one.

Two experiments with scammony proved that it has a slight cholagogue action.

Of four experiments with calomel, the secretion of bile was slightly increased in one, but there was nothing but diminution of the secretion in the other three. Purgative action was produced in all. The bile was rendered more watery.

Two experiments with gamboge gave no evidence that this substance is a cholagogue.

One experiment with castor-oil confirmed Röhrig's statement that this substance has scarcely any cholagogue power.

Two experiments with dilute alcohol injected into the stomach showed that, after the alcohol was given, the secretion of bile slightly diminished.

In the report, a full account will be given of the *post mortem* examination of the state of the alimentary canal (hitherto entirely omitted in such experiments), so that the effect upon the biliary secretion and that upon the intestinal mucous membrane can be compared.

It was shown that the increased biliary flow from podophylline, rhubarb, etc., in these experiments could not be ascribed to reflex contraction of the gall-bladder; for this had been previously well nigh emptied by digital compression, and the cystic duct had been clamped; nor could it be ascribed to reflex spasm of the larger bile-ducts, for the exaggeration of the biliary flow was far too great and far too prolonged to be explained in this way. Reasons were adduced for regarding it as probable that the agents are absorbed, and act on the liver directly. It was not professed, however, that their *mode of action* was definitely settled, the experiments having had for their primary object a determination of the facts of the case.

The opinion was expressed that powerful purgative action tends to diminish the biliary secretion.

The diminished secretion of bile in *non-fasting* animals after podophylline, observed in the experiments of Dr. Bennett's Committee, probably resulted from a diminished absorption of food from the alimentary canal, in consequence of the purgative action.

When a hepatic and intestinal stimulant, such as podophylline, is administered to an animal that is not fasting, it is probable that (1) the liver is excited to secrete more bile; (2) the absorption of bile and food from the small intestine is diminished on account of the purgative effect.

In conclusion, it was pointed out that this research proposed to be simply a contribution to comparative physiological pharmacology; and that it was left to the clinical investigator to compare these results with those observed in human pathological conditions.

AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF MEDICINE,

At the Annual Meeting of the British Medical Association,
in Edinburgh, August 1875.

By W. T. GAIRDNER, M.D., F.R.C.P.Ed.,

Professor of Medicine in the University of Glasgow; Vice-President of the Section.

In taking the chair of the Section of Medicine, I have, in the first place, to submit to the Section the letter I have received from Dr. Quain, expressing his extreme regret at being unable to be present at this meeting, owing to unavoidable circumstances which have led to his devolving his duties on the Vice-Presidents. (After reading the letter, Dr. Gairdner continued.) You will not, under these circumstances, expect me to give you a very elaborate or systematic address, the more so as, in occupying the same position at Leeds some years ago, I to some extent anticipated what I might have said on the present occasion. I will rather ask you to receive a few thoughts that have occurred to me almost on the way to this meeting, and in listening to the admirable address which we have just heard from Dr. Begbie; I refer especially to that part of the address in which he spoke of Cullen. It is impossible for anyone, being in Edinburgh, and inheriting the traditions of the Edinburgh Medical School, not to associate Cullen with the *genius loci*, of which, indeed, he was eminently a representative man. The fame of Cullen was, moreover, world-wide, and extended beyond medical circles; he was a distinct and noteworthy personage in that literary and scientific society which included Adam Smith, David Hume, Robertson the historian, and Black the distinguished chemist. Cullen had, by reason of his accomplishments, something in common with all of these and all the other eminent men of that time, and was highly esteemed by them all. In point of medical experience, he was at the very head of his profession; a most distinguished clinical teacher, constantly associated with his students in the observation of hospital cases, and, besides this, engaged in private consultations which brought him into extensive correspondence (as his manuscripts in the College of Physicians show) with all parts of the country. Now, one of the most remarkable facts in the history of the epoch of Cullen is one which was not alluded to by Dr. Begbie, but which, nevertheless, might be made available in discussing, or in reflecting over, the signs of progress in the medical art to which he alluded. About a hundred years ago, when Cullen was at the height of his fame, the Chair of the Royal Medical Society was filled by a man who had been the pupil, the friend, almost the dependent, of Cullen, and who then and afterwards became his most bitter antagonist. He was not a man of large personal experience in the art of medicine; his learning and accomplishments were of a very limited kind; his private life and character were the reverse of laudable; his personal and social standing was in every point so much inferior to that of Cullen as to admit of no comparison. Yet this man, first in the Royal Medical Society among the younger students, and afterwards by a literary and doctrinal influence which extended in a wave of controversy to the very extremities of European civilisation, became the recognised author of a system which all but subverted that of Cullen for a time in Edinburgh, and, up to the end of the century, occupied the minds of men in Italy and Germany to an extent that we can hardly even comprehend now-a-days from anything we know of the system itself. I will almost take it upon me to affirm that there are not two men in this room—if, indeed, there are so many in the whole British Medical

Association (and I do not pretend to be one of the two)—who could at this moment give off-hand a reasonably clear account of the doctrine which was called Brunonianism, and of its application to the leading varieties of disease and their treatment. Yet it would be an inquiry fraught with the deepest interest to us, and I know none which would more effectually gauge for us the progress of the art of medicine during these last hundred years, and thereby show us if we are in reality getting upon solid and surer foundations, than to ask ourselves whether, if some such man as this John Brown were to arise now and to broach such a system as he advocated in 1775, it would have a shorter life, and be less revolutionary in its effects. I cannot enter upon that question to-day; I cannot even talk to you, however briefly, of the respective merits of Cullen's and of Brown's teaching; but I happened, in looking over a few books on the subject yesterday, to light upon an actual and apparently authentic prescription of John Brown's, preserved for us by one of his pupils; or rather, perhaps, let us call it the net result of his system conveyed in written advice to a hypochondriac patient as follows. I think you will recognise in it something not unlike what we have seen and known in our own time.

"For breakfast, toast and rich soup made on a slow fire; a walk before breakfast and a good deal after it. A glass of wine in the forenoon from time to time. Good broth or soup to dinner, with meat of any kind he likes, but always the most nourishing. Several glasses of port or punch to be taken after dinner, till some enlivening effect is produced from them; and a dram (of whisky?) after everything heavy. One hour and a half after dinner, another walk. Between tea-time and supper, a game with cheerful company at cards or any other play, never too prolonged; a little light reading; jocosely humorous company, avoiding that of popular Presbyterian ministers and their admirers, and all hypocrites and thieves of every description. Lastly, the company of amiable, handsome, and delightful young women, and an enlivening glass."

I think that from this prescription we can obtain a pretty good idea what was the nature, or at least the upshot, of the famous Brunonian system, the end and issue of all those lectures and expositions upon direct and indirect debility, and upon excitability, which formed the key-stone at once of Brown's doctrine and of his practice. It is a very curious proof how things go to sleep and are revived again, that we should have seen a practice, not, indeed, based upon the same theory, but very like this in its processes within our own time, even within these few years, to such an extent as to have led to a formal declaration against it by many of our most distinguished physicians. I can testify for one that people have come to me repeatedly who had been formally advised, very much after the manner of John Brown, to take, say, four or five, or more, glasses of port wine after dinner and after that as much toddy as their heads could carry, and this as part of a regular prescription going on for weeks together. But, if anyone should ask, Could such a practice, however indulgent to the weaknesses and follies of self-indulgent people, be successful in our day in floating such a general theory of disease and cure as the Brunonian system? I should incline to reply in the negative; and I should rely on giving that answer not only upon the great advances that have been made in physiology and pathology, the sciences upon which all genuine improvement in the medical art is founded, but also upon the much more exact and complete methods of clinical observation pursued in the present day, even as compared with the time of Cullen. I refer especially, of course, to the methods taught to the average general practitioner in our schools; for no one would wish to deny that we have had great and true, nay, eminently exact, clinical observers in the past, even in the remotest ages.

No doubt, too, there are still many imperfections; but, on the whole, we are pretty safe in saying that now-a-days, in every well appointed school, the clinical study of medicine is far more carefully attended to in detail than in any previous age; and the introduction of those practical methods of teaching and examination to which Sir Robert Christison has referred has in no department been more successful than in medicine proper. There seems reason, therefore, to believe that we have been gradually gaining for the art of medicine a more secure position in connection with demonstrable or demonstrated facts, and that we have gone some way towards making it impossible for any man, coming forward with a new theory not based upon the careful study of facts, to make such a revolution in opinion as was the case in Brown's time, and such as has over and over again been witnessed in the history of medicine almost from the days of Hippocrates. In regard to the methods of medical teaching in general, I sympathise very much with Sir Robert Christison's remarks. The true way is not to depreciate lectures as opposed to practical teaching, but to maintain both in a high state of efficiency, so that the excesses of doctrinal development may be corrected by the constant appeal to facts, while, on the other hand,

the facts may be more carefully correlated, and their real significance brought out by carefully regulated systematic instruction. And for this purpose the true ideal is to have as much as possible the systematic and the practical-teaching in one hand, so that no one is led by the nature of his office to become a mere lecturer or a theorist only, and no one, on the other hand, a mere demonstrator of facts and experiments. If you will allow me to use a comparison that is with me a familiar one, I would say that the art of medicine is like a tree; it must have its roots in the soil of facts, and its branches and leaves in the upper air, amid the currents of human thought. Unless its roots are well fastened down into the ground, it will be blown over; but, unless its leaves are freely inhaling every breath of opinion, it will wither and die, as surely as if it were torn up by the roots. And this should be the character of our work in this Section: careful and exact observation, followed by discussion, in the most absolutely free spirit, of all points involving differences of opinion.

REPORT OF PARLIAMENTARY BILLS COMMITTEE, 1875.

THE Parliamentary Bills Committee beg to report that they have held numerous meetings during the year, and have taken steps to bring under the notice of Parliament, and of the Government, amendments in the Artisans' Dwellings Bill, in the Adulteration Acts Amendment Bill, and in the Public Health Acts Amendment Bill.

The amendments proposed in the Artisans' Dwellings Bill were chiefly directed to the amendment of the clauses relating to areas of improvement; to the protection of medical officers of health in performing the very onerous duties cast upon them under this Act; and to diminishing the expense attendant upon the preparation and approval of improvement schemes. Your Committee had the advantage of the active co-operation of Mr. Kay-Shuttleworth, M.P., the Right Hon. Lyon Playfair, M.P., and of Dr. Tripe, Dr. Meymott Tidy, and other experienced advisers; and they had the satisfaction of finding that the clauses drawn in accordance with their recommendations were framed, approved, and passed by the House of Commons in committee on the Bill, and have now become law.

Your Committee were unable to approve of many of the clauses of the Adulteration Acts Amendment Bill as originally introduced into the House of Commons, especially those which required the proof of distinct knowledge on the part of the retailer of the nature and effects of the adulteration of articles sold. They were unsuccessful in obtaining the removal of the objectionable words in these clauses when the Bill was under discussion in the House of Commons; but, by further representations to influential members of the House of Lords, they succeeded, in combination with other bodies entertaining the same regard for the public welfare in this respect, in obtaining the assent of the Government to considerable amendments, which will tend to ensure a large amount of protection to the public from fraudulent and deleterious adulteration of articles of food, while they lessen the probability of any undue pressure upon innocent vendors. The Public Health Acts Amendment Bill was, in the first instance, presented to the House of Commons by the President of the Local Government Board, as an amending Bill as well as a consolidating Bill. Your Committee felt that as an amending Bill it was wholly insufficient, and indeed quite illusory. They felt it their duty to co-operate with the standing committee of the medical officers of conjoint districts in distributing to members of the legislature an elaborate series of amendments, designed to meet proved defects discovered in the working of the existing health-laws. These were also brought under the notice of Mr. Sclater-Booth, the President of the Local Government Board, by Mr. Ernest Hart, Chairman of the Committee, and Dr. Bond of Gloucester, Secretary of the Standing Committee of medical officers for conjoint districts. Mr. Sclater-Booth, however, strongly urged the necessity of passing the Bill of this year as a consolidating measure, and, as the advantages of consolidation are obvious, and as Mr. Booth assured Dr. Lyon Playfair in the House of Commons that he would treat this purely as a measure for consolidation, leaving the ground open for early amendment of the law, your Committee did not think it advisable to use the parliamentary influence of the Association and its Branches to oppose the Bill. The thanks of the Association, and indeed of the public, are certainly due to the honorary local secretaries of Branches for the trouble which they took in bringing the matter under the notice of their local representatives in Parliament. Letters were received from upwards of sixty members of Parliament undertaking to assist in setting the views of the Association on this subject before the legislature, and no doubt the same assistance will be forthcoming, and may be effectually used, on a future occasion.

It is probable that the Committee will draft the amending clauses which were then circulated in the form of a separate Public Healths Acts Amendment Bill, which will be introduced into Parliament early next year by an influential member of the House.

Your Committee have the satisfaction to report that a Royal Warrant has been issued, granting to the medical officers of the Navy a considerable number of those concessions, as to rank, pay, and retirement, which were laid before the First Lord of the Admiralty by a deputation of the Committee. The Committee have had the pleasure of receiving the warm and grateful thanks of many eminent members of the naval medical service for the successful results of that representation, which is believed to have had a very valuable effect. Your Committee have renewed representations to the Secretary of State for War as to the redress needed for many grievances of the army medical officers. Great pains were taken to ascertain the facts, and to submit to Mr. Gathorne Hardy suggestions which would meet the views of the service at large, and were such as might be reasonably entertained. Mr. Hardy has since several times stated that he has tested these suggestions very minutely, and that he is still giving them his careful consideration. Your Committee trust that before long a Royal Warrant will be issued making such amendments as to pay, retirement, relative rank, and allowances of army medical officers, as will restore contentment and popularity to that important service.

Your Committee beg to remind the Branches of the Association that each Branch is entitled to elect a representative annually on this Committee. One or two Branches during the last year omitted to do so. It is desirable that every Branch should have its representative member on this Committee, in addition to those who are elected by the Association at large. The labours of this Committee are considerable and continuous throughout the year. They involve a modest expenditure, and the Committee recommend that the Association grant £15 during the ensuing year towards these expenses.

ERNEST HART, *Chairman.*

REPORT OF THE SCIENTIFIC GRANTS COMMITTEE.

YOUR Committee beg to report that they have held five meetings with the object of arranging the principles of distribution of the fund entrusted to them, and the determination of particular grants for the present year, in response to applications for such grants from gentlemen proposing to pursue definite scientific investigations in furtherance of the medical art.

Your Committee have thought it desirable to adopt for the present year the "conditions" for grants which have been and are in use by the British Association for the Advancement of Science.

The following are the grants which were recommended by the Committee at their meeting in London in January 1875, and approved by the Committee of Council:

Mr. Hicks. Researches on Alcohol	£50
Dr. P. M. Braidwood and Mr. Francis Vacher, Birkenhead. The Life History of Contagion	15
Dr. R. Caton, Liverpool Royal Infirmary. The Electric Currents of the Brain	20
Dr. J. M. Fothergill, London. The Effect of certain Agents upon the Circulation	10
Dr. M'Kendrick and Mr. James Dewar, Edinburgh. Physiological Action of Chinodine and Tyridine Compounds	25
Dr. Mahomed, London. The Pathology of Albuminuria	20
Dr. Munro, Cupar. An Antidote for Chloroform	5
Dr. W. H. Spencer, Clifton, Bristol. The Action of Uranium Salts in Diabetes	20
	£165

Of these grants the following amounts have been expended:

Dr. P. M. Braidwood	£12 12 4
„ R. Caton, Liverpool	8 16 9
„ Fothergill, London	3 18 10
„ M'Kendrick	5 0 0
„ Mahomed	5 12 8
„ Munro	2 15 11
„ W. H. Spencer	13 15 11

Interim reports have been presented by Dr. Fothergill on the action of Aconite and Digitalis; by Drs. Braidwood and Vacher, on the Life History of Contagion; by Dr. Spencer, on Uranium in Diabetes, and on Trimethylamine in Rheumatism; by Dr. Mahomed on Albuminuria; by Dr. Caton on the Electric Currents of the Brain. Mr. Hicks has been

unable to carry out the proposed research on Alcohol during the year, and has not drawn the sum allotted.

The Committee beg also to recommend the Committee to make a grant of £30 in aid of researches carried out during the past year on the Biliary Secretion, by Professor Rutherford of the University of Edinburgh, and M. Vignal; the results of this investigation will be laid before the Association at the present meeting by Professor Rutherford in his Address on Physiology. The balance in hand will then be £101:6:5, which will be returned to the treasurer.

Your Committee recommend that a further grant of a total sum not exceeding £300 be made for the purposes of scientific grants during the year ending July 30th, 1876. They will be happy to receive at once applications for grants from physiologists and members of the profession generally, in aid of scientific researches; they are desirous that such researches should in all cases have relation to the advance of medicine and its auxiliary branches, and will be especially glad to further scientific research in the departments of therapeutics, and clinical medical and surgical research.

FRANCIS SIBSON, *Chairman.*

REPORT OF JOINT COMMITTEE ON STATE MEDICINE,

1875.

YOUR Committee, in presenting their report for the past year, desire to return their best thanks to the 135 medical officers of health who sent replies—many of them very full and of great practical value—to the schedules issued by them last year. If they have not yet communicated to their correspondents the results of that inquiry, it is because the time for making a profitable use of the information has not yet come.

Your Committee at one time thought that last spring would have been the time for energetic action on their part; and, judging merely by the bulk of the Public Health Bill of this session, some may be of opinion that they have acted wrongly in remaining quiescent. But, as the Bill was almost entirely one of consolidation of previous statutes, and so directed to the accomplishment of one of the objects earnestly sought for in their original memorial to the Government, your Committee did not consider it advisable needlessly to interfere with the progress of a measure which, though still incomplete and in various respects inefficient, is a step in the right direction, and will enable many to study this important subject in a single Act, instead of having to unravel the perplexing and often inconsistent provisions of twenty or thirty. They will thus be enabled with comparative ease to qualify themselves for the intelligent consideration of the amendments which, according to the express statements of Her Majesty's ministers, will be submitted to the next session of Parliament. It was this assurance which chiefly weighed with your Committee in deciding to reserve any communication to the Government until the nature of the amendments shall appear.

Your Committee have observed with satisfaction that, during the recent discussions on the Public Health Bill, there has been a steady approximation to the views constantly maintained, and the proposals persistently brought forward, by the Committee; and that, in particular, it is now plain that several important principles urged by them from the beginning, such as the adoption of larger areas and the readjustment of boundaries, will be adopted. In proof of this, your Committee refer with much pleasure to Section 284 of the Public Health Bill, 1875, which empowers the Local Government Board, "on any representation made to it that the appointment of a medical officer of health for two or more districts, situated wholly or partially in the same county, would diminish expense, and otherwise be for the advantage of such districts, by order to unite such districts for the purpose of appointing a medical officer of health." They are happy to observe, from this provision, that the Imperial Legislature is at length beginning to perceive that it may be possible to promote both economy and efficiency by the appointment of skilled officers: an idea which was thus formally propounded in the original memorial of the Joint Committee, dated May 1863; "yet it is believed by those who have directed their attention to the subject that the amount actually disbursed under the present disjointed and very inefficient system would, if otherwise distributed—the districts and many of the duties being consolidated—go far to maintain a sufficient staff of specially trained and highly qualified district scientific officers with inspectorial functions. Without such officers, it is vain to expect any material improvements in this important department of the public service."

Your Committee are also happy to observe that the same section permits the appointment of assistants to the officer appointed for the united districts. The mode of dealing with nuisances, where the cause

of the nuisance arises without a district, prescribed by Section 106, is also a very marked improvement on the existing law.

Your Committee cannot help referring to a speech of Mr. Stansfeld, delivered at Halifax on January 11th, 1875, in which it was made to appear that the British Medical Association had been adverse to "a system of local self-government" in sanitary matters, and that Mr. Stansfeld, in reply to a deputation in 1872, had combatted these views in the following terms:—"He could understand the position, the point of view, of professed and scientific sanitarians. Their first idea was health, their second local government; but not in the sense of trusting it; on the contrary, they led to a hopelessness about it, and sometimes to an unmerited contempt. . . . Local administrators would not display intelligent interest in their new functions, unless they were shown respect and trust. Respect for the principle of local self-government, and a keen sense of the importance in these days of inspiring local administrators themselves with the feeling that they were treated by the Government with respect, were his guides in the administration of the Poor-law and of the Local Government Boards." Your Committee read the report of this address in the *Times* of January 12th with the most profound astonishment, and think it sufficient comment on the statements contained therein to refer to the following extracts from the Committee's report of 1871, and from the memorial presented in 1872 by the very deputation mentioned by Mr. Stansfeld. At page 8 of the report are these words:—"We cannot too strongly urge on the Legislature the necessity of limiting the powers and functions of the central authority within the narrowest bounds consistent with effective action." And at page 15:—"This mode of administration" (by the frequent intervention of the central authority and its officials) "has the threefold disadvantage of being costly, of being inefficient, and of keeping the country in a state of perpetual tutelage. If, on the other hand, the inspectors, or rather, chief officers of health, highly trained in all the departments of public medicine, were resident in their districts, each one of them would be a centre of instruction whence sound and enlightened views on all sanitary matters would emanate, so as gradually to enlighten the public mind, stimulate local action, and reduce to a minimum the need of interference by the central authority." And the seventh paragraph of the above mentioned memorial, which was read *in extenso* at Mr. Stansfeld's own request, is as follows:—

"That, though they have always insisted on the necessity of a central check on local inefficiency and caprice, your memorialists did not contemplate, and cannot regard with approval, the investiture of any department of the executive with powers so large as those which the Public Health Bill" (the first draft of Mr. Stansfeld's own Bill) "proposes to confide in the Local Government Board; and that the costly alternative adopted in the Bill of providing a system of central inspectorial supervision of undefined proportions and cost, rather than efficient local government, cannot be considered either wise, expedient, or effective."

Throughout the same address, your Committee observe with surprise the adoption by Mr. Stansfeld of all or nearly all the principles and amendments on the Sanitary Act, urged on his attention from time to time by the Committee collectively and by some of its active members in their individual capacity, as though these had originated with himself, and were in opposition to the views of the Committee.

Your Committee cannot conclude this brief report without expressing their deep regret, shared, they are persuaded, by the whole of both Associations, that so eminent a member of the Committee as Dr. Rumsey, who had so much to do with its formation, and whose name has been identified with every stage of our sanitary progress during the last forty years, has been disabled by paralysis from the exercise of his profession, and from those invaluable public labours which have contributed much more to the good of the commonwealth than to his personal advantage. Your Committee rejoice that many members of the Associations have already manifested, and they trust that many more will yet manifest, in a tangible form, their sense of his private worth and great public services.

WILLIAM CLODE }
W. H. MICHAEL } *Honorary Secretaries.*
A. P. STEWART }

FOREIGN NEWS.—Professor von Langenbeck has been chosen Dean of the Faculty of Medicine in the University of Berlin.—A festival of German military surgeons was held in their new hall in Berlin on August 2nd. Herr Stenzel, a student, read a discourse on the Action of Modern Projectiles on the Human Body; and Professor Gurlt gave an address on the History of Military Surgery in Prussia during the last 150 years.

BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st, Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, AUGUST 14TH, 1875.

A REVIEW OF THE EDINBURGH MEETING.

THE fair fortune with which the Edinburgh meeting commenced lasted till the end, and the good work which deserved success attained it. The President, Sir Robert Christison, and all the local officers must be congratulated on the completeness with which in nearly every case their intentions were fulfilled; while the Association at large, and especially of course the members who attended the meeting, owe a large debt of gratitude for the unsparing labour, the thoughtful preparation, the unstinting liberality, and the cordial good-will which the profession in Edinburgh lavished on them at this meeting. We have the satisfaction of knowing that the entertainers at the close of their labours are justly gratified by the signal success of the great professional meeting which they organised, and feel that their work has not been in vain. The recollections which all will long retain of the Edinburgh meeting are of the most agreeable kind. The first and most striking impression which has been produced is, we believe, that which every such great gathering is likely at once to make. The social influence of an assemblage of over a thousand members of one profession is in itself the creation of a power: the contagion of vast assemblies is potent: the atmosphere of good fellowship, of academic impulse, of learned emulation, of professional self-respect, which pervades such a gathering in so great an university, under so cultivated and eminent a President, and addressed by orators so skilled and highly cultured—such an atmosphere widely diffuses itself; it cannot be breathed for a week together without influencing the individual mind. The meeting presented at every side aspects worthy of respect, and which could not but give birth to impressions at once useful and agreeable to all who took part in it, or who attentively considered it. Many hundreds of old graduates returned to find their Alma Mater more flourishing than ever, extending widely her habitation, varying her methods of examination, enlarging her power of teaching, and showing that with the experience of age may be combined the elasticity and vigour of youth. Those to whom the Edinburgh medical schools have hitherto been only a name, have learned to connect with well known names the precise ideas and associations which belong to the concrete facts. The systems both of teaching and of examination in Edinburgh are well worthy of attentive study, and the men who administer both were there to explain and to describe them. Sir Robert Christison, wisely, as we think, chose this opportunity to discuss historically and critically the rise and progress of the Edinburgh University system. We totally differ from a writer who thinks the occasion ill chosen, and we feel sure that the President's address will be consulted with advantage and with interest for years to come, by all who are interested in the development of medical education. Such an interest every member of the profession must fairly be held to have; nor could any more suitable topic be found on which to address such an assemblage of medical men as met in Edinburgh, than to trace the history of its great Medical Faculty, to describe its methods of instruction and examination, and to endeavour to ascertain how it has become great, whether its methods are suitable for general adoption, and what are the principles which may be discovered by examining its past and present circumstances. Sir Robert Christison is peculiarly well qualified by his calm and judicial quality of

mind, not less than by the rare experience of half a century, to fulfil this high task. Only a very superficial mind could, we imagine, find his discourse dull, and to no person of ordinary intelligence could it possibly be uninteresting.

The address was unquestionably of greater length than was convenient for the disposal of other business, and hence there was disclosed more clearly than on any former occasion a difficulty in the arrangement of the business of the first day's meeting. This has before been occasionally apparent in a lesser degree, and the managers of the business of the annual meetings will now, no doubt, feel called upon carefully to consider the matter. The things to be done on the first day of meeting, besides the delivery of the President's address, have a considerable, and not always a merely formal, importance. The Report of the Council has always to be submitted, and with this the old Council expires; and certain official appointments are made. This year the business was more heavy than usual, since the By-laws, which have been recently remodelled to suit the position of the Association as an incorporated body, had to be brought up and passed. The Report of the Council is always an important, although usually by no means an exciting, document. It contains few things which are not already known to the members. It is a summarised account of the official doings of the Association. It contains a note on the balance-sheet, which has been printed previously for all the members; a condensed note of the work of the various committees, which has also for the most part been made known from time to time during the year, and each of which committees on a subsequent day presents its own detailed report; and it refers briefly to any important incidents of the year. It has already passed through the hands of the General Council of the Association, a body of several hundreds of representatives of the Branches, and has there been thoroughly examined. Like all such documents, therefore, it is usually entirely divested of any sensational element, and it has little of novelty. It is, however, a paper of considerable interest, and affords a legitimate opportunity for any member to raise a discussion on the wide range of subjects thus analysed, to express his views on any of the various points connected with the subjects mentioned, and with the general management of the Association. Such opportunities are numerous throughout the year at the various Branch meetings or in these columns; and the representation of the Association is so extensive in the Committee of Council, which consists of representatives of all the Branches to the number of over a hundred, and in the General Council to the number of several hundreds, that it is rare to find that any novelty is discussed. Moreover, the difficulties of discursive debate in an assembly of near a thousand persons are so great, that men instinctively choose the minor meetings of Branches and Councils, which are frequently taking place all over the United Kingdom, to thresh out subjects of debate and put them in a state in which general agreement is previously attained before bringing them to a great meeting. Sir Robert Christison justly observed, that very large general meetings become, by their bulk, so unwieldy that they almost invariably confide to their representative Councils the preliminary discussion of subjects likely to raise much difference of opinion. This is of course particularly the case where, as in the British Medical Association, the whole body is formed of an union of separate bodies, with large powers of self-government and free debate, and having a widely spread and democratic representation in a Council wholly composed of their freely elected delegates. Nevertheless, the opportunity of free debate on all lawful occasions is a privilege which Britons wisely hold dear; and experience has taught us all that the essence of liberty is best preserved by an undeviating maintenance of all the forms by which it is guarded. In the bare half-hour which remained on the first day of the late meeting for the transaction of much business, and with the urgent necessity then existing for receiving the report of the Council before it became officially defunct, there was no time for reading the printed Report or debating it, if any one desired it, unless members remaining in the meeting were willing to forego their dinners. The struggle

then arose between two sacred principles: should the Report be read out and dinner be sacrificed, or should it be accepted on the faith of the General Council and of those who had read it, and should the members dine? The gastric principle prevailed, and so Report and By-laws were voted in succession and in mass. To none could this be a matter of greater regret than to those who were compelled to recommend it. Dr. Sibson, Dr. Falconer, Mr. Husband, Dr. Carpenter, and many others who had devoted great time and trouble to the preparation of these documents, and the Council who had discussed them, could but desire that the full honours of debate should be accorded to them. But the conflict between the forms of debate and the pangs of hunger was an unequal one, and the prospect of dining was to the majority more delightful than that of a conversation on the By-laws. Next year, however, it will be well to provide against the recurrence of what was an unprecedented waiver of privilege. There are more ways than one by which this can be arranged, and we need not now discuss the slight changes in the programme by which it can be effected.

The succeeding days of the meeting passed off without any check or hindrance to their course of uninterrupted success. Of Dr. Begbie's address in Medicine, we have already spoken. Mr. Spence's careful, thoughtful, and interesting address in Surgery, maintained his reputation as a surgeon of vast experience, and one who uses his material cautiously and securely to advance the art of which he is a distinguished professor. Perhaps that part of his address which will be most critically read is the conclusion, in which he displays the good results attending the careful application of the rules of cleanliness, neatness, and approved open dressings in the major surgical operations in his own practice. He spoke of a series of sixty-three major operations in his own practice during three years, of which sixty had been successful. It is understood that he did not refer to the last three years, but to a particular series of years, in which the atmospheric and other epidemic conditions being favourable, this result had been attained. This reservation being made—and it accords with Mr. Spence's views, we imagine, that stress should be laid upon it—it must still be admitted that such a statistic is striking and instructive. It may of course, be said, that it is the boast of the antiseptic system that it renders patients secure from such atmospheric conditions of danger, and rescues them from the perils of the epidemic hospital diseases which are the terror of the surgeon. But those who are favourable to the views which Mr. Spence maintains, state that the great originator of the antiseptic system of surgery and his disciples have not made public any such consecutive tabular statement of results achieved during a series of years, as would indicate that those results are independent of the epidemic conditions of recurrent cycles of years. This argument we state, without assigning to it so much importance as it appears to have in the minds of those who urge it. Test-cases frequently repeated are almost as convincing as accumulated figures; and we believe that the brilliant chemical demonstrations of Mr. Lister, and the most interesting report which he gave of the results achieved in re-establishing "salubrity" in foreign surgical wards as well as in his own, have convinced hundreds that "epidemic constitution" is often only a vague phrase which covers without expressing "atmospheric impurity"; and that the antiseptic method of protecting open wounds from zymo-poisoning is capable of reversing the conditions which sometimes neutralise surgical skill, and commonly hang around the bed of the subjects of surgical injury. Of course it may be urged, that the antiseptic method is, above all things, a means of absolute cleanliness, and that, by the introduction of surgical cleanliness under the solemn guise of advanced science, the lives of innumerable patients would be saved in the wards of most great continental hospitals; but, after all deductions have been made, which, as the results of Mr. Spence and Mr. Callender show, ought to be made, there remain achievements to the credit of Mr. Lister's method which every one must admire, and at which most men are still fain to wonder. The two sides of this great question in surgery have been very clearly and very picturesquely contrasted at this meeting. After

listening to Mr. Spence's address, the members passed to Mr. Lister's demonstrations; and to both they must feel indebted for the labour and the time which they bestowed in elaborating the facts submitted for consideration. Mr. Lister's fine genius for patient and accurate scientific research was fully appreciated; his dressings and his general precautions are themselves the work of an experimental genius, and his splendid demonstrations on the processes of infection in the physiological section, held a great audience spell-bound for two hours, and have left a great impression on the minds of all who were present. Undoubtedly, Mr. Lister's efforts contributed in a high degree to the scientific success of the meeting.

Dr. Rutherford, in succeeding to the chair of Hughes Bennett, for many years a scientific leader in this Association, and the author of its "Scientific Grants", inherits a relationship of which he has at once brilliantly fulfilled the functions. No small part of the work of the Edinburgh Committee on the action of mercury was done by Drs. Rutherford and M'Kendrick; and the Address in Physiology, which Dr. Rutherford gave this year, includes and mainly consists of an abstract of a report of a most valuable investigation of the action of other drugs on the liver, of which the full details will soon appear in the JOURNAL, as a report to the Scientific Grants' Committee of the British Medical Association. The spirited and outspoken defence of the experiments on animals by which such investigations are carried on, elicited important remarks from Dr. Burdon Sanderson and Sir Robert Christison. Here especially, as at many other periods of the meeting, it was impossible not to regret deeply the absence of Dr. Hughes Bennett. He, almost more than any other man, was entitled to claim that in his hands, and, under his influence, experimentation had been so carried on as to advance knowledge, to increase precision, and ensure soundness in medical science and practice. He had desired, particularly in his own University, before his own townsmen, and the pupils, colleagues, and medical brethren who appreciate his character and labours, to repel the poor aspersions which unscrupulous and ignorant *doctrinaires* have thrown upon the practice to which suffering humanity owes priceless boons. Unfortunately, his weak state of health forbade his taking part in the meeting, although it had been hoped till the last moment that he would have shared in the welcome which his University gave to an Association which owes him much, and gratefully acknowledges its debt.

The Sectional meetings were more frequented than they had ever been before. Audiences of between two and three hundred thronged the rooms in which any particularly interesting paper was read, or any important demonstration was given. Among the most crowded meetings were those in which the papers of Mr. Lister, Dr. M'Kendrick, and Mrs. Garrett-Anderson were read. In the latter case, no doubt, curiosity had much to do with the attendance; but we understand that this lady produced a very favourable impression, and that, at the close of her paper, the unusual compliment of a special vote of approbation was paid amid loud and general acclamation. This was done at the instance of the most competent members of the section. In another section, Mrs. Hoggan described and demonstrated an important method of histological preparation, of which something has been before heard elsewhere. In the course of the general meeting, a question was put by Mr. Oliver Pemberton, the well-known surgeon of Birmingham, and the reader of the Address in Surgery at the Birmingham meeting, as to the portals by which these two ladies had been admitted to the Association. Dr. A. P. Stewart mentioned that Mrs. Anderson was elected two years ago by the Metropolitan Counties Branch, of which she has, we believe, attended more than one meeting. Mrs. Hoggan was elected by the Committee of Council, and is not a member of any Branch. Mr. Pemberton moved, and Dr. Marshall of Clifton seconded, a resolution, which was carried almost without a dissentient, instructing the General Secretary to issue, before the next annual meeting, a form of question to every member of the Association, inviting their opinion as to the advisability of admitting ladies practising medicine as members of the Association. The subject will, there-

fore, probably receive the full and no doubt temperate discussion, for which there was no opportunity in the few minutes which succeeded Sir Robert Christison's address, or preceded that of Dr. Begbie. It is very convenient for all, that printed notice be given in the printed agenda prepared before each meeting, of any important resolution of a novel or independent character, or raising any important point of procedure or principle. Both were involved in this resolution; and it would have been more satisfactory if the precedent of a *plebiscite* on a question not yet discussed had been established after a thoughtful debate. A verdict of any sort commands more ready acquiescence when arguments on both sides have preceded it; a *plebiscite* is an unusual and important incident in the history of the Association, and so potent a judgment would have been more effectually invoked after pleadings on both sides had been heard. By a little deliberate arrangement this might have been provided for on the last day of the meeting. The Brighton meeting may, however, possibly be enlivened by arguments *post factum*.

The work done in the Sections will be reported in this and subsequent issues. The Presidents' addresses will have been read with great interest. Mr. Playfair showed once more the acuteness of his political insight and the grasp of the principles of sanitary legislation which have signalised his parliamentary utterances throughout. The member for the University of Edinburgh has by his career already done high honour to his University, and has rendered great services to the nation. The independence with which he has throughout maintained sound principles of health-legislation, and assailed the mischievous proceedings of his colleague Mr. Stansfeld, deserves hearty recognition. It is to Mr. Lyon Playfair chiefly, that we must look in the House of Commons for the inauguration of a legislative system which shall provide adequate areas of administration and a good local system of sanitation. The demand for an inquiry into results is probably the first step towards such an amendment, and we are glad to learn that he intends urgently to press it.

Dr. Matthews Duncan's address is characteristically outspoken, learned, and incisive in tone. His remarks on the younger surgeons of Great Britain are calculated to arrest attention. We have had more than once to suggest reflections during the last decade, which are not altogether out of harmony with his plea for the more earnest cultivation of the higher elements of surgical greatness in our hospitals and schools. Dr. Quain was missed from his post of honour in the Medical Section. His place was filled by the able Professor of Medicine in Glasgow, Dr. Gairdner, a conspicuous ornament of the meeting. The Section of Psychology had as its Chairman the President of the College of Physicians of Edinburgh, to whom the Association is indebted not only for his services in this capacity, but as the head of a corporation which welcomed the Association with splendid and cordial hospitality.

Two of the Sections passed important resolutions, which were subsequently approved by the general meeting, appointing influential Committees to prepare reports for the next year's meeting. The Committee on Poor-law Medical Relief in Scotland, appointed as the result of the reading of a paper by Dr. Joseph Rogers, late President of the Poor-law Medical Officers' Association of England, has before it an important work. Dr. Rogers pointed out that the medical officers of Scotland suffer under disadvantages from which, partly through the influence of the British Medical Association, and partly by their own efforts, the Poor-law medical officers in other parts of the kingdom have been relieved. These are, the necessity of providing medicines out of their salaries; the tenure of office for an annual term only, renewable only at the good pleasure of the parochial boards; and the want of the large aid from the Consolidated Fund which helps to secure for them and for the sick poor central protection and most liberal treatment. The Committee has power to add to its numbers, and we call the attention of the Poor-law medical officers of Scotland to its formation. They should supply materials by forwarding to the chairman information showing how the present system acts in imposing on them ill-remunerated labour, in placing them at the mercy of local

boards, with whom rigid and immediate economy of money is often a ruling consideration, and in restricting their usefulness to the sick poor.

The Committee on Anæsthetics is, we think, a timely one, and has before it an important field of statistical and clinical inquiry and scientific investigation. It will probably work by subcommittees, confiding divisions of the work to specially skilled hands among its members.

To bring this review to an end without further prolongation, we must pass over many other important incidents of this fruitful meeting. The Museum, the organisation of which heavily taxed the energies of Dr. Underhill, was ably conducted by him, and by the Museum Committee, of which he was Secretary, and Professor Turner President. An excellent printed catalogue was prepared by Dr. Underhill, and we shall separately notice its more important contents. The various entertainments provided by the liberality of the subscribers to the Reception Fund, the University, and the College of Physicians, we must pass with a bare reference; and equally so the Dinner, although not without a hearty word of thanks to the Entertainment Committee and their most active Chairman, Dr. Gillespie, whose exertions for the comfort of the members were untiring, and were most successful. The private hospitalities of the leading members of the profession in Edinburgh were both wide-spread and catholic. The *fête* at the Botanical Gardens was rendered especially interesting by the thoughtful labour which Professor Balfour had expended in displaying connected series of its treasures. The excursions were favoured throughout with fine weather, as the whole meeting had been; and the final impression on the minds of all is, that the meeting in Edinburgh in 1875 has been the most successful professional congress ever held in that city, and one which will be memorable in the history of the Association, as having done much to promote a cordial feeling of affectionate unity between the profession in the northern and southern divisions of the United Kingdom. To promote such unity is one of the great purposes of the British Medical Association.

THE ROYAL HOSPITAL, PLYMOUTH.

THE Royal Hospital at Plymouth has been recently severely criticised on some points in its construction and management. Amongst other statements, it is averred that the hospital is built at the head of a tidal creek, into which a certain amount of drainage is received which renders the mud at low tide very offensive; that the windows in the wards are five feet high above the level of the flooring, so that a patient must stand on a chair to look out; that the view obtained from these windows is obstructed by a dead stone wall, instead of comprising the square with its grass and flowers, and the beautiful scenery for which the neighbourhood of the hospital is famous; that a large set of rules, prominent amongst which are instructions to be followed in the event of a patient dying, are hung up in the wards; that when a patient becomes convalescent, he is compelled to take the air in a stone colonnade, running from east to west, and exposed to a sharp easterly breeze; and that the wards present a cold and dreary appearance, more likely to retard than expedite the recovery of a patient who, from the circumstances of the case, is more likely to suffer a relapse than to attain a speedy recovery. We considered these charges of so grave a nature that we have taken some trouble to ascertain the real facts of the case, which we now reproduce.

The hospital at Stonehouse was built in 1760, at which time the tidal creek was not a receptacle for the drainage of the large suburbs which have grown up especially during the last twenty years, and the mud which is now at times offensive has only recently become so from the sewage being allowed to run into it. Besides, the Admiralty and War Department, the Lord of the Manor, and the freeholders of Stoke, Stonehouse, and Plymouth, have interest in this property. The Sanitary Boards have not been idle, and the question of sewage is now under consideration at the hands of an eminent engineer on the part of the Government, who, with the local authorities, is preparing a report on the best means to remedy what is evidently a growing evil.

The height of the windows from the floor is not more than four feet ten inches out of a total of thirty-four feet, being only three feet nine inches above the level of the ward-floors. All the windows were formerly barricaded with iron bars to prevent the escape of the patients, but these bars have all been removed for some years, as, owing to better discipline, the few patients who may be inclined to be unruly are kept under proper restraint without difficulty. The view from the windows extends over the green slope of the glaciis towards Devonport. Again, the ward referred to is only twelve feet high at the highest part, and is—with the exception of one side of the hospital, where the top of the ward is on a level with the middle floor of the building—considerably (six feet) below the window-sills of the lowest parts, its average distance from the main building being eighty yards. None of the regulations referred to are hung up in the wards, although some of them, now obsolete, are placed in the corridors out of view of the patients in the wards. The wards are brighter and more cheerful, with pictures; and a bountiful supply of flowers is to be found in all of them. When a man is convalescent, he is allowed to take his airing in the recreation grounds, where quoits, croquet, and other games are provided; and the stone colonnade is on three sides of the inner quadrangle, where protection can always be found, however great the heat or bleak the wind, and not one of the sides of the colonnade faces due east. In cold weather, the patients prefer to remain in the spacious smoking saloons, where fires are always kept in the winter months.

Such are the exact facts in relation to this hospital at Stonehouse; and it appears evident that the information supplied must have been sent under a misapprehension of the points raised, and without knowledge of the subject treated. We should be sorry to discourage free and impartial criticism; but, if our hospital authorities are to be condemned without good reason, we should do all in our power to discourage and expose such treatment.

Inspector-General Domville has recently been appointed to the Plymouth Hospital, and we have no doubt that any modifications in the system of management which may be considered necessary will, under his able and experienced management, be speedily made, so that little will be left to be desired in this respect even by experienced hospital reformers. We may add, that we have reason to know that the steps already taken to remove the nuisance caused by the drainage into the creek will speedily obviate all cause for complaint in this respect.

THE PORTSMOUTH BOARD OF GUARDIANS.

THE medical officers who serve under the Local Government Board have at all times an arduous and responsible post to fill, and in no town can this be the more the case than at Portsmouth, where the infirmary accommodates 250 patients, and where the medical officer has usually the health of about 1,100 inmates in his keeping. With such demands upon his time and energies, he ought at least to be treated in a considerate manner by the guardians. Generally speaking, this is now the case; but we hear occasionally of unhappy exceptions. Such an one has recently occurred at Portsmouth, where Dr. Diver, who for three years has had charge of the workhouse, and who was "proclaimed one of the most skilful and humane officers in the kingdom", has been subjected to a petty persecution, which has resulted in the loss of his services. We quite agree with a local newspaper in saying, that we do not wish to excuse even the most trivial departures from the consolidated orders; but there cannot be a doubt that most of the allegations so common a few months ago were the grossest exaggerations, and that a highly efficient and attentive officer has at length been driven from his post. Perhaps the best testimony Dr. Diver can receive is that which has already been borne by his workhouse patients, who have manifested their regret at his retirement in the most unaffected and unmistakable manner. We hope this expression of opinion on the part of those who have been so intimately connected with him, will open the eyes of the guardians to the harshness of their

conduct towards their medical officers, and, at the same time, that it will go far to counteract any professional injury which it might otherwise have inflicted upon him.

UNIVERSITY COLLEGE HOSPITAL.

THE vacancies recently caused by the promotion of Dr. Ringer and Mr. Christopher Heath have been filled up by the appointment of Dr. G. Vivian Poore, of Charing Cross Hospital, to be assistant-physician, and of Mr. Arthur E. J. Barker, surgeon to the City of Dublin Hospital, to be assistant-surgeon.

INSTRUCTION IN PSYCHOLOGICAL MEDICINE.

THE following important resolution was adopted by the Royal College of Physicians of London, on July 19th: "That the registrar prepare and submit a regulation to the College, 'That students who wish to qualify for the examination for the membership or license of the College may substitute, if they so desire, a three months' course of clinical instruction in the wards of a lunatic asylum for the same period of attendance in the medical wards of a general hospital.'"

TRIPLET BIRTHS.

M. DEPAUL lately submitted to the Academy the placenta of a triplet born at Bordeaux. The three children were females and were, when the case was reported, still alive and in good health. The placenta formed one entire mass; the three cords were perfectly distinct, one was inserted in the centre of the placenta, another on the edges of this organ, and the third on the membranes. There were three amniotic pouches which were rather difficult to trace on the specimen; but, according to the report of the medical gentleman who forwarded it, there were during parturition three distinct ruptures of the membranes, which took place before the birth of the children. By a remarkable coincidence, the Paris papers have reported that a *concierge* in the fourteenth arrondissement in Paris, has given births to triplets, two boys and a girl. The mother is aged 35, and has been confined for the third time. The boys, who were in the same amniotic sac, were born first, at an interval of an hour between each; the girl, who was in a separate sac, was born half an hour after the last boy. The whole three are alive, well-formed, and sufficiently strong, particularly the first boy and the girl.

RETIREMENT OF ROKITANSKY.

ON Friday, July 16th, Professor Rokitsky delivered his last lecture in the pathologico-anatomical class-room of the University of Vienna, in the presence of a large audience, including many professors and doctors of medicine. Among the guests was, Dr. Ziguin, physician to the Czar of Russia, and chief of the sanitary department in St. Petersburg. Professor Rokitsky, who was received with loud applause on taking his place for the last time, spoke a few words in resigning his post, and said that he should not become entirely inactive. He then delivered his farewell address to his pupils. He explained the essential character of pathology, and commented on the modern direction of science and of the impossibility of resisting progress. Finally, he exhorted his hearers to diligent and conscientious work. He admonished practising physicians to give an academical impress to all their work, and to always remain true to academical principles.

ACTION OF COMPRESSED AIR.

M. BERT has shown, by a long series of experiments, that air compressed to a certain degree kills living beings in a very short space of time. This result, according to M. Bert, is due, not to the pressure of the air considered as a physico-mechanical agent, but to the tension of the compressed oxygen. These researches have led M. Bert to study the effects of compressed air on the different fermentations, and with this view he submitted fresh meat, beaten eggs, urine, wine, and milk, to a strong tension of oxygen, and the result has been that these substances have been kept in a perfect state of preservation. From these facts, M. Bert has deduced the following conclusions, which he sub-

mitted to the Academy of Sciences. 1. Oxygen of high tension effectually stops the fermentation properly so-called, so much so that the process is not resumed on the restoration of the normal pressure; it kills all fermenting agents. 2. Its action on diastasic ferments is unappreciable: notwithstanding the presence of oxygen, they continue to be active for an unlimited period. It will be seen that this new method of analysis may be usefully applied to the study of the blood in malignant pustule or charbon, and the different viruses and venoms of infectious diseases.

TEMPERANCE DRINKS.

WE learn with great pleasure, from a paragraph in the *Times*, that the Committee of the Church of England Temperance Society propose to establish in the crowded and poorer districts of London, wherever suitable accommodation can be obtained, street-stalls for the supply, at a low rate, of light but substantial refreshments, together with tea, coffee, cocoa, and other drinks suited to the varying seasons. Visitors to Munich will remember the temperance stalls in that city. It is intended to establish the stalls in London through the agency of the parochial branch societies, and the object of the movement is to provide for the working classes counterattractions to the publichouses. An experimental stall was submitted to inspection recently at Lambeth Palace. The structure is neat in appearance, compact in its details, and can be easily wheeled from place to place, as the exigencies of trade or the state of the weather may require. The principal objection that can be urged against the stall—regarding it as a competitor of the publichouse—is that persons using it will have no protection either from sun or rain. This might, however, be remedied, by extending the eaves of the permanent wooden roof, or by affixing to it for use, as occasion may require, a projecting screen of canvas or similar material. It was stated that the cost of each stall, together with the necessary fittings, will not exceed £20.

SCOTLAND.

MR. HAWKSHAW, brother of Sir John Hawkshaw, has been making examinations in Port Glasgow and Greenock with the view of ascertaining the causes of the pollution of the tributaries of the Clyde.

THE weather during July was, in Shetland, remarkably fine and dry; with the exception of one or two days, the whole month was unprecedentedly dry and warm. For ten successive days, the sky was cloudless, and the thermometer from 100 to 120 degrees Fahr. in the sun at noon.

THE Summer Session at the University of Aberdeen was brought to a close last week, when the degrees of M.D. and M.B. were conferred on thirty-three and fifty-nine gentlemen respectively. The John Murray Medal and Scholarship were awarded to Mr. Albert Westland, as the most distinguished graduate of his year.

A MEDICAL MAN DROWNED AT MILLPORT.

THE attention of some men who were standing on the new pier at Millport on the morning of August 5th was attracted by a black object in the water. This was found to be the body of Dr. A. D. Kerr, who had recently commenced to practise in the town. When the discovery was made, the tide had ebbed, and the body lay in a shallow close to the pier. It is conjectured that the deceased gentleman, who was for some years a practitioner in Greenock, had accidentally fallen into the harbour.

POLLUTED STATE OF LINLITHGOW LOCH.

AT a meeting of the Local Authority of Linlithgow held last week, the Sanitary Inspector laid before the meeting a communication from the Board of Supervision regarding the present polluted state of the loch, accompanied by a report by Professor Douglas Maclagan, obtained at the instance of Her Majesty's Commissioners of Works. The report bore that Dr. Maclagan, along with Dr. Affleck, had examined the loch on the

27th July, and had since analysed a sample of the water. He had come to the conclusion that the proximity of a town to a still water so largely impregnated with decomposing organic matter must be detrimental to the health of the inhabitants, and especially so in dry and hot weather. The meeting remitted consideration of the matter to a committee, and also instructed the medical officer to draw up a report on the subject.

HEALTH OF LEITH.

THE public health returns of the borough of Leith for the past month show a death-rate of 99, equivalent to an annual mortality of 24 per 1,000. Of these deaths, 10 were due to zymotic diseases; the total number of births in the same period was 186, including 8 illegitimates.

REMARKABLE LONGEVITY.

IT has been ascertained that there are living within the bounds of the borough of Crieff, the population of which is about 4,000, no fewer than forty persons whose ages range from 80 to 96 years. Ten of that number are 90 years and upwards, their united ages amounting to 925 years; the ages of the remaining thirty persons vary from 80 to 88 years. The majority of these aged persons enjoy fair health, and are able to walk about.

THE CHAIR OF MEDICINE AT ST. ANDREW'S.

AT the last meeting of the St. Andrew's University Court, a communication was submitted from the Senatus Academicus intimating that the Chair of Medicine in the University had become vacant by the death of Dr. Oswald Home Bell. The Court proceeded to take into consideration the terms on which the Chair had been reconstituted and held since Dr. Reid's appointment in 1841, especially embodied in a minute of the University of that date. The Court unanimously resolved that these terms should be considered to be still in force to the following effect:—That "the Professor shall be a teaching Professor, who shall open classes to be regularly taught during the session of the United College for the instruction of those students who may apply to him in the principles of medicine and anatomy, with a view to make an *Annus Medicus*." The Court further found that the whole correspondence and supervision connected with the system of medical graduation in the University should be considered to be a part of the ordinary work of the Professor. And looking to these duties and the circumstances of the University, the Court were of opinion that the person to be appointed should not engage in the work of a general medical practitioner in the town or neighbourhood, but saw no objection to his engaging in a special or consulting practice.

GIFT TO THE UNIVERSITY OF ABERDEEN.

IT is reported that Dr. James Taylor of Greenskares, Banffshire, retired Deputy-Inspector of Hospitals and Fleets, has conveyed in trust to the University of Aberdeen his estate of Greenskares, for the purpose of founding bursaries in connection with the University for young men born in any of the parishes or educated in any of the schools of Banffshire. The bursaries are to be tenable for four years, of the annual value of £30, and to be determined by competition. The estate is rated in the county books at nearly £400 a year. All steps connected with the conveyance of the trust have been completed.

THE MEDICAL RELIEF GRANT FOR SCOTLAND.

SOME time ago, a memorial was forwarded by the Barony Parish Parochial Board of Glasgow to the Secretary of State for the Home Department, complaining of the small amount of the medical grant for the relief of the poor in Scotland, and of the mode in which it was apportioned. According to the present system, the sum of £10,000 is annually distributed for the medical relief of the poor in Scotland, while for England and Wales no less a sum than £127,000 is annually paid. The other point of complaint was, that the amount payable to Scotland was distributed among the Parochial Boards under the census of 1841, instead of under that of 1871. In consequence of this, from the increase of the population, the Barony and Govan parishes have been for

several years underpaid to the extent of £630 a year. These grievances, however, as will be seen from the following communication, are now likely to be remedied.

Whitehall, July 30th, 1875.

Sir,—Referring to the memorial by the Parochial Board of the Barony Parish of Glasgow, in regard to the amount and the mode of apportionment of the medical grant for the relief of the poor in Scotland, I am directed by the Secretary of State to inform you that the Lord Advocate has advised that next year the amount of the grant should be increased, so that it may bear a more accurate proportion to the English grant for the same object, and that the opinion of the Board of Supervision should be ascertained as to whether it would be proper that the apportionment should take place upon the footing of the census of 1871.—I am, sir, your obedient servant,

(Signed) HENRY SELWYN IBBETSON.

J. Maxton, Esq., 175, St. Vincent Street, Glasgow.

CLOSURE OF GOURROCK GRAVEYARD.

AFTER a prolonged investigation, the Sheriff has found that the Gourrock graveyard is so crowded with bodies, or "otherwise so conducted as to be offensive or injurious to health", and, therefore, a nuisance under the Public Health (Scotland) Act of 1873. He has accordingly decreed that it shall be prohibited as a place of sepulture. The reasons given for this judgment were that the ground was too small for the size of the town, that the graves were not far enough apart from each other, that their depths were insufficient to prevent noxious gases from flowing into the air on the occasion of interments; and that the graveyard could not be conducted, under the circumstances, so as not to be a nuisance to the public health.

THE CHAIR OF MIDWIFERY IN ABERDEEN.

WE learn that the Chair of Midwifery and Diseases of Women and Children in Aberdeen University, vacant by the death of Dr. Inglis, has been filled by the appointment of Dr. Stevenson of Edinburgh. Dr. Stevenson has made so good a name for himself in Edinburgh by solid work done in the department of the Chair, that his appointment cannot fail to be beneficial to the Aberdeen School and satisfactory to the profession in the north of Scotland.

IRELAND.

THE IRISH PHARMACY ACT.

THE King and Queen's College of Physicians have granted the use of apartments in the College for the meetings of the Council of the Pharmaceutical Society, established under the new Pharmacy Act.

STEWART INSTITUTION FOR IMBECILE CHILDREN.

THE half-yearly meeting of the Council of this charitable institute was held last week in Dublin, the chair being occupied by Lord James Butler. From the report of the Managing Committee, it is satisfactory to find that the establishment continues to progress satisfactorily, a large increase over that of the preceding six months having taken place, under the head of pupils' maintenance. The expenses of an institution of this kind are exceedingly heavy, and the last half-year's expenditure was in excess of the income; but a sum has been received on account of the lunatic asylum which covers any deficiency, and leaves a small balance to the credit of the charity. Since last report, six children have been admitted, and the Committee hope to hold another election shortly, as the number of applications for admission is daily increasing. Among those who have helped the institution within the past few months, the name of Mr. P. P. Law may be mentioned, having given a donation of £500 to the general fund; legacies have also been received of £100 to the general fund and £100 to the building fund from the late Miss S. D. Pilkington. The Committee have completed a contract for the erection of the new building at Palmerston, and the work is now proceeding satisfactorily, and it is expected that it will be ready for occupation in the course of next year.

DUBLIN DAIRY-YARDS.

SOME of our readers may recollect that in September 1871, Mr. Benson Baker published in our columns an account of a sanitary tour in Dublin. In that article, Mr. Baker specially referred to the nuisances arising from the Dublin dairy-yards. It appears that nothing has since been done to abate these nuisances, and that, in spite of the law, a large number, probably 5,000 dairy cattle, are kept "so as to be a nuisance and dangerous to health" within the city of Dublin. It appears that the sanitary authority of Dublin is as unwilling as ever to interfere with the liberty of the dairymen to injure their neighbours and poison Dublin babies with diseased milk, but that the authorities of Mercer's Hospital are determined not to have their patients injured, so have complained to the Local Government Board about a large and filthy dairy-yard next to the hospital. The Public Health Committee, as usual, say *non possumus*, but the matter having been brought under the notice of the Committee of the Dublin Sanitary Association, the following proceedings took place. A report recently issued by the Public Health Committee of the Corporation of Dublin relative to an alleged nuisance existing in immediate proximity to Mercer's Hospital, and arising from an overcrowded and filthy dairy-yard, having been brought under the notice of the committee, it was resolved:

"That this committee is of opinion that the keeping of cattle in such a locality is in itself a nuisance and injurious to health within the meaning of section 8 of 18 and 19 Vic., cap. 121 (Public Health Act, 1866).

"That it is desirable that the keeping of cattle in the proximity of a hospital or other inhabited building should at once be prohibited.

"That this prohibition is especially called for in the case of a hospital, the inmates of which are necessarily in a low state of health, and therefore unable to resist the inroads of preventable disease."

We have not space further to refer to this matter, but the authorities seem to be shielding the dairymen.

THE GOVERNORS OF THE DUBLIN HOSPITAL FOR INCURABLES AND POST MORTEM EXAMINATIONS.

At a meeting of the Governors of the Dublin Hospital for Incurables, held on July 28th, to consider a motion to rescind a resolution passed at last meeting against having *post mortem* examinations in the institution, there was a large attendance of governors, Frederick Stokes, Esq., in the chair. Dr. Baxter, in an able and elaborate speech, showed the advisability of, on certain occasions, having such *post mortem* examinations, and moved a resolution to that effect. He was seconded by Adam Findlater, Esq., J.P., and by Drs. Stewart, Mulock, and Granby Burke. On the other side, Mr. Thomas Dockrell gave a very striking illustration of bad effects in a case of which he had knowledge. Mr. Kelly and Dean O'Connell, and Mr. John Wardell, were also against the practice of dissections. Mr. Richard Allen was against the system generally, considering that the feelings of entering patients should be respected, but there were cases, he said, in which it might be necessary for the benefit of science and suffering humanity. The chairman particularly called the attention of those present to the fact that the institution was not an hospital in the hospital sense of the word. The doctors had in most cases exhausted all their skill and ingenuity on the cases before admission, and, in fact, they should be incurable before being entitled to a home in the institution. The chairman then moved an amendment to the effect that in no case, either by medical officers in the institution or by any other, should dissections be allowed, on pain of dismissal of any officer assisting. The resolution was put to the meeting and declared to be carried.

REPORT OF THE LOCAL GOVERNMENT BOARD FOR IRELAND.

FROM the annual report, 1874-75, lately issued, we learn some matters which may be of interest to our readers. During the year, the total number of deaths in the various workhouses amounted to 11,119; the number from fever being 762, whilst the mortality from small-pox caused 142 deaths. The deaths from this latter disease in all Ireland were 540, and the importance of early vaccination cannot be too

strongly impressed upon the sanitary authorities and the poor, because of the very large proportion of the entire mortality from small-pox that falls on the first five years of life; viz., four-fifths. It is, therefore, unsatisfactory to find a continuous decline in the number of infants vaccinated each year from 109,222 in 1872 to 100,061 in 1873 and to 96,850 in last year. The cases of medical relief afforded under the Medical Charities Act for the year amounted to 687,165, of whom 186,138 patients were attended to at their own homes, and the remaining 501,027 at the dispensaries of the various unions. As regards visiting-tickets, the Board has called attention to the matter on former occasions, in the hope of thereby procuring the abatement of an abuse in the issue of tickets for dispensary relief; and they consider that there must be far too great laxity in Leinster, Munster, and Connaught in issuing tickets and in cancelling those bestowed upon improper objects. The only check provided by the Medical Charities Act against the abuse, consists in the power given to dispensary committees to cancel such as they consider to have been bestowed on persons whose circumstances might enable them to procure the services of private practitioners. The abuse in question injures the private practitioners, the ratepayers, at whose expense the medicines and medical appliances are provided, and the recipient, who is demoralised by accepting gratuitous relief to which poverty gives him no just claim. During the year, midwives were appointed in four dispensary districts, and regret is expressed that the appointment of these most useful officers has not more frequently been applied for. The number of persons vaccinated amounted to 139,587, of whom 20,250 were over ten years of age: a proof that the wisdom of re-vaccination about the time of puberty is beginning to be understood by the lower classes. The expenditure for medical purposes came to £140,992, being an increase of £1,752 over that of the preceding year, and equal to 2.51d. in the pound on the Poor-law valuation of £13,449,553. In reference to the Public Health (Ireland) Act, 1874, the Board regret that much disinclination has been evinced to compensate the medical officers of dispensary districts for the additional obligations cast upon them by this Act, and state that considerable delay took place after the operation of the law in October last, before sanitary authorities, both urban and rural, could be induced to comply with their views in regard to the salaries. The Act has, however, notwithstanding the question of remuneration, been for some time past almost universally in operation; and the records of proceedings show great activity in the removal of nuisances and in other sanitary operations, especially in the supply of pure water to towns and villages, and the improvement of the sewerage.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE KENSINGTON MEDICAL OFFICER OF HEALTH.—At the last meeting of the Kensington Vestry, the salary of Dr. Dudfield, the medical officer of health, was by an unanimous vote, and in terms indicating a hearty appreciation of his services, raised from £300 to £400 *per annum*.

VACCINATION.—Mr. J. Acworth Angus, Public Vaccinator, Western District of the Newcastle-upon-Tyne Union, has been awarded for efficient vaccination the sum of £54 3s. from the Local Government Board. Mr. Jonathan Dalgliest, of the same district, has received £43 16s. This is the third time of receiving the grant.—Mr. W. A. Sumner, Public Vaccinator for St. Marylebone, has been awarded £149 18s. (second time) by the Local Government Board for the efficient manner in which vaccination has been carried on at his stations.—The Local Government Board have awarded to Mr. John Berry the sum of £19 1s. for efficient services rendered as Public Vaccinator for the Leyland District, Chorley Union.—Mr. T. Wells Hubbard, of Lenham, Kent, has been awarded a grant of £8 14s. by the Local Government Board, for efficient vaccination. This is the second time Mr Hubbard has received the extra grant.

FORTY-THIRD ANNUAL MEETING
OF THE
BRITISH MEDICAL ASSOCIATION.

Held in EDINBURGH, August 3rd, 4th, 5th, and 6th, 1875.

SECOND GENERAL MEETING, WEDNESDAY, AUGUST 4TH.

THE second general meeting of members was held in the Chemistry class-room of the University. Dr. FALCONER, the President of Council, took the chair at the opening of the meeting, in the temporary absence of the President.

Place of Meeting, for 1876.—Dr. FALCONER reported that, at the meeting of Council held in the morning, two places had been proposed for holding the next meeting of the Association. A large majority were in favour of the next meeting being held at Brighton in 1876, and that the President-elect should be Sir John Cordy Burrows. He moved a resolution accordingly.

Mr. HUSBAND (York) seconded the motion, and said he was sure it would be adopted.

Dr. MARSHALL (Clifton) said that, before this motion was carried, it would be right that the Association should be put in full knowledge of all the circumstances connected with that recommendation, and it ought to be mentioned also that the invitation from Brighton was by no means unanimous. Indeed, he was led to understand that a special request had been made that the meeting should not take place at Brighton next year. Considering the statement made by a considerable minority that there were local reasons which rendered it undesirable that the meeting of the Association take place at Brighton before 1877, and also taking into account the very cordial and warm invitation which they had had from the whole profession in Liverpool, the invitation being signed by between ninety and one hundred medical men without a dissentient voice, he felt warranted in proposing that the invitation from Liverpool be accepted for 1876 in preference to that from Brighton.

Dr. A. P. STEWART seconded the amendment. He thought it had been a wholesome and a very proper rule that, where there was any division of opinion in a proposed place of inviting the Association, the visit should not be to that town. [*Hear, hear, and applause.*] The reason why they had not met at Brighton some time ago was the same as that now urged—namely, that there had been a division of opinion as to the propriety of the Association being invited there. He did not think it would be becoming in the Association to accept an invitation where there was even the slightest diversity of sentiment among the members of the profession; and when they had an unanimous invitation from Liverpool, it was their duty to accept it.

Dr. A. B. STEELE (Liverpool), as representing the Lancashire and Cheshire Branch of the Association, which Branch comprised the town of Liverpool, appealed to Dr. Marshall and Dr. Stewart to withdraw their resolution. Liverpool had, he said, sent a cordial and unanimous invitation for next year, and they should be quite prepared to do the same thing another year when there was a vacancy; but they had no particular predilection in favour of 1876. [*Applause.*] A long time had elapsed since the Association met in Liverpool, and the profession there were beginning to think that their claim ought to be considered, but they did not desire to press it on the present occasion, and under existing circumstances. Whatever difference of opinion existed in Brighton now, might possibly, on a future occasion, exist in Liverpool; but, even should that occur, he thought they should always be able to bring from Liverpool a largely supported invitation. He was sure he was expressing the feelings of the Liverpool deputation when he asked that the amendment should be withdrawn, as Liverpool would be extremely sorry to be the means of introducing anything like dissension upon a point on which there ought to be unity. [*Applause.*]

Dr. MARSHALL, thus appealed to, said he was in the hands of the meeting, though of opinion that it would be very undesirable to go to a place where they were told they were not wanted.

The PRESIDENT said that, listening to the sounds that were emanating from the meeting, he thought a very large majority were inclined to go to Brighton. A little difference of opinion in the medical profession was a thing they need not at all wonder at. [*Laughter and applause.*] There might be reasons for the difference of opinion in Brighton which would disappear in a short time. There had been a difference of opinion in regard to the meeting of the Association in

Edinburgh at this time. He was one of those who had thought that the meeting there should be delayed for three years, that they might be able to present to the Association the new Infirmary in full working order, and the new medical College, where they would have had ample accommodation for their meetings, though they might even appear in the proportion of 2,500 members. But he had yielded to the wish that the Association should at once come to Edinburgh.

A show of hands was then taken, when a very large majority declared in favour of Brighton.

President of Council.—Dr. SIBSON (London) reported that the Council, at its meeting that morning, had resolved that Dr. Falconer, who had been for many years Treasurer of the Association, should be elected President of the Council, in room of Mr. Southam, whose term of office had expired.

The PRESIDENT said he had received a letter that morning from Mr. George Southam, which he thought was intended to be communicated to the meeting. In this letter, Mr. Southam expressed his regret that his continued illness, although somewhat alleviated, would prevent his being present at the meeting of the Association, and handing over personally his office to his successor. He had accepted the appointment with much diffidence, knowing the responsibilities attached to the office and the difficulties surrounding it; but he rejoiced at being able to congratulate the Association on its present prosperous condition. He reflected with pleasure on the facts that the membership had been increased from 4,200 to 6,100 during his tenure of office, and that the finances had been considerably augmented, and placed on a new and satisfactory basis. He spoke of the grants made for the encouragement of science and the incorporation of the Association. He referred to the large and important gatherings at London and Norwich, and to the arrangements made for holding an equally successful one at Edinburgh. He acknowledged the valuable assistance given by his colleagues in the Council, and concluded by expressing a hope that, if spared, he would be able to take the same active interest in the affairs of the Association he had hitherto done.

Vote of Thanks to Mr. Southam.—Dr. FALCONER moved: "That the best thanks of the Association are due, and are hereby given, to Mr. George Southam, F.R.C.S., for the able and courteous way in which he has discharged the onerous duties of President of Council for the past three years, and that he be and is elected a Vice-President of the Association." Only those who had been associated with Mr. Southam could form a true estimate of his attachment to his work, and of the thoroughness with which he performed it. They regretted extremely that circumstances had prevented him from completing his three years' term of office.

Dr. CHADWICK (Leeds) having seconded the motion, it was agreed to unanimously.

Vote of Thanks to Dr. Falconer.—Mr. ALFRED BAKER moved: "That the best thanks of the Association are due, and are hereby given, to Dr. Falconer for the way in which he has discharged the duties of Treasurer to the Association for the past nine years, and that he be and is hereby elected a Vice-President of the Association." When Dr. Falconer took the office of Treasurer, the condition of the Association was very different from what it was now, and the position of Treasurer was one which must have caused a constant call upon his time, and given him, indeed, much anxiety. Dr. Falconer had, besides, shown the greatest interest in the annual meetings of the Association, and in the conduct of its general business, and the honour of being a Vice-President had not been more thoroughly earned by any one. [*Loud cheers.*]

Sir J. C. BURROWS (Brighton) seconded the motion; and said that, when Dr. Falconer undertook the position of Treasurer, the Association was in debt, and he had the satisfaction of leaving it in a most satisfactory financial condition. The contrast was, indeed, great between the time when Dr. Falconer took, and when he resigned, the Treasurer-ship: then the Association was in a condition which caused alarm to its friends, now it had a balance at its banker's.

The PRESIDENT said he should take it that the motion was carried by acclamation. [*Loud cheers.*] He had a strong fellow-feeling with Dr. Falconer in this matter, as he (Sir Robert Christison) had held the same office in the Edinburgh University. He knew the great trouble it cost to keep out of debt, in particular in consequence of the many demands made upon the funds. He had hitherto been successful, like Dr. Falconer, in keeping the University out of debt, and of seeing its funds largely increasing year after year; and he hoped the same would be the case with the successor of Dr. Falconer.

Dr. FALCONER could not allow the motion to be carried without expressing his thanks to the Association for the appointment they conferred on him nine years ago. It was perfectly true that the finances at that time were very narrow, but they must not attribute to him the present

prosperous condition of the funds. They had had a good Finance Committee and a good Committee of Council; and he must not omit to mention the name of the General Secretary—[*applause*—] who had ably assisted him in every possible way. It was now his (Dr. Falconer's) duty to resign the office of Treasurer into the hands of the Association; and though he retired from the office with some regret, he found himself in a position in which he hoped his labours would still be useful to the Association. [*Applause.*]

Election of Treasurer.—Dr. SIBSON proposed that Mr. Husband of York be elected Treasurer of the Association for the next three years. [*Cheers.*] Mr. Husband had taken a very active and intelligent part in the affairs of the Association for many years past; and in Mr. Husband the Association would have a Treasurer who would be most careful of the funds—who would take care that every shilling due to the Association was collected and passed to the bankers, and every shilling in the bank was only expended in a proper direction. [*Cheers.*]

Dr. FALCONER seconded the motion, and said the appointment of Mr. Husband to this position would be most gratifying to him. [*Cheers.*] The motion was unanimously carried.

Mr. HUSBAND thanked the Association for the vote; and said that he feared that, now the Association was in a prosperous condition, demands of a heavy character for grants would be made; but he trusted that moderation would guide them in all things. He had now to propose a vote of thanks to Dr. Sibson for having taken up the duties of the office of Mr. Southam in his absence through illness, and for the able manner in which the work had been carried on. The motion was certainly only one of form; for everyone who came into contact with Dr. Sibson had for him the highest respect, and all knew the active part he had taken in the executive duties of the Association. [*Loud cheers.*]

Dr. CHADWICK (Leeds) seconded the motion; and said that, having known Dr. Sibson for many years, and having watched his untiring energy in all the affairs of the Association, it gave him great pleasure, and, indeed, he felt it an honour, to second the motion for a vote of thanks to this gentleman for these specially arduous services. [*Cheers.*]

The PRESIDENT asked that the vote should be carried by acclamation; and the meeting, with loud cheers, assented.

Dr. SIBSON acknowledged the vote.

Members of Committee of Council.—Dr. FALCONER reported the election of the following twenty members in the Committee of Council for 1876:—T. Clifford Allbutt, M.D.; J. W. Baker, Esq.; G. W. Callender, Esq., F.R.S.; A. Carpenter, M.D.; J. Matthews Duncan, M.D.; B. Foster, M.D.; E. L. Fox, M.D.; R. Harrison, Esq.; G. F. Hodgson, Esq.; T. Holmes, Esq.; J. R. Humphreys, Esq.; F. E. Manby, Esq.; E. Morris, M.D.; R. Quain, M.D., F.R.S.; T. H. Smith, Esq.; T. Underhill, M.D.; W. F. Wade, M.B.; A. T. H. Waters, M.D.; C. G. Wheelhouse, Esq.; and Eason Wilkinson, M.D.

Election of Honorary Members.—Dr. FALCONER moved that the Right Hon. John Inglis, President of the Court of Session, and Chancellor of the University; the Right Hon. Edward Strathearn Gordon, M.P., Q.C., Lord Advocate for Scotland; and the Right Hon. Lyon Playfair, M.P., be elected honorary members of the Association. [*Applause.*]

Sir JOHN CORDY BURROWS seconded the motion, which was unanimously agreed to.

The Admission of Lady Members.—Mr. PIMBERTON (Birmingham) said he wished to bring under notice the subject which he brought before the meeting on the previous day. It would be in the recollection of those present on the previous day that he referred to the names of two ladies who had their names down for papers to be read, and he presumed they were members of the Association. How they became so—whether by a vote of the Committee of Council, or by the vote of any Branch—he did not know; but he thought that on a question of this kind the voice of the Association should have been taken previously. [*Hear.*] He was not here to-day to say whether the matter commended itself to his judgment or whether it did not; whenever that became a matter of discussion, he should be prepared to express his own sentiments. As far as he read the rules of the Association, the members were only described as "he" or "him", and not as "she" or "her"—[*laughter*—]—and he therefore moved: "That it be an instruction to the Secretary, between now and the next annual meeting, to issue a circular addressed to every member of the Association, requesting an opinion, 'yes' or 'no', as to the admission of female practitioners to membership." [*Applause.*]

Dr. MARSHALL (Clifton), in seconding the motion, took occasion to say that the members of the Association must be content at their annual meetings to spend some little time in business as well as in mere complimentary speeches. The previous day they performed the astounding feat of passing their Report, which few knew and but few had read.

They left it to the Committee of Council to do their duty for them, and thanks were due to the Committee for doing it so well. Still, at these annual gatherings, the members ought as a whole to express their opinion and take account of what had been done. [*Hear, hear.*] During the past year, two ladies had been admitted members of the Association—whether by the Committee of Council or by a local Branch he did not know—but, in either case, he thought a great liberty had been taken with the rules of the Association. [*Hear, hear.*] This was a matter of which those residing in a place like Edinburgh could hardly estimate the importance to the members of the Association generally. In Edinburgh, they had their medical societies to discuss medical topics; but those living in large English towns had no other medical society but this, the British Medical Association, and the election of lady members changed the whole position. Now, without entering into the merits of the case, he thought so important a change should not have been taken without thoroughly ascertaining the feeling of the entire Association. [*Hear, hear.*] He knew he might be told that it was open to any individual Branch to say whether or not any member of the profession should be a member of that Branch; but, if it was the opinion of the Association that there should be female members of the profession, let that be ascertained, and then there would be an end of the question. [*Hear, hear.*] In his own neighbourhood, there was a lady practising medicine, whose professional acquirements commanded the greatest respect, and he was glad to say that she was meeting with much success. [*Hear, hear.*] But he should think that, if she became a member of the Bristol branch, their discussions would be hampered, and their social gatherings would become much more formal. If the general principle were carried, and women were to be eligible, this lady would be a most proper person, and he should be happy to propose her name. He hoped the general feeling of the Association would be taken on the subject, and he cordially seconded the motion.

Dr. A. P. STEWART stated that Mrs. Garrett Anderson, one of the ladies referred to, was admitted in due form by the Metropolitan Counties Branch, and he had great pleasure in proposing her name—[*hear*]—not that he approved of the general principle of lady doctors, but because the rules admitted any legally qualified member of the profession, and as she was a legally qualified member he did not see how she could be kept out from membership.

Dr. CARPENTER (Croydon) submitted that in point of order such a resolution could not be put. This meeting was held under the by-laws which required seven days' notice of a motion, and the agenda paper was to be the guide of the business to be transacted. It was therefore necessary to have notice given of this matter for discussion. They had on the previous day passed by-laws giving the Association a proper legal standing. They were now binding upon the Association, and one of these stated distinctly that seven days' notice must be given of any matter on the agenda paper. It was, therefore, not competent to pass that resolution at all. It could not be put from the chair legally, but must be retained to be discussed at the next meeting of the Association on notice given. Whatever resolution on this question was passed would not be binding upon the Association. He moved that Mr. Pemberton be requested to give notice of his motion.

Mr. ERNEST HART reminded the Association that the by-laws had been approved of by the Board of Trade for the purpose of the Association's incorporation. If it were competent for them to pass a resolution against lady members, it would be necessary to submit it to the Board of Trade for approval. This would be asking that a disability should be imposed upon the members, for they could now admit or refuse a legally qualified member of the profession, but the resolution against lady members would have them say that they should not have this power; that the power should be taken away. If at any future time a considerable number of ladies were practising they might wish to admit them to the Association, and they would then require to go and get the disability removed which some wished to impose.

The CHAIRMAN said he had taken the advice of those better able to judge than himself, and had ascertained that the motion was in order.

Dr. STEELE asked that the resolution should be again read. This was done; and Dr. Steele said the resolution involved no point whatever regarding the constitution of the Association. Surely the Association could give instructions to its Secretary without seven days' notice of the motion. He supported the motion; and when the Association obtained the information—the "yes" or "no" asked—it would be quite time to consider whether any alteration should be made in the constitution of the Association.

Dr. YELD (Sunderland) said the resolution ought to be put.

Dr. SIBSON said he did not see why such a motion should be objected to.

Dr. CARPENTER said he would withdraw his amendment; and the motion by Mr. Pemberton was then carried.

The Address in Medicine was delivered by Dr. WARBURTON BEGBIE. It was published at page 164 of last week's JOURNAL.

Dr. GAIRDNER (Glasgow) moved—

"That the best thanks of this meeting are due, and are hereby given, to Dr. Begbie for his able and interesting Address in Medicine." He commenced by addressing the assemblage as "ladies and gentlemen", saying that he was sure the good sense of the meeting would permit him to acknowledge the presence of lady members. [*Cheers.*] To him had been entrusted the duty of moving a formal vote of thanks to Dr. Begbie for his address [*cheers*]; and, though this motion was formal, it must be accompanied by some remarks. As to the address itself, the attentive faces around the theatre during its delivery were the criticism and the proof of its great excellence. [*Cheers.*] He did not venture to criticise further that address; but there happened to be one or two things to be said of Dr. Begbie, and no one could say them better than one who, like himself, had known Dr. Begbie under many circumstances. It so happened that they rose within a few years of each other—pursuing studies at the same time, lecturing together in the same place to students who very often passed over from one to the other, and this for fourteen or fifteen years; and it was simply a matter of fact that, in an atmosphere charged with medical storms, and under circumstances in which they differed in opinions, no shade or shadow had ever passed between them as regarded each other; and that was a circumstance upon which they could congratulate each other. [*Cheers.*] The speaker then dwelt upon the modesty of Dr. Begbie, as shown by the impersonal character of his address, when it might have been more personal. Dr. Begbie had shown that the ancients had not done all, but that they had left something for the moderns to do; and much of what they had not done had been accomplished by Dr. Begbie.

Dr. RUSSELL REYNOLDS seconded the motion, and said the address had been of a most interesting and instructive character. [*Cheers.*]

The motion was carried by acclamation, and the meeting closed.

THIRD GENERAL MEETING, THURSDAY, AUGUST 5TH.

THE third general meeting was held in the Chemistry Class-room of the University at 10 A.M.

Report of the Committee on Qualifications in State Medicine.—Dr. FALCONER presented the report.

Dr. A. P. STEWART (London) moved "That the report be received and adopted, and that copies be forwarded to the General Medical Council." He reminded the meeting that the subject came before the Association in consequence of a committee named on the motion of their much esteemed friend Dr. Rumsey, who was indefatigable in this work, but was now laid aside by illness. All knew how great had been that gentleman's services to public medicine; but in this last work before his illness he had done the profession the greatest possible service. [*Hear.*] The members of the Association were all as one upon the necessity of having specially trained men as medical officers of health. There were not at present a large supply of gentlemen specially qualified for this work, and they thought it right to look forward to the time when, by the five years' clause in the Public Health Act of 1872, it would fall to local authorities to make their appointments anew, with the view of providing for having a number of men thoroughly trained for the special purpose of attending to the public health. He thought this object would be well met by the articles which had just been read.

Dr. CARPENTER (Croydon) seconded the motion. The subject, he said, was one which must be acknowledged on all hands to be of great importance. It would be seen from the report that it was recommended that all medical men in attendance on the poor of this land should have a certain fair knowledge of the principles of public hygiene. Now, it seemed to him to be absolutely necessary that those who were most likely to come into contact with that class of disease which was styled the filth disease should have a fair knowledge of its causes, and that they, of all people, should have some knowledge of public hygiene. It was also considered necessary that every man who entered the portals of their profession should be capable of attending to the poor, and therefore it followed that every man should have a knowledge of the means for the prevention of disease. But it followed from this that it was not absolutely necessary that every medical man should make the subject of State Medicine a special study, because it was one, like every other branch of the profession, of which a life devoted to it would not give a man time to get a perfect knowledge; and it followed, therefore, that there was a necessity for officers who should devote special attention to the prevention of disease. It followed as a natural sequence from this, that those who took up the subject of State

Medicine for the prevention of disease should have an opportunity of obtaining a proper recognition of their knowledge after an examination held for the purpose. Having obtained such a certificate or diploma, the holder of it should be entitled to have an opportunity of registering it, and provision for all these points was included in the report. The report went to the root of the matter, and those who took up this subject would be likely to have their claims to recognition observed. The object of the Association now was to bring the subject under the attention of the Medical Council, who, he hoped, would consider it and carry the recommendations.

The motion was unanimously adopted.

Report of the Joint Committee of the British Medical and Social Science Associations.—Dr. A. P. STEWART presented this report, which is published at p. 202.

Dr. CHADWICK (Leeds) moved "That the report be received and adopted, and the committee reappointed, with power to add to their number". He said that those who had attentively listened to the report would find sufficient evidence in it that it vindicated itself, and that those who composed the committee had been diligently and assiduously discharging the functions committed to their charge. The report also justified the proceedings which the resolution of the Association contemplated, and showed that those gentlemen were ready and willing, when defence was required, to uphold the position they had previously occupied, and to allow no upstart statesman or other person, anxious to decorate himself in other than his own feathers—[*laughter*]—to usurp the position of critic with the words they have provided for him. [*Hear.*] The report concluded with a delicate and very proper reference to the loss of service the committee had sustained by the illness of Dr. Rumsey, one of its most active members, and a gentleman who had given a lifetime to the service of the public to the neglect of his own proper needs, illustrating the present position of affairs, and pointing the moral that it would be far better for such statesmen as those to whom he had referred to exercise their powers in providing something like an adequate remuneration to those who worked for the State, rather than taking the bread out of their mouths, and casting it to the dogs. [*Hear.*] Knowing Dr. Rumsey's private worth and the self-sacrifice with which he had so long devoted himself to the public service, he hailed with pleasure the reference made to him, which, while it in no way touched the high position he had attained, showed that they were not insensible to his merits.

Dr. T. CLIFFORD ALLBUTT (Leeds) seconded the motion, and said that, while the committee had avoided anything like a vexatious interference with the State affairs, it was apparent they were ready to take action when the opportunity offered. It was apparent now that, after all these years' fighting, the country was ready to accept the views of the Association as to the necessary qualification of the health-officers.

The motion was carried unanimously.

Scientific Grants.—Dr. FALCONER read the report of the Scientific Grants Committee (see page 202).

Dr. HEATON (Leeds) moved "That the report be received and adopted, and that a grant of £300 be made for the year 1876, in accordance with the recommendation of the report." He said the members of the Association knew so well what good work had been done as the result of the money grants made by the Association in former years, and they also knew so well the interesting and important matters which had been and were still under investigation, and the distinguished ability of the men to whom the various investigations were entrusted, that he was sure they all felt satisfaction in adopting this resolution. [*Hear.*]

Dr. MORTON (Glasgow) seconded the motion, and added that his only regret was the sum was not larger.

Mr. HUSBAND (York) said, in reference to the remark of the last speaker, that he believed the Association was willing to make as large grants as might be necessary for the investigations of science, and would do so when scientific men were unwilling to make those investigations themselves; but hitherto the grants made—and the facts reflected the highest credit upon scientific men—had been more than sufficient. [*Cheers.*]

The motion was carried.

The Address in Surgery was delivered by JAMES SPENCE, F.R.S.E., Professor of Surgery in the University of Edinburgh. It is published at page 189.

Dr. G. H. B. MACLEOD (Glasgow) moved "That the best thanks of the Association be given to Professor Spence for his able and interesting Address in Surgery."

Mr. SPENCER WELLS seconded the motion. Referring to the criticism which had been passed upon the antiseptic system, he said that the criticism must, from the spirit in which it had been given, result in the greatest good to science. [*Cheers.*]

After some remarks from the PRESIDENT, the motion was unanimously carried.

The Sections met in the afternoon.

FOURTH GENERAL MEETING, FRIDAY, AUGUST 6TH.

The Address in Physiology was delivered by WILLIAM RUTHERFORD, M.D., F.R.S.E., Professor of the Institutes of Medicine in the University of Edinburgh. An abstract of it is published at p. 198.

DR. BURDON SANDERSON moved

"That the best thanks of the Association be given to Professor Rutherford for his able and interesting Address in Physiology."

He said that the subject of vivisection, to which Dr. Rutherford had referred, was one which could not have been avoided, for it was a subject which at present moved the heart of certain classes in this country, more particularly in England, to an extent of which, he dared say, the Scotch people, less moved by emotional considerations, could hardly form a just conception. If there were any present who felt with those now engaged in agitating this question—and he had no doubt there were some present who felt a great deal for the poor animals, the last days of whose biographies were written in the tables before them—he would draw attention particularly to the statement made by Dr. Rutherford—namely, that in the experiments used in illustrating the processes of physiology for purposes of teaching, it was possible to demonstrate all the great facts—particularly that all those very great fundamental facts which had made the last twenty years more notable in the history of science, excepting those of Galen, Harvey, and Haller, might certainly be exhibited to students in animals altogether free from suffering. [Applause.] He was not quite sure, however, but that if Dr. Rutherford had omitted this his first argument, they should all have felt that the evidence he had given in the results of his researches would have carried conviction to all. If there were any objector present he should say, *Si monumentum queris, circumspice*. They had the results of his researches relating to questions in which they were all personally interested. The merit of such investigations no one was disposed at all to doubt, for it was by means of such investigations alone that they could attain an answer to that question which of all others interested them most in physiology, or in fact in any of the applications of science to medicine—the question, How did those agents, of which they had a vague knowledge by means of their experience in medicine, affect the great functions of the body? If there were any one present who thought this a question of very little importance, he could only say he was very sorry for such person: but he was sure there was no one who would so regard the question. [Cheers.] They all must feel that it was of immense importance to them that those truths which they were using daily in practice should be known to them, not merely by the knowledge they gained from experience, but also by that kind of knowledge which could only be obtained by the application of scientific methods of investigation; so that, as regarded the experiments of which they had been hearing an account, the only question was whether they had been performed with all that skill and judgment which were necessary in order that the best results might be obtained, in order to insure that for every grain of suffering which was inflicted on the animals which were the subjects of investigation, there might be got an equivalent of valuable knowledge. In the present instance, there could not be the slightest doubt that the knowledge gained was of the most important and most valuable kind: let them, therefore, put it down as their principle, that not only in this Edinburgh school—for it was already there—but in every other school of medicine also, the best methods of instruction should be used, the best apparatus and best experimenters employed, and the best teaching in physiology given. And then, if that was so, if they showed that they were doing their work in the most efficient manner, that they had before them an earnest purpose, that they had the highest possible motive—and there was no motive so high as the desire to increase knowledge for the benefit of the race—they might feel perfectly certain that those wise persons who were engaged at present in considering the subject would not only be guided by motives of humanity, but would also afford evidence of a sagacious consideration of the necessities and requirements of the case. He had himself the most profound confidence in the sagacity of the Legislature: not that that body never made mistakes, but generally, when it was well informed, it acted with judgment. All they had to do was, he believed, to secure that perfect information might be given to Parliament, and then they might be quite sure that, if there were legislation, the results would be such as would further and protect science, not tend to its destruction. [Applause.]

Dr. STRUTHERS (Aberdeen), in seconding the motion, said it was evident that results of the greatest importance to practical medicine were flowing from physiology; and it was equally evident that the great

science of physiology, in the hands of Dr. Rutherford, was most ably represented in this University. [Applause.]

Sir ROBERT CHRISTISON—I am sure you will authorise me to thank Dr. Rutherford for his most admirable paper, in which he has shown the cause of error in previous investigations. This is one of the fruits of vivisection. [Applause.] I understand there was a great shyness to broach this question of vivisection at the present meeting. I think that was a great mistake. It ought to have been made, in my opinion, a prominent question. It has been made a very prominent one with the public, who are completely in error in every respect regarding it—[applause]—and therefore we should have taken advantage of this great meeting to show where the truth lies, because the truth can be shown by a few of those who have been engaged in vivisection all their life, in a few words. And, late as it is, I will show you how I think I can put down the matter at once. I put it down by the system of cross-questioning, by which I have been a good deal tormented in the course of my life as a witness, and I shall give all those who are so desirous to put down vivisection, in brief words, a history of vivisection. When I went to Paris after graduating, and staying in London, I found all scientific Paris resounding with the recent experiments of Orfila on toxicology, by which he at once erected toxicology into the dignity of a science; and not only so, but, as is the invariable result of scientific investigation, he indicated most important practical results of his extensive experiments. I venture to say that there is not in the whole history of experimental medicine or vivisectionism so long, so numerous, and protracted a series of medical experiments as those performed by Orfila. But we know the result. Would any one wish that these experiments had not been made? I should think there can be but one answer to that question. [Applause.] A very short time before I went to Paris, in the same way, a great noise was made in the scientific world by experiments upon animals as to nutrition by substances which did not contain azote, upon which has been founded the accurate dietic treatment of gout and gravel. I would like to know if the gravelly people who are antivivisectionists would desire these experiments undone, and that we should still be in ignorance of the proper dietary for gravel. [Applause.] Coming to myself, I conducted a series of experiments at one time as to oxalic acid, in the course of which we found the cause of the difficulty that had been found in treatment with oxalic acid. We found that it produced two sets of consequences, one corrosion and irritation, and the other a most powerful action on the brain and spinal cord; and it was found that, while certain antidotes destroyed the corrosive action, they made no impression upon the action on the nervous system, which was the source of danger. When the acid was neutralised by an alkali, the irritation and corrosion were put an end to, but without altering in the least the effect on the nervous system or the tendency to death. Here, then, was pointed out the practical conclusion that, in the treatment of poisoning with oxalic acid, we must not use alkalies, but must take the chemical counter poisons which produced an insoluble substance. Would any one desire that these experiments should not have been conducted? [Applause.] Not long afterwards, in criminal trials, it came to my lot to inquire what was the duration of time between the administration of hydrocyanic acid and death. I made experiments upon animals, and found that when a large dose was given death ensued in four seconds. I do not suppose that these experiments would be much regretted, because they inflicted a very short torture upon the animals. Then, in the next place, there was a remarkable criminal action from an offence committed in the north of Scotland. The charge was that of poisoning with the laburnum bark, and I was consulted by the Crown in the matter. Curiously enough, nothing was known about the action of the laburnum bark. It was known that the seed, the flowers, and the leaves were poisonous; but no experiments had been made as to the bark. You might form a probable conclusion on the matter; but in a criminal prosecution a probability will not do. I therefore found it necessary to make experiments, and I found that when the bark was used it was a most powerful and most remarkable poison indeed. I do not suppose that any one would desire that these experiments had not been performed, when in this way you can either establish the guilt of a criminal or save a man's life. [Applause.] Then the Calabar bean was brought under my notice by some curious observations made by our missionaries in Old Calabar. I saw that it was a most dangerous poison to arrive here when people were in ignorance of its action. I resolved to make experiments, and I made, in the first instance, a very cruel experiment—as I suppose the antivivisectionists would believe—I made an experiment upon myself, and some of my friends thought that I had made a narrow escape. I did not think that my escape was very narrow, because I apportioned my dose with some care; but the effects were most violent. I then made a few experiments upon animals, and found that the effects upon them were identical. I therefore gave a short account of the matter, and

afterwards remitted the further investigation to my assistant, Dr. Fraser, who was led to discover, in the course of his inquiry, the very remarkable action of the Calabar bean upon the pupil. I do not suppose that any one would say that these experiments should not have been performed. [*Applause.*] But this is not all. A considerable time ago I thought I had invented a way by which I could settle what was at that time a very important and difficult question, whether certain medicines or poisons acted through the medium of the blood or through the nervous system. I made one experiment with a view to settle this question; but it was so cruel an experiment that I could not repeat it, and I abandoned the inquiry on account of the cruelty of the experiment. What are we to infer from this? That in a great school such as that of Edinburgh, where men of science know what they ought and what they ought not to undertake, nothing will be done that will be in the least degree offensive to public decency or public opinion; and further, that cruelty is just as disagreeable to vivisectionists as it is to all those super-delicate people who are offering twenty guineas reward for the discovery of a vivisectionist. [*Applause.*] You see that if the cruelty is greater than the object in view, the cruelty will prevail, and the investigation will be abandoned. [*Applause.*] I refer, lastly, to the investigation of Dr. Rutherford. We see what have been the results of that investigation. I do not say that Dr. Rutherford will say that these experiments were not cruel; but I will put against the cruelty the nauseousness of them to the investigator. Dr. Rutherford's experiments are fully justified by the importance of the conclusions to be drawn from them. The physiological results of these experiments are extremely interesting, but the practical results are of very great importance. [*Applause.*] I do not know how the antivivisectionists are to answer these statements; but I shall be very glad to see the answer as soon as they are prepared to give it. [*Loud applause.*]

CONCLUDING GENERAL MEETING.

The concluding general meeting was held in the Chemistry Classroom, at 1.30 P.M.; Sir ROBERT CHRISTISON, Bart., in the chair.

Report of the Parliamentary Bills Committee.—Dr. FALCONER presented the report of the Parliamentary Bills Committee, published at page 201, and moved its adoption.

Inspector-General SMART (Haslar) seconded the motion, and bore testimony to the efficiency with which reforms of the medical affairs of the Navy had been advocated by the Parliamentary Bills Committee, although some things yet required reform. He hoped that the Army would benefit equally by the same kindly efforts of this great professional Association.

Habitual Drunkards.—Sir ROBERT CHRISTISON brought under the notice of the meeting the following resolution, which had been passed by the Section of Public Medicine:

"That excessive intemperance is in many cases a symptom of a special form of insanity, which requires special treatment, with a view, first, to the recovery of those affected; and, secondly, to the protection and advantage of them and of society; that, in the present state of the law, such treatment is quite unattainable; and that it is desirable that legal provision be made to render it attainable." [*Applause.*]

Dr. A. P. STEWART (London) moved:

"That the Association desires to afford assistance in aid of the views expressed in the foregoing resolution, and that the resolution be referred to the Committee on Habitual Drunkards recently appointed by the Committee of Council."

Dr. CARPENTER seconded the motion; and said, if it were carried, it would help to strengthen the hands of those who were striving to carry on this movement.

Dr. PEEL RITCHIE (Edinburgh) said the resolution, and some of the remarks made in support of it at the meeting of the section on the previous day, would but lead the general public to believe that the Association considered that only a portion of the cases of habitual drunkards suffered from a species of insanity, and that such cases alone should be legislated for. He moved as an amendment:

"That drink-craving—whether the result of vice or the manifestation of a special form of insanity—frequently renders the subject of it unable to manage his own affairs, and therefore a nuisance to society; that such cases require special treatment; that the existing law, although it recognises the necessity for dealing with such cases by providing for the confinement of incapables, is insufficient; and that it is desirable that legal provision be made to render such treatment attainable."

The amendment was not seconded, and the motion was carried.

Medical Relief of the Poor in Scotland.—The following resolution of the Public Medicine Section was brought before the meeting:

"That, in the opinion of this section, the interests of the sick poor in Scotland would be furthered, and the system of parochial relief would be placed on a more satisfactory footing, if the following measures

of reform were adopted universally throughout Scotland—namely, that the cost of medicines be supplied by every Parochial Board, exclusive of the salary of the medical officer; that medical officers be removable from office by the Board of Supervision only; that the Parochial Board be required to superannuate such officers; and that the Parliamentary grant in aid of medical relief be placed on the same footing as in England and Wales."

Mr. HUSBAND moved:

"That Sir Robert Christison, Dr. W. T. Gairdner (Glasgow), Dr. Matthews Duncan (Edinburgh), Mr. Ernest Hart, Dr. Strachan (Dollar), Dr. Joseph Rogers (London), Dr. Littlejohn (Edinburgh), Dr. Mackay (Elgin), and Dr. Alex. Ogston (Aberdeen), be a Committee to carry out the resolution of the Public Medicine Section relating to the system of poor relief in Scotland, with power to add to their number, and that Dr. Matthews Duncan be appointed chairman."

He said he was sure that all who had listened to the interesting paper by Dr. Rogers would at once see the necessity of carrying out a change of the Poor-law system in Scotland.

Mr. ERNEST HART seconded the motion, which, he said, was one which would recommend itself with peculiar force to this meeting. He drafted the resolution in the Public Medicine Section as the result of the very able paper by Dr. Rogers of London, who was well known as an Irish and English Poor-law reformer of many years' standing—[*cheers*—] and as having devoted many years of his life to attain the ends necessary for a better Poor-law system. Some of these ends—as a higher rate of pay, freedom from removability, except with the sanction of the higher authority, and the system which should ensure for the sick poor a greater liberality of treatment—had been attained to a great extent in England and Ireland, largely through the efforts of Dr. Rogers; and the Association was anxious to introduce these improvements to Scotch soil. [*Cheers.*]

The PRESIDENT said that no one could refuse to admit this reasonable resolution, unless it were some bigoted members of local boards.

The resolution was unanimously passed.

Anæsthetic Agents.—The following resolution, passed by the Surgery Section, was brought before the meeting:

"That this section is of opinion that it is desirable that a committee be appointed to inquire into and report upon the use in surgery of various anæsthetic agents and mixtures of such agents; that it be part of the object of such committee to collect and summarise the experience of British practitioners of surgery and medicine as to the relative advantages of chloroform, ether, nitrous oxide gas, and other agents, and to carry out suitable experimental investigations; that Professor Lister of Edinburgh, Professor Pirrie of Aberdeen, Mr. Annandale, Dr. Thomas Keith, Dr. J. Duncan, Dr. M'Kendrick, and Dr. Crum-Brown of Edinburgh; Dr. Burdon Sanderson, Mr. Spencer Wells, Mr. Ernest Hart, and Mr. Clover, of London; Dr. Macdonnell and Mr. J. Morgan, of Dublin, be requested to act as a committee for this purpose, with power to add to their number."

Dr. CHADWICK (Leeds) moved:

"That, in accordance with the resolution now read, a committee on anæsthetics, consisting of the gentlemen whose names are given above, with power to add to their number, should be appointed, and that application for a grant be referred to the Scientific Grants Committee."

He said that, notwithstanding the benefit to the community that had resulted from the introduction of anæsthetics, much remained to be done in the investigation of this subject. They would, he was sure, have full confidence in a committee such as had been named.

Dr. RADCLYFFE HALL (Torquay) seconded the motion. It seemed proper, he remarked, that in this, the classic land of the origination of anæsthetics, to a great extent, any new discovery in that direction should have its origin at this meeting in Edinburgh.

The PRESIDENT said they must all wish that the efforts of this committee should be attended with success. They knew the great division of opinion that still subsisted on this question. They knew that a great revulsion had taken place in America, and that a change of opinion was occurring here amongst surgeons in favour of going back to the old anæsthetic in place of adopting the new one—chloroform. With regard to the others, they were only in probation. He thought they might look to the inquiries of this committee with confidence.

The resolution was carried.

Vote of Thanks.—Sir J. CORDY BURROWS (Brighton) moved—

"That the best thanks of the Association be given to the Right Hon. the Lord Provost, the Magistrates, and the Town Council of the City of Edinburgh, for their warm reception, and their liberal donation to the Reception Fund."

He took occasion to say that, by the vote of his Town Council, everything would be done to make the visit to Brighton a pleasant one.

Dr. GAIRDNER (Glasgow), seconded the motion, which was unanimously carried.

Mr. HUSBAND (York) moved :

"That the best thanks of the Association be given to the Senatus Academicus, to Principal Sir Alexander Grant, and to the Secretary, Professor Wilson, for granting the use of the University building for the meeting of 1875."

He would have added for giving the garden party, to which they were just about to proceed, but that had yet to come; and altogether, he said, the meeting had been a most successful one.

Dr. BRIGLEY (London) seconded the motion, which was at once agreed to.

Honorary Members.—On the motion of Dr. FALCONER (Bath), seconded by Sir J. CORDY BURROWS, the name of Principal Sir Alexander Grant was included in the list of honorary members, from which it had been accidentally omitted.

Votes of Thanks.—Dr. MARSHALL (Clifton) moved :

"That the cordial thanks of the Association be given to the President and Council of the Royal College of Physicians of Edinburgh, for their hospitality in receiving the members of the Association in the Industrial Museum."

Of all their meetings, he believed this had been the most successful, and one of the most charming features of it was the brilliant reception given to them by the College of Physicians.

The Rev. Dr. BELL (Goole) seconded the resolution, which was cordially agreed to.

Mr. DOLMAN (Derby) proposed the following resolution.

"That the best thanks of the Association be given to the profession and citizens of Edinburgh for their cordial and hospitable reception." The members had had the greatest kindness and cordiality shown to them since they entered the beautiful city.

Dr. BROADBENT (London) seconded the resolution, and it was then passed.

Dr. LYON PLAYFAIR moved :

"That the warmest thanks of the Association be given to Sir Robert Christison—[*applause*].—Dr. Matthews Duncan, Vice-Chairman of the Reception Committee, Professor Douglas Maclagan, Professor Turner, Chairman, and Dr. Underhill, Secretary of the Museum Committee, and to Dr. Gillespie, Chairman of the Entertainment Committee, for their indefatigable exertions to promote the success of the present meeting."

The mover said they had all conjoined to give the Association a warm welcome.

This was passed with acclamation.

Dr. HEATON (Leeds) proposed :

"That the warmest thanks of the Association be given to the Local Treasurers, Mr. Joseph Bell, Dr. R. Blair Cunynghame, and Dr. T. S. Clouston; and to the Local Secretaries, Dr. J. Batty Tuke, Mr. Chiene, Dr. McKendrick, and Dr. John Bishop, for their arduous labours in connection with this Association."

Dr. HENRY (London) having seconded this resolution, it was cordially agreed to.

Dr. KEALY (Gosport) moved :

"That the best thanks of the Association be given to the Directors of the Royal Asylum, the Directors of the Hydropathic Establishment, Melrose, and the Fife and Kinross Board of Lunacy, for hospitably entertaining the members of the Association."

Dr. NICHOLSON seconded the vote, and it was agreed to.

Dr. FALCONER then took the chair, and said he had a resolution to propose, the mere mention of which would ensure its acceptance. It was a vote of thanks to the President. [*Loud cheers.*] The motion was :

"The cordial thanks of the Association are due and are hereby given to Sir Robert Christison, Bart., for the able way in which he has presided over the forty-third annual meeting of the Association." [*Cheers.*] Dr. Falconer said Sir Robert had assisted the Association very greatly, and had settled his memory in all their hearts. He was sure they wished him all happiness and prosperity.

The meeting rose *en masse*, and carried the motion with rounds of cheers.

The PRESIDENT, in replying, said that some of his friends had been rather afraid of his undertaking the fatigues of the office; but he had done so with perfect confidence in his ability to go through the work of the week, and knowing that younger and more active friends in town would lighten the preliminary business for him as much as possible. [*Applause.*] And now he wished to say that he felt he had even profited by the work. [*Renewed applause.*] The only great labour he had had was that of answering the innumerable letters sent to him as President, many of which were very amusing. For example, a gen-

tleman had written to say that he expected members of the Association would be furnished with specimens of Scotch music, Scotch dancing, and Scotch dress. [*Laughter.*] Not knowing that the 79th Highlanders were in Edinburgh, he had answered this gentleman's note, telling him, with reference to his anxiety about Scotch dress, that, if he went into Princes' Street any afternoon, he was sure to meet half-a-dozen gentlemen wearing the kilt, all of them countrymen of his own from the south of England, on their way to the Highlands, believing they were wearing the national costume. [*Loud laughter and applause.*] As for the national music, he need not perhaps remind them that they had heard on the previous evening four pipers of the Queen's Edinburgh Volunteer Brigade; and, if that were not enough, they would have a chance of hearing twice that number of pipes in the course of that afternoon. [*Renewed laughter.*] In conclusion, he begged to return the members of the Association thanks for their kindness in appointing him their President, and for the attention with which they had received anything he had put before them in the course of their meetings. He should long remember this occasion; and, if any person of his age were afraid at any future time to undertake the duties he had undertaken, they might tell him that he should find the work act upon him as a powerful tonic, equal to any chalybeate—[*laughter and applause*].—and that he should, after the session, be equally prepared for the next operation, which was that of climbing the Highland mountains and rowing upon the Highland lakes. [*Loud and continued applause.*]

This concluded the business.

CORRESPONDENCE.

DEGREES AT THE UNIVERSITY OF CAMBRIDGE.

SIR,—In your report of the proceedings of the session of the General Medical Council for Friday, June 18th, there is a sentence which is calculated to mislead. I refer to the remark of Dr. Quain, "that he thought the visitors should have called attention to the fact that there was no examination in surgery at Cambridge". This, of course, must refer to the examination in medicine for the degree of M.B.

There is a very searching examination in surgery and midwifery for the degree in surgery, which can be taken only after passing the examinations for the M.B. degree. Now, I think that there are some very good reasons why there should be no examination in surgery for the degree of M.B. If surgery is to be required, why not also midwifery? Thus two additional subjects would be introduced into this examination.

We may regard the standard of any pass examination as representing the utmost amount of knowledge which can be got from the lowest of those who pass; and, although it is a good thing to raise this standard and to keep it as high as possible, yet we know very well that it cannot be forced up beyond a certain point. Supposing, then, that this limit is attained in the case of the M.B. degree at Cambridge, and that another subject is introduced into the examination, I maintain that the standard in medicine will necessarily be lowered, and this degree, instead of showing that the man has possessed the utmost amount of knowledge of medicine which can be obtained by the highest class of men who enter the profession, will show perhaps that he knows many things, but has not specially excelled in medicine, as the title of his degree might imply.

If the standard for this degree can be raised at all (which I very much doubt), let it be in medicine. It has ever been one of the principles of the University of Cambridge that clear and accurate knowledge of one subject should be preferred to a little knowledge of many; and I sincerely hope that this principle will be maintained in our medical and surgical examinations, as I believe it has been hitherto.

I am, sir, yours truly, A. WANKLYN, M.B., M.C.

Leek, June 28th, 1875.

ETHER AS AN ANÆSTHETIC.

SIR,—For the safe and efficient administration of ether-vapour for producing anæsthesia, several things are needful to be known and remembered, which are chiefly these.

1. That kind of ether should be used which is fittest for the purpose of inhalation, and this is the pure anhydrous washed ether, of specific gravity .720, free from alcohol and water. Robbins' "ether for local anæsthesia" is a dangerous compound for inhalation. It was this last which was used in a case recently fatal at Manchester.

2. The ether should be given in such a way that the inhalation may

be commenced with a very weak vapour, which, after a few inspirations, can be rapidly increased in strength. If we begin with too powerful a vapour, the air-passages are intolerant of it, and the patient resists the inhalation; but, after a few moments' inhalation of a weak vapour, its strength can be increased without inconvenience and the patient rapidly brought under its influence. I think a cone of felt, covered with thin mackintosh, is the simplest and best apparatus for this purpose.

3. Stimulants should not be administered before the inhalation. Ether is itself a stimulant, and can be safely given in cases where there is great depression; but, as Mr. Clover has pointed out, it is very undesirable to have alcohol in the stomach when ether is being inhaled.

4. Whatever danger may belong to ether, has relation to the respiratory function; the breathing should, therefore, be watched. And I may add, it is desirable so to place the head of the patient that the saliva (the secretion of which is increased by the ether) may run out at the corner of the mouth rather than into the trachea.

The superior safety of ether over chloroform is not, I think, doubted by any one; and in my paper, read at the Royal Medical and Chirurgical Society in 1871, I pointed out other advantages which it possesses. A greatly extended experience has confirmed the opinions I then expressed; and, with your permission, I would repeat the words with which I concluded that paper.

"It has been said that one great advantage of anaesthetics is the mental tranquility with which a person is enabled to regard the prospect of an operation which is to be robbed of its pain; but I am not sure that this is not often counterbalanced by the dread of an anaesthetic which it is known may of itself prove fatal. It seems to me, therefore, that for this, as for the other reasons herein advanced, we should avail ourselves of an anaesthetic so safe as ether appears to be, rather than of one, however much it has to recommend it, to which is attached the danger which unquestionably pertains to chloroform."

I am, sir, your obedient servant,

J. WARKINGTON HAWARD.

Montagu Street, Portman Square, July 28th, 1875.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Saturday, August 7th.

Sanitary Law (Dublin) Amendment Bill.—This Bill was read a second time.

Public Health (Scotland) Act (1867) Amendment Bill.—This Bill passed through committee.

Wednesday, August 11th.

The Royal assent was given by Commission to the following Bills: Pharmacy, Public Health, Sale of Food and Drugs, Metropolitan Board of Works (Loans), Department of Science and Art, Public Health (Scotland) Act, 1867, Lunatic Asylums (Ireland), Amendment Local Government Provisional Orders Confirmation.

HOUSE OF COMMONS.—Thursday, July 29th.

Public Health Bill.—The Lords' amendments to the Public Health Bill were agreed to.

The Sanitary Law (Dublin) Amendment Bill passed through committee.

Female Medical Practitioners.—Mr. COWPER-TEMPLE called attention to the exclusion of women from registration as practitioners of medicine, and asked whether the Government meant to introduce any measure on the subject in the next session of Parliament.—Lord SANDON replied that the matter was first brought under the notice of the Government at the beginning of the session; but, before forming an opinion respecting it, they decided on referring it to the General Medical Council. That body met in June; and, after carefully considering it, addressed a letter to the Lord President of the Council for Education. During the recess, the Government would give the question their best consideration, and state next session whether they thought legislation desirable or not; and, if desirable, they would explain their views and say whether they would move in it themselves or support the right honourable gentleman in doing so.—Mr. RUSSELL GURNEY approved of the course taken by the Government in consulting the General Medical Council, and was glad to find that the Council had expressed a decided opinion that women ought no longer to be excluded from the profession. After such an opinion, he could hardly imagine that they could remain without some legislation.

Tuesday, August 3rd.

Medical Department of the Navy.—In answer to Mr. Forsyth, Mr.

HUNT said the Director-General of the Medical Department of the Navy was appointed for a fixed term, which would expire on the 5th of April, 1879.

MILITARY AND NAVAL MEDICAL SERVICES.

ARMY MEDICAL DEPARTMENT.—The following is a list of army medical candidates, who were successful at both the London and Netley examinations, having passed through a course of instruction at the Army Medical School, Netley.

Marks.		Marks.	
1. Charlesworth, H.	497	5. Mapleton, E. A.	399
2. Dartman, J. C.	489	6. Kelsal, E. W.	380
3. Le Mottee, G. H.	484	7. O'Sullivan, D.	375
4. Chester, W. L.	469	8. Sharpe, C. E.	293

NAVAL MEDICAL SERVICE.—List of naval medical candidates, who were successful at both the London and Netley examinations, having passed through a course of instruction at the Army Medical School, Netley.

Marks.		Marks.	
1. Marsh, H. F.	477	6. Lynch, A. R.	318
2. Strickland, H. G. T.	470	7. Dudley, J.	284
3. Patterson, A.	465	8. Sherlock, J. J.	240
4. Roman, M.	451	9. Bockey, D. B.	238
5. McAdam, J. A.	435		

REGIMENTAL SYSTEM VERSUS UNIFICATION.

SIR,—The pains you have taken to advocate the cause of the Army Medical Department claim the warmest acknowledgment from its members; and, as you have evinced every disposition to hear patiently the views which have been propounded in favour of either form of organisation, I venture to put forward my plea for the system in which I have grown grey.

At the outset, comes the objection that regimental medical officers were filling the papers with their complaints, whilst unification merely loomed as a shadowy form in the future; but, in fact, setting aside the minor remonstrances about cocked hats and gold belts, which were the mere rose-leaves beneath our beds, nearly all these complaints were founded on the grievances resulting from the systematic and deliberate infringements of the spirit of the Royal Warrant, which, giving us relative rank, declared that it should carry with it all precedence and advantages pertaining to the substantive rank, excepting, of course, actual command. Had that warrant been honestly carried out, and had some provision been made for the flow of promotion in the junior rank, the block in which had probably scarcely been foreseen when that warrant was promulgated, there would have been to this day comparatively few contributions to your correspondence columns on the grievances of the department. From the first, however, covertly or openly, many of the advantages nominally conferred by that warrant were really either withheld or covertly or openly rescinded or evaded. Position at mess was never entirely accorded in correspondence with relative rank, but in some regiments commanding officers did allow medical officers, when senior, precedence next to themselves. Then the Commander-in-Chief decided that no second place was to be recognised, and finally deprives us of any place at all; so that I have had the satisfaction in my own regiment of seeing the mess-sergeant come into the ante-room, and, entirely ignoring me, who paid more in mess subscriptions than any other officer, announce to a subaltern that dinner was upon the table: not a very important thing, you will probably think, to complain about, but a blister on one's foot, or a toothache, though they do not procure much sympathy for the sufferer, may cause him quite as much annoyance as graver maladies. A similar system was pursued with reference to mixed boards. The Royal Warrant entitled the medical officer to sit as president of any board or committee (courts-martial, etc., specially excepted) when he was senior to the other members. This was met by a circular, directing that committees were to be so constituted that the non-combatant never should be senior, and finally he was ejected from such committees altogether, and is now called upon to sign his name to the proceedings as "attending" without having a vote in the matter.

Similar tactics have been adopted with regard to quarters, allowances, and, finally, forage; so that the relative rank is now little more than a mockery. Complaints on subjects like these cannot justly be laid to the score of the regimental system; and one of the greatest causes for the extreme disgust and discontent with which the late warrant has been received, is the perception that it is really a settlement of all the points on which complaints were previously made in a sense unfavourable to the interests of medical officers.

Now, under the guise of unification, we find ourselves compelled to contribute to messes and bands with which we have no further connection than that of paying for them. What, then, are the advantages of unification? A pamphlet just circulated in India, and which will probably be in your hands ere this, written by a gentleman whose English proves him to be an Irishman, and whose startling suggestion, that all surgeons in future admitted to the service should be compelled, during their first five years, to contribute to a widows' fund, irresistibly leads to the conclusion that he is a Benedict, gives a glowing programme of the future of the *Royal Army Medical Department*.

Station messes of medical officers are to be forthwith established in all large stations, and a series of hospitalities (dinner-parties and occasional balls, I presume) inaugurated and carried on in the name of the senior medical officer and his subordinates; and thus we rise at a bound from the hangers-on of regiments to be the entertainers on our own account of the corps which formerly slighted our pretensions, but which for the future will look upon the Royal surgeons as they regard the Royal Engineers. Mess-houses will, of course, be erected, and the Government contribution of £10 for each member as a contribution towards mess expenses, he is quite confident, only has to be asked for to be given in India, in lieu of that Regent's allowance, which we should, of course, draw at home. What touching confidence in the liberality of that Government which has always shown itself so ready to loosen its purse-strings on our behalf! I believe that some such dream as this is really at the bottom of the confidence which the very few members of the department who believe in unification feel in our future prospects: the "cream of the medical officers of the army", "the most thoughtful men of the department", as they delight to call each other. Verily, the departmental milk must be poor in cream; for I have not met more than two or three men who did not look upon unification as a delusion, and they so far resembled cream, that they had risen into snug births, where unification could do them no harm. A simple reference to the Army List, and a calculation of the number of stations in which a mess of half a dozen medical officers could by any possibility be maintained, ought to be sufficient to dissipate such a dream for ever. Remember that the one medical officer attached to each regiment would, of course, be lost to the medical mess; and that, of the senior officers, a large proportion are married, and have little messes of their own to look after. The one military medical mess in existence at present, though magnificently housed, and, I doubt not, well managed, is not, I believe, of that cheery pleasant character to render its members particularly anxious to see similar institutions multiplied elsewhere. I dwell thus upon this question of messes, because it is really of the very greatest importance as regards not only the comfort, but the *morale* of the surgeons of the future. In the great majority of cases, a military medical mess, even on the most modest scale, is an impossibility. When surgeons-major have lost their regimental positions, and young surgeons are attached as excrescences to messes to which they will not really belong, there will be no one to press upon mess-presidents the propriety of making solitary medical officers honorary members of their messes, and regimental medical officers well know how often such reminders were useful.

What, then, will be the position of the young surgeon under this new system of an unified department? He will be sent to an average station, where there are perhaps three or four other medical officers, of whom one or two will be married and another probably dining at a regimental mess. His days, of course, he will spend in laboriously improving his professional knowledge, and perfecting himself in the employment of the microscopes and other scientific instruments of research with which a liberal government will doubtless stock all station-hospitals. His meals, prepared by a hard-fisted soldier, he will eat in solitary splendour on a barrack-table, in the one squalid room which is to serve him as study, dining, and breakfast room and bed-chamber; or he may prefer to eat cheap dinners at second-class inns, for the purpose of enjoying the pleasant society which he is there likely to meet. Is such a course of life likely to train men to add dignity to the reorganised department? What other prospect, I ask, is before them?

Economy is supposed to be one of the recommendations of the new scheme. Two medical officers will henceforth do the work of three, and I admit that this may really be carried out in time of peace; but the whole object of maintaining an army at all is to be ready for war. Where, then, will you get your medical officers? Remember that, whilst a soldier may be made tolerably useful in from six to twelve months, a course of study extending over four or five years is absolutely necessary to produce a medical officer. If the demand in time of peace fall off, the supply correspondingly diminishes; and, on an emergency, no sudden increase would be possible without offering

terms large enough to attract men from civil practice, and, as was done before, taking no note of quality in the demand for quantity.

Then the foreign service is to be equalised. Had any endeavour been made to equalise foreign service under the old system, in so far as circumstances allowed, we might have some confidence in the result of a new system putting more power into the hands of the head of the department; but it is well known amongst ourselves that a long spell of service at home was treated as a valid reason why a man should not be sent abroad, and that one whose previous service had been all out of England was not considered to be entitled to remain at home a day longer on that account.

As regards the regimental system, in spite of the assertions and misrepresentations of the author of the pamphlet to which I have referred, there were few posts where a man was more thoroughly master of his position than was a regimental surgeon in his own hospital. The colonel was theoretically responsible for the hospital as for everything else to the regiment, but he held the surgeon responsible, and, as a general rule, never thought of interfering, excepting where there was gross or palpable mismanagement. Nominally, he appointed the sergeant and orderlies; but it was usually done on the surgeon's nomination, and he would never think of removing either one or the other without the surgeon's concurrence.

Another merit of the new scheme is, that all men are to be either in hospital or at duty: light duty, or being excused particular duties, is henceforth to be unknown. This, so far from being an improvement, I look upon as a senseless retrogression. A man must encumber the hospital because he has a whitlow and cannot shoulder his rifle smartly enough, or because he has a boil on his neck and cannot button his collar! In civil life, if a man cannot do all his work, he does what he can. Why should not a soldier do the same? The hospitals will be filled, and no good done either to the service or to the individual.

In conclusion, I will say, Restore us to our regiments, and, instead of abolishing the regimental system, remove those grievances which worried medical officers, and were simply the outcome of the jealousy of the military officers at the sudden change made in the position of men whom they had hitherto looked upon as mere useful appendages to their regiments.—I am, sir, your obedient servant,
India, April 14th, 1875.

A SURGEON-MAJOR.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following members were elected Fellows of this College at a meeting held last week.

Adey, Charles Augustus, M.D. Edin., St. Leonard's
Burdet, Charles Foster, M.D. Aberd., Clifton, Bristol
Cortfield, William Henry, M.D. Oxon., Bolton Row
Falls, William Stewart, M.D. St. Andrew's, Bournemouth
Fearnside, Henry, M.B. Lond., Preston, Lancashire
Matterson, William, M.D. St. Andrew's, York
Monckton, Stephen, M.D. Lond., Maidstone
Montgomery, James Barclay, M.D. Glasgow, Penzance
Ord, William Miller, M.B. Lond., Brook Street, Grosvenor Square
Semple, Robert Hunter, M.D. St. Andrew's, Torrington Square
Shepherd, Augustus, M.B. Oxon., Seymour Street, Portman Square
Thorne, Richard Thorne, M.B. Lond., Inverness Terrace
Tuke, Daniel Hack, M.D. Heidelberg, Falmouth

UNIVERSITY OF LONDON.—First M.B. Examination. Pass List. Entire Examination.

First Division.

Benham, Frederick Lucas, University College
Dunbar, James John Macwhirter, St. George's Hospital
Gadsby, John Topham, University College
Goodchild, Francis, St. George's Hospital
Hayward, Thomas Ernest, St. Bartholomew's Hospital
Henderson, George Courtenay, University College
Lyddon, Richard, St. Bartholomew's Hospital
Miller, Richard Shalders, University College
Nicholson, John Francis, St. Thomas's Hospital
Frowse, Arthur Bancks, Liverpool School of Medicine and St. Mary's
Eye, Walter, St. Bartholomew's Hospital
Taylor, Harold Gilbertson, King's College
Willcocks, Frederick, King's College

Second Division.

Blamey, James, University College
Bond, James William, University College
Bott, Henry Septimus, University College
Bury, Judson Sykes, University College
Cattle, Charles Henry, Leeds School of Medicine
Claremont, Claude Clarke, University College
Collins, William Edward, St. George's Hospital
Davy, Henry, Guy's Hospital
Garbutt, John Gilliot, M.A., St. Mary's Hospital
Gristock, William, University College

Horrocks, Peter, Guy's Hospital
 Hudson, James, University College
 Hunter, Christian Bernard, University College
 James, Alfred, University College
 Joll, David Burnett, University College
 Lloyd, David, University College
 Lubbock, Montague, Guy's Hospital
 Mears, William Pope, London Hospital
 Mortimer, John, University College
 Nicholson, William Rumney, University College
 Paddison, Edmund Howard, Guy's Hospital
 Sedgefeld, Arthur Robert Wyatt, King's College
 Shaan, William Frederick, Liverpool School of Medicine
 Silcock, Arthur Quarry, University College
 Stevenson, Leared Henry, Guy's Hospital
 Thomas, John Raglan, St. Bartholomew's Hospital
 Watson, Charles John, University College
 Weiss, Hubert Foveaux, St. Bartholomew's Hospital
 Wiglesworth, Joseph, Liverpool School of Medicine
 Wilkinson, Arthur Thomas, B.A., B.Sc., Owens College School of Medicine

Excluding Physiology.

First Division.
 Lowe, Howard Griffiths, Queen's College, Birmingham
 Plumbe, Samuel Thomson, St. Bartholomew's Hospital

Second Division.
 Beevor, Charles Edward, University College
 Blake, William Henry, University College
 Drysdale, Alfred Edgar, University College and Liverpool Infirmary
 Rosckel, Waldemar Joseph, St. Bartholomew's Hospital
 Smith, Herbert Urmsen, St. Thomas's Hospital

Physiology only.

First Division.
 Cross, Francis Richardson, King's College
Second Division.
 Bigger, Samuel Ferguson, Liverpool Royal Infirmary
 Champneys, Henry Laurence, Guy's Hospital
 Finch, Alfred, Guy's Hospital
 Hellier, John Benjamin, Leeds School of Medicine
 Smith, Thomas Bower, University College

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At a meeting of the Council held on the 9th instant, the following gentleman was admitted to the Fellowship.

Poppleton, Joe, L.S.A., of Bradford, Yorkshire; diploma of membership bearing date October 5th, 1873

UNIVERSITY OF DUBLIN: Degrees and Licences in Medicine and Surgery, June 30th, 1875.—Master in Surgery (*honoris causis*).

Colles, William

Bachelors in Medicine.

Baker, Arthur W.
 Cochrane, Robert S.
 Clibborn, William
 Fox, Allan Nesbitt
 Fisher, Thomas Carson
 Goodman, Francis G.
 Halpin, Nicholas John

Hart, William Hume
 Hayes, Thomas Crawford
 Montfort, Archibald Henry
 Power, John Joseph
 Smyth, William B.
 Stanley, William H. R.
 Walter, William

Bachelor in Surgery.

Hunter, William L.

Masters in Surgery.

Banks, Alfred
 Bleakley, Alexander S.
 Baker, A. W. W.
 Fisher, Thomas Carson
 Griffith, James de Burgh
 Hart, William Hume

Halpin, Nicholas John
 Moran, James J.
 Nixon, George Michael
 Power, John Joseph
 Stack, Richard T.

Doctors in Medicine.

De Montmorency, Hon. Arthur Hill
 Trevor
 Elliott, Christopher
 Hayes, Thomas Crawford
 Hurford, Cedric Herbert
 M'Munn, Charles Alexander

Meredith, John Edward
 Newman, Horace Townsend
 Oulton, William H.
 Tredenack, William M.
 Woods, Oscar Thomas

Licentiate in Medicine.

Byrne, Edward H.
 Lane, John

O'Carroll, Martin

Licentiate in Surgery.

Byrne, Edward H.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, August 5th, 1875.

Dudgeon, John Matthew, Dalbeattie, Kirkcudbrightshire
 Edwards, Edward Joshua, Llansanffraid, Montgomeryshire
 Highton, Thomas, St. Thomas's Hospital

The following gentlemen also on the same day passed their primary professional examination.

Allen, M. H. L., St. Mary's Hospital
 Bennett, Arthur, London Hospital
 Bowen, Owen, Guy's Hospital
 Cree, Percy K., Middlesex Hospital

Gillam, Thomas H., St. Bartholomew's Hospital
 Goode, Charles F., St. Mary's Hospital
 Hallsworth, F. A., St. Bartholomew's Hospital
 Harper, Robert R., St. Thomas's Hospital
 Jaquet, J. L., Westminster Hospital
 Johnstone, William, University College Hospital
 Joseph, S. W. L., St. Thomas's Hospital
 Moorhouse, Edward D., Owens College, Manchester
 Stephens, Charles, Liverpool Hospital
 Walker, William, Middlesex Hospital

MEDICAL VACANCIES.

The following vacancies are announced:—

BOURNEMOUTH GENERAL DISPENSARY—Resident Medical Officer and Secretary. Salary, £120 per annum, with furnished apartments, coals, gas, and attendance.
 BURY UNION—Medical Officer for the Radcliffe District.
 CARNARVON UNION—Medical Officer for the Llandwrog District. Salary, £60 per annum.
 CHRISTCHURCH UNION—Medical Officer for the Eastern District. Salary, £60 per annum, and fees. Applications on or before August 10th.
 CROYDON GENERAL HOSPITAL—House Surgeon. Salary, £60 per annum, with board and lodging. Applications on or before the 15th instant.
 DAVENTRY UNION—Medical Officer for the Workhouse and the First District.
 DORE UNION—Medical Officer for the Knatclough District and the Workhouse.
 DUDLEY DISPENSARY—Resident Medical Officer at Michaelmas.
 HAY UNION—Medical Officer for the Herefordshire District.
 KEYNSHAM UNION—Medical Officer for the Keynsham District.
 LEEK UNION—Medical Officer for the Norton District.
 LYMINGTON UNION—Medical Officer for the Hordle, Lympington, and Milford Parishes.
 MALDON UNION—Medical Officer for the Southminster District.
 NORTH STAFFORDSHIRE INFIRMARY—House-Physician. Salary, £80 per annum, with board, lodging, and washing. Applications on or before the 15th instant.
 NORWICH DISPENSARY—Salary, £120 per annum, with unfurnished residence and apartments.
 ORMSKIRK UNION—Medical Officer for the Second District.
 PEMBROKE UNION—Medical Officer for the First District.
 PLOMESGATE UNION—Medical Officer for the Aldburgh District.
 ROYAL SOUTH HANTS INFIRMARY—House-Surgeon. Salary, £80 per annum, with board, lodging, and washing. Applications on or before September 6th.
 ROYSTON UNION—Medical Officer for No. 5 District. Applications on or before September 6th.
 ST. IVES UNION—Medical Officer for the Warboys District.
 STAINES UNION—Medical Officer for the Shepperton District.
 UCKFIELD UNION—Medical Officer for the Maresfield District.
 WARWICK COUNTY LUNATIC ASYLUM—Second Assistant Medical Officer. Salary, £100 per annum, with board, lodging, and washing.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

COTTLE, Wyndham, B.A., F.R.C.S. Eng., appointed Assistant-Surgeon to the Hospital for Diseases of the Skin, *vice* Waren Tay, F.R.C.S. Eng.
 CRABB, James, M.B., C.M., appointed Resident Surgeon to the Royal Hospital for Sick Children, Edinburgh.
 *DUDLEY, J. G., M.A., M.D. Cantab., M.R.C.P., appointed Consulting Physician to the North London Hospital for Consumption and Diseases of the Chest.
 LEFTWICH, Ralph W., M.B., C.M., appointed Resident Medical Officer to the East London Children's Hospital.
 TAY, Waren, F.R.C.S. Eng., appointed Surgeon to the Hospital for Diseases of the Skin.
 *THOMPSON, James, A.B., M.B.T.C.D., L.K.Q.C.P.I., M.R.C.S., etc., appointed Police Surgeon for the Borough of Royal Leamington Spa.
 TOMKINS, H., L.S.A., appointed Physician's Assistant to the Manchester Royal Infirmary, *vice* C. E. Smith, L.R.C.P. Ed., appointed House-Surgeon.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTH.

MACCARTHY.—On August 3th, at Thomhall, Polmont, N.E., the wife of D. A. MacCarthy, M.D., Retired Staff-Surgeon, Royal Navy, of a daughter.

MARRIAGES.

ATKINSON-POSGATE.—On Friday, August 6th, at St. Mary's Parish Church, Reading, John Furniss, son of the late William Atkinson, of Broom Grove, Sheffield, to Clara Elizabeth, younger daughter of W. T. Posgate, late of Heathfield, Halifax, and niece of William Exall, of Holy Brook House, Reading.

BARRY - EXALL.—On Friday, August 6th, at St. Mary's Parish Church, Reading, Frederick William Barry, M.B., eldest son of William Barry, of Scarborough, to Ellen Montague, elder daughter of William Exall, of Holy Brook House, Reading.

SIMS - FULLER.—On August 5th, at St. Thomas, Portman Square, by the Rev. Arthur Sinclair Brooke, M.A., Chaplain to the Royal College, Cooper's Hill, Francis Manley Sims, Esq., F.R.C.S., of 25, Half Moon Street, Piccadilly, to Alice Belgrave, second daughter of the late Henry William Fuller, M.D., Senior Physician to St. George's Hospital.

AN infirmary is to be established at Andover, towards which Sir Charles Pressley has subscribed £1,000, Mr. Henry Thompson £500, and the Earl of Portsmouth £10 per annum; and Mr. Gue has given the necessary land.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1 P.M.
- TUESDAY Guy's, 1 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1 P.M.—West London, 3 P.M.—National Ophthalmic, 2 P.M.
- WEDNESDAY... St. Bartholomew's, 1 P.M.—St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women, 1 P.M.—2 P.M.—Cancer Hospital, Brighton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1 P.M.
- THURSDAY... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Ophthalmic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1 P.M.—Hospital for Women, 2 P.M.
- FRIDAY..... Royal Westminster Ophthalmic, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.
- SATURDAY... St. Bartholomew's, 1 P.M.—King's College, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1 P.M.—St. Thomas's, 1 P.M.—Royal London Ophthalmic, 2 P.M.

NOTICES TO CORRESPONDENTS.

- CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.
- PUBLIC HEALTH DISBURSEMENTS.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with Duplicate Copies.
- AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. RODGER, 37, Great Queen Street, W.C.
- CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names, or initials, not necessarily for publication.
- WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS.
- COMMUNICATIONS, respecting editorial matters, should be addressed to the Editor; those concerning business matters, non-delivery of the JOURNAL, or a board be addressed to the General Manager, at the Office, 35, Great Queen Street, W.C.

PERIPHERAL CONTAMINATION AND SICKNESS.

SIR,—In connection with the discussion of periparturient fever, the following history is of interest. On June 2nd, 1874, a primipara was confined, and delivered with puerperal fever of a typhoid type. Her case, of a few weeks' duration, ended by recovery. The day after the confinement (June 10th) she received from a neighbour a visit from a friend, who was suffering from a severe fever, and was at once removed to another house. On the fifth day after the confinement she was again fevered. The patient then was discharged from hospital, and returned to her home on the 17th to attend the puerperal patient, but at this time a severe erysipelas under her removal, owing to her being attended with a patient who was from the drainage of the house was at fault, there being a pipe which conveyed gas from the main sewer to enter one of the bedrooms.—Yours truly,
DUBLIN, August 2nd, 1875. J. E. GOSL, M.B.

C. L.—Mr. Frank Beckland, M.A. Oxon, is a member of the Faculty of Surgeons, he was formerly a surgeon in the Royal Horse Guards. His father, the eminent geologist, was Dean of Westminster.

M.D. BERLINGS.

SIR,—Owing my degree of M.D. to a letter in the smallest part of the Journal some ten years ago, and perceiving that the kind of information which was useful to me may be useful to others, I no longer hesitate to support the following proposition. A medical man desirous of obtaining the M.D. of the University of Edinburgh, the Dean of the Medical Faculty of the University of Berlin, or any other university, may offer himself as a foreign candidate for the degree, and asking that, if his prayer be granted, he (the Dean) will forward the necessary information, and his name being admitted he should present himself. The necessary information, in English phrase, that he is registered, and that, if admitted, he will be received by me for the approval of the Faculty. In the case of the University of Berlin, he will be received on the day fixed for his work, and admission to the examination will present himself, should it be approved. If the thesis be satisfactory, he will hear from the Dean that he can appear at the time named. Testimonials, diplomas, and the certificate of registration must be taken with him. The examination is written and oral in the following subjects: Anatomy and physiology, medical jurisprudence, pathology, medicine, midwifery and anatomy of women, and surgery. There is separate material for each subject, but the whole of the examination is conducted in the three subjects named, which on the day of the examination is conducted in English, and the thesis may be written in Latin.—L. B. GOSL, 1874.

A good method of reaching Berlin is to go from London to Southampton in one day, and stay the night at the Hotel de Barriere in the latter place, where all information concerning Berlin can be obtained.

At the University town, a little German will be almost indispensable for comfort; but, with a little previous knowledge of the pronunciation and grammar, Bodeker's Manual of Conversation will afford every assistance necessary. My experiences relate to the year 1872.

I enclose my card, and remain, sir, your obedient servant,
M.D. BERLINGS, L.R.C.P. Lond.

BRASS PLATE, I. I. F.—It is quite a matter of taste. The illustrious Hunter, who was noted for his simplicity of character and singleness of heart, had a plain brass plate on his door in Leicester Square, inscribed "John Hunter".

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 16 A.M. on Thursday.

ON PAIN: PHYSIOLOGICAL OR PATHOLOGICAL?

SIR,—After informing us that "pain is either physiological or pathological", and that "pain is physiological in the act of parturition, the contraction of uterine muscle would not be to any effective purpose without pain". Dr. Spender, in his treatise *On Pain*, goes on to say: "The contraction of uterine muscle, as part of the physiology of parturition, involves one of the most delicate problems of the species. It would be a hindered contraction, and which no scientific person would commit, to try to limit the pain by any quantity of medicinal means. Up to a certain point, pain is an expression of motor energy and power. The ordinary and rational female would therefore, by the greater the pain the more she is the parturient position be more. Now, without attempting the various means of throbbing heat, which the ill state of a following labour without pain, trapping to require that such treatment in the uterus are supposed to consist with the rest of a Woman's Health, I will only remark that a less pain factor on account of an extra effort of them in a position from some sensible observations by Mr. Lambert, late house-surgeon in the Maternity Hospital, Edinburgh.

"Coloured a great value in the relief of parturient labour, and it may be administered under favourable circumstances during and at the close of the second stage, with the result of producing absolute unconsciousness in the same sense in which it is considered to be induced in various circumstances. A labour may be conducted from its beginning to its end without any consciousness on the part of the patient, under the sole influence of chloral. Chloral not only does not suspend, but rather possibly, during contraction, such labour under the influence of chloral and possibly, need greater duration than ordinary labours, without chloral." *Lancet Medical Journal*, Aug. 1870.

The writer may not unreasonably say, "What passed does Dr. Spender bring forward in support of his assertion that 'pain is physiological in the act of parturition', and that 'the contraction of uterine muscle would not be to any effective purpose without pain'? and he would be surprised to hear that no attempt is made by the author to prove either of these assertions, or, indeed, one either of those which I have quoted from *Physiology of Pain*. Why, it may be asked, does he, by preference, refer the pain of labour to the contraction of uterine muscle, and leave out of account the equally essential, and what might, *prima facie*, be considered the more necessary process, namely, the ordinary stretching of the parts? The fact that the contraction of uterine muscle is a purely physiological process, should at once negative the hypothesis that its normal condition must be painful. Where in Nature do we find any analogy in support of such an idea? Not to the contraction of uterine muscle, but to the inordinate distension of the parts involved, and more especially to the resistance offered at the mouth of the womb and at the external orifice, may chiefly, if not exclusively, be considered the pathogenic of labour. And in every instance the amount of such resistance is variable, being dependent on a variety of conditions antecedent to and concomitant with labour, all of which may be shown to have a special bearing on temperature, we now arrive (*pace* Dr. Leishman) at an intelligible explanation why the pains of labour should be so variable in duration and severity. And if, as I have shown, the ordinary physiological pain is a matter which, by the simple regulation of temperature, may be brought completely under control, and if, when under control, the parturient process, so far from being delayed and rendered unnecessary, may, in fact, be promoted and rapidly brought to a close, what conclusion can we possibly arrive at than that the whole conception of physiological pain is a false and mischievous phantom, which it is clearly our duty, in the interests of all concerned, to exorcise as speedily as possible. And when the true philosophy of the subject shall be generally understood, it will be impossible any longer for a great professor to talk of painful and tedious labours as being "perfectly normal", and having experienced no such suffering in his own person) emphatically to inform his audience that "such assertions are generally of no great importance". Nor shall we hear any more of such assertions, that "up to a certain point" what pain "is a necessary expression of motor energy and power"; nor such suggestions as that there is any essential connection (except an inverse one) between the amount of pain and the progress of labour; nor, above all, shall we be withheld by any such fallacious reasoning from administering to a patient, when needed, a quantity of a cooling or narcotic, or a narcotic, to free her from the torment the pain causes, and, indeed, we cannot effectually anticipate them by simple hygienic means.—Yours, etc.,
HARLEDEN, June 1875. M.D.

MATERNAL IMPRESSIONS.

I AM not a believer in maternal impressions, or, perhaps, I should rather say, I am disinclined to believe in their occurrence, as I cannot see the link which connects the impression on the mother with the development of the fetus *in utero*. The following case, which has just occurred in my own practice, is one of those where the fact has proved the argument superfluous and unnecessary. I have reviewed a most interesting case, the finger from the right hand of a child only six weeks old, and the following history was given me by its mother. "When I was a half pregnant, and while she was still unaware of her state, being engaged in suckling her former infant, and not having menstruated since its birth, a colporteur entered her cottage to distribute tracts. She noticed with surprise that he had a small supernumerary finger attached to the little finger of his hand, and told her of it, and her sister of the circumstance in their native house. About a half month afterwards her present child was born, and she was astonished to find that it, too, had a small supernumerary little finger on the same situation. About three years ago, I published a curious case of monstrosity, also explained by the mother, as resulting from a maternal impression in the early stage of her pregnancy; and I am aware how frequently cases—apparently authentic—are narrated. For the interest of the present case appears to me to consist in the fact, that Dr. Montgomery's explanation—generally received, I believe—of the occurrence of limbs, or portions of them, in abnormal situations in new-born children; viz., that the parts have undergone spontaneous intrauterine amputation by constriction, either by bands of lymph or by the umbilical cord, and then become attached in their new situation by adhesive inflammation, is here inapplicable; for why should the child have had the other fingers of each hand perfect if this were so? I have never heard any theory advanced which attempted to explain these cases, yet the number already detailed in the pages of your Journal, which I might, no doubt, be swelled enormously if the subject merited it, is so considerable that I am tempted to narrate the one.
J. HOLMES-JONES.
Tamworth, June 1875.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

PROFESSIONAL ASSOCIATION WITH A BONE-SETTER.

We are very glad to find the following article in a local paper on a subject to which we have already referred, and on which we had expressed an opinion similar to that which our contemporary intelligently endorses.

"It says much for the sense which the medical men of North Wales have of the dignity and rights of their profession, when we find that only one of their number is found applying for the appointment at the Penrhyn Quarry Hospital, which had become vacant through Dr. Hamilton Roberts' honourable retirement from the post. There is much in the appointment which, under other circumstances, would have been sure to invite keen competition for it. The emoluments are not inconsiderable, and the successful candidate would enter upon his work with a fair prospect of having a fortunate career before him. This, and much more to the same effect, might be said if the medical men of North Wales were under the influence of no other than pecuniary considerations; if professional honour were an abstraction to which the mass of them were strangers, and professional privileges were fictions not worth contending for. But, in reality, the case stands quite differently; and it is no small credit to those concerned to find that the action which was determined upon at the recent meeting of the local Branch of the British Medical Association is almost unanimously endorsed by the profession. Five candidates were rightly or wrongly named in connection with the appointment—one being a medical man from Manchester, for whom some one has, with gratuitous ingenuity, discovered a perfectly imaginary relationship with Dr. Richards, the President-elect of the North Wales Branch of the Association. Another name on the list was Dr. O. T. Williams, of Bangor, whose letter is more than sufficient to assure the public that he would be one of the last to aspire to the post on the conditions under which it has become vacant. Dr. Williams was in no sense whatever a candidate; and two other medical men, Dr. William Williams and Dr. Ellis, were only such in a limited degree, as both of them stipulated that they would not accept the appointment unless they were guaranteed against having to co-operate with the unqualified practitioner who is now acting in the two quarries. This practically excluded both from the competition, so that it is strictly true to say that the whole of North Wales only contributed one candidate. The appointment of Dr. Williams, of Penygroes, whose skill is highly spoken of, therefore became a matter of necessity. The lay view of the question, we venture to think, will not widely differ from that which the profession have taken, for the course which the Medical Association have determined upon is, inferentially, a censure upon those of their brethren who see no impropriety in associating with irregular and unauthorised practitioners."

A MEMBER.—The *Calendar* of the College of Surgeons will give you full information. It is published annually, generally in September.

HOSPITAL REFORM.

As a former hospital and dispensary physician, I am much interested in the flagrant question of hospital reform. I trust that this question will at last be satisfactorily solved, not only in the metropolis, but throughout the kingdom. During the last twenty years, hospitals for stone, heart, throat, skin, nervous system, paralysis, women, ears, hip-joint, and other specialities, have luxuriantly flourished, and are now so exuberant that the anomaly threatens of hospitals remaining rather without patients than of patients languishing from deficiency of eleemosynary medical aid. Given an aspiring M.R.C.S. or L.R.C.P., glowing from the schools, and recently commissioned from Lincoln's Inn Fields or Pall Mall, together with a benevolent captain or other manubriated individual to act as secretary, the unities seem to be complete to float a hospital or dispensary: hence these institutions multiply in almost geometrical progression, and beget, rather than minister to, the cravings of disease. I cite a few of them:—Hospital for Diseases of the Heart, founded in 1857; Hospital for Stone, founded in 1860; Hospital for Diseases of the Throat, founded in 1863, and another last year; Hospitals for Diseases of the Skin, four founded since 1863; Hospital for Disease of the Nervous System, founded in 1866; Hospital for Women, founded in 1871. The last-named charity (?) is reported to have eight beds, thirty-two in-patients and five hundred out-patients, or rather more than one daily, during the year; and, conceding this statement to be unexaggerated, it would be interesting to also learn the expenses of the institution and its concomitant usefulness.

To make specialism more specialistic, it appears possible, with the coming race, that, to accommodate the widening crowd of applicants, the above will so fungate and ramify, that a throat-hospital may have laryngeal, uvular, tonsillar, pharyngeal, and oesophageal departments, with a *clinique* for the cartilages; a stone-dispensary may become separated into urethral, vesical, and renal sections; a skin-hospital into cuticular and dermal branches; a hospital for the nervous system into divisions for the cerebro-spinal centres and for the sympathetic, with sub-departments for hysteria, neuralgia, nightmare, dreams, and disorders of the psychic energy, unless the last affection attain an independent foundation. It may be conceived that hospitals for women will be ultimately limited to maids or matrons, with subdivisions, according to the organ or tissue suspected to be diseased; and, by the force of bathos, it may be opined that dispensaries for polypos, indigestion, and affections of the suprarenal capsules, will be instituted; and, the solids having become exhausted, for maladies of the blood, lymph, and bile, many of which would be scarcely more absurd than some of the existing charities for the sick.

Whilst such institutions are permitted to increase, and the medical appointments to them eagerly coveted as gratuitous honours, remuneration for duties at the older hospitals will be in vain sought for by future medical and surgical practitioners. The face of the profession should ever be averted from the creation of rural (cottage) hospitals, unless it be arranged that payment is to be offered for the work performed; and it only demands firm co-operation throughout the country to insist upon and obtain redress. The apology of poverty cannot be pleaded as excuse in the acceptance of honorary and unpaid appointments; and without an efficient staff every hospital and dispensary must remain a nonentity, or at once collapse. Heaven forbid that hospitals should be abolished. It is their reform I advocate, with restriction of their benefits, as far as possible, to the deserving poor, and that their mansprings and executive (the medical staff) should obtain due recognition and requital on a par with other professions.

July 12th, 1875.

WM. BOYD MURPHY.

DR. MALCOLM (Edinburgh)—Your son, having passed his preliminary examination in Arts, can commence his professional studies at once.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than *Thursday*, twelve o'clock.

DR. MALCOLM.—A similar provision is made under the will of Mr Thomas Aye which is dated July 20th, 1691, and directs that of the profits of premises at Bland ford, "three-twelfths be given to some man or woman of exemplary life, and some skill in physic and surgery, who should industriously endeavour to help all the poor of Ottery St Mary, Devon, gratis in cases of sickness and accident, till better advice could be had." Testator's kindred were to be preferred for the office; the clerk's wife next; the vicar's wife before any other, if she should be very fit, or as fit as Mrs. Alford, the late vicar's wife. He also gave another twelfth portion to the person above described wherewith to buy "drugges and plaisters".

COTTAGE HOSPITALS.

SIR,—If your correspondent M.D., in the *JOURNAL* of the 1st July, will write to me, I shall be happy to give him any information in my power about the practical working of our cottage hospital.—Yours faithfully,
G. W. EVANS.
Bridport, August 3rd, 1875.

A PROVINCIAL FELLOW.—According to collegiate etiquette, only the members of the Council of the College of Surgeons who have passed the chair wear the President's sash on public occasions. Sir James Paget, Bart., has succeeded Mr. Clark as President.

EXAMINATIONS.—The following were the questions on the principles and practice of medicine, submitted to the candidates for the diplomas of membership of the Royal College of Surgeons, at the recent meeting of the Court. 1. A patient is labouring under general dropsy. What are the different conditions on which it may depend? and what will be the probable state of the organs chiefly affected on examination after death? How would you distinguish and treat such cases? 2. What are the diseases characterised by the presence of pustular or vesicular eruptions in the skin? On what do such eruptions generally depend? 3. Mention the chief formulæ in the *British Pharmacopœia* into which opium enters; state the proportions of the drug, the doses in which the formulæ are to be used, and the purposes for which they are specially adapted. Write a prescription for a draught to produce sleep.

ERRATA.—In Sir Robert Christison's Presidential Address in last week's *JOURNAL* page 159, column 1, line 6, for "vigour" read "rigour"; and in page 161, col. 2 line 12 from bottom, for "simply read" singly. In the same number, at page 184, column 1, line 25, it should have been stated that Dr. Balthazar Foster (Birmingham) moved, etc.—instead of Mr. Lawson Tait. A similar correction is required at page 185, column 1, line 18.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Bristol Daily Post; The Daily Bristol Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Glasgow Herald; The Sunderland Daily Echo; The Carnarvon and Denbigh Herald; The Manchester Guardian; The European Review; The Hackney and Kingsland Gazette; The Worcestershire Chronicle; The Birmingham Daily Post; The Brighton Daily News; The Sussex Daily News; The Glasgow Herald; The Cork Examiner; The Scotsman; The Cork Daily Herald; The Southampton Times and Hampshire Express; The Hampshire Advertiser; The Birmingham Morning News; The Chester Courant; The Metropolitan; The Live-Stock Journal; The Shield; The Grocer; The Shipping and Mercantile Gazette; The Advertiser; The Islington Gazette; The Penrith Observer; The Hastings and St. Leonard's Gazette; The Ikley Free Press; The Leicester Daily Post; etc.

COMMUNICATIONS, LETTERS, &c., have been received from:—

Sir Robert Christison, Edinburgh; Dr. Rutherford, Edinburgh; Mr. Spence, Edinburgh; Mr. F. E. Manby, Wolverhampton; Dr. Peel Ritchie, Edinburgh; Dr. Angus MacDonald, Edinburgh; Dr. C. E. Underhill, Edinburgh; Mr. A. Walker, Dudley; Dr. Struthers, Aberdeen; Dr. Sibbald, Edinburgh; Dr. G. E. Shuttleworth, Lancaster; Dr. W. T. Gairdner, Glasgow; Mr. J. A. Goodchild, Ealing; Mr. W. G. Kemp, Bayswater; Dr. R. Caton, Liverpool; Mr. William Bennet, Liverpool; Inspector-General Dartnell, Birmingham; Mr. T. W. Hubbard, Maidstone; D. A. B. Munro, Bradford; Mr. R. W. Leftwich, London; Dr. A. Peddie, Edinburgh; Mr. S. W. Sherlock, London; Mr. J. T. Clover, London; Mr. Hinnell, Bury St. Edmunds; Our Dublin Correspondent; Mr. H. E. Trestrail, Aldershot; Dr. John Roberts, Chester; Dr. Collic, Homerton; Mr. A. Allen, Halesy Bridge; Dr. J. H. Balfour, Edinburgh; Mr. T. M. Stone, London; The Registrar-General of England; The Registrar-General of Ireland; Dr. B. Foster, Birmingham; Mr. J. Crabb, Edinburgh; Dr. Macaulay, London; The Secretary of the Royal College of Surgeons of Edinburgh; Dr. A. P. Stewart, London; Mr. R. H. B. Wickham, Newcastle-on-Tyne; Dr. Tilt, London; Mr. W. Adams, London; Mrs. Hoggan, London; Dr. C. R. Drysdale, London; Dr. C. Muirhead, Edinburgh; Mr. Cullingworth, Manchester; Dr. Maclean, Netley; Dr. Brotherton, Alloa; Dr. Caton, Liverpool; Mr. Eastes, London; Dr. Haddon, Manchester; Dr. Edis, London; etc.

BOOKS, ETC., RECEIVED.

The Philosophy of Laughter and Smiling. By George Vasey. London: J. Burhs, Southampton Row, 1875.
Health in the Nursery, and how to Feed and Clothe a Child; with Observations on Painless Parturition. By E. Holland, M.D. London: H. K. Lewis, Gower Street, 1875.
Vernon Galbray, or the Empire; the History of a Quack Dentist. London: E. T. Whitefield, Strand, 1875.
Medical Politics: being the Essay to which was awarded the first Carmichael Prize of £200 by the Royal College of Surgeons of Ireland. By I. Ashe, M.D. Dublin: Fannin and Co. 1875.

REMARKS

ON

CRIMINAL DEATHS IN THE NAVY AND ARMY.

By WM. R. E. SMART, M.D., C.B., Inspector-General R.N.

The subjoined table has been carefully compiled from the official Health Reports of the Navy and Army through Thirteen Years, 1860-72 inclusive.

Table displaying the Periodical Differences, Grand Totals in Thirteen Years, and the Yearly Averages, with Ratios of Suicides, Homicides, and Judicial Deaths, together with the Primary and Secondary Mortality from Intemperance, per 1,000 of Mean Strength.

NAVY.	Mean Strength.	Suicides.		Homicides.		Judicial Sentences.		Mortality from Intemperance					
		No.	Ro.	No.	Ro.	No.	Ro.	Primary.		Deaths from Intemperance.			
								No.	Ro.	No.	Ro.		
1860-1864	232,470	51	.174	14	.048	..	..	27	..	49	.168	76	.260
1865-1867	151,685	1	.125	2	.013	..	..	1	.079	2	.13	32	.211
1868-1872	241,040	22	.091	2	.008	..	..	15	.062	25	.104	40	.166
Totals of 13 yrs.	685,172	74	.134	18	.026	..	..	54	.079	94	.137	148	.216
Yearly averages	52,705	7.07	.134	1.37	.026	..	..	4.15	.079	7.23	.137	11.2	.216
ARMY.													
1860-1864	954,042	245	.256	36	.038	15	.016	117	.124	249	.26	366	.38
1865-1867	508,880	274	.302	13	.026	3	.006	4	.1	127	.249	218	.412
1868-1872	826,526	324	.32	41	.049	5	.006	66	.084	162	.196	231	.280
Totals of 13 yrs.	2,289,448	713	.324	50	.039	23	.009	269	.117	538	.234	807	.352
Yearly averages	176,112	57.2	.324	6.92	.039	1.77	.009	20.69	.117	41.38	.235	62.07	.352

It presents at a glance striking differences in the ratios per 1,000 mean strength in favour of the navy under each of the headings suicides, homicides, judicial deaths, and mortality from intemperance; opening up an interesting inquiry into the probable causes of inequality, which at first sight involves the probability that the mortality from these causes is allied, or that it may be altogether relative to the amount of intemperance that prevails in each of the services; but to solve this interesting question, further investigation is needed.

It is difficult to present strict parallelism, as the returns are based differently, those of the navy including officers with men constituting the crews, while those of the army exclude the commissioned officers, which is disadvantageous to the ratios of the navy, as in it the suicidal deaths, as well as those from intemperance, hold higher proportions among the officers than among the crews; so that, these being deducted, which it would be difficult to effect with certainty, and the naval ratios made parallel with those of the army, they would be still lower than represented in the table.

Owing to the limits of age of seamen and soldiers, from twenty to forty-five, there is no external standard for comparison, as elsewhere all ages from infancy to senility are included in the death-returns. Thus if the returns of the Registrar-General for the metropolis through a similar period of thirteen years—1862 to 1874 inclusive—be examined, it is found that in an average population of 3,030,000, including all ages, there were 3,544 suicides, giving a ratio of .089 per 1,000, against .134 in the navy, and .324 in the army; but with corrections for ages and for sex it cannot be doubted that the ratio for the metropolis would at least equal the ratio in the navy.

The Census of 1871 in the metropolis gives: total population 3,254,260 persons; of ages between 20 and 45, 1,111,655, of which there were, males, 511,895; females, 598,760. This exceeds a third of the entire population between those ages when suicide is more frequent than at other periods of life; and the male sex, most given to it, bears a remarkably less proportion than the female sex. Thus, probably one-half the suicides are due to the same period of life as in the navy and army, and of this half the male sex will carry a greater proportion than the female; for these reasons it may be assumed that the suicides in the metropolis, among males from 20 to 45, are at least equal to those in the navy, viz., 134 to a million persons.

Before examining the table, it must be observed that the "average annual strengths" given—52,705 for the navy, and 176,111 for the

army—are obtained by dividing the sum of the annual strengths by the number of years involved, and that the same rule has been applied to the mortality. Again, the ratios of suicidal and homicidal deaths in both services would be augmented, if it were usual to return as such all who are "found drowned", which are excluded likewise from the returns of the Registrar-General, where, unless proof be afforded of murder or suicide, they are classed "accidental", as in the services of the state.

The summary of the statistics embracing their essential data lies in the following ratios per 1,000 annually.

	Suicides.		Homicides.		Judicial.		Intemperance.	
	Nos.	Ratios.	Nos.	Ratios.	Nos.	Ratios.	Nos.	Ratios.
Navy	74	.134	18	.026	—	—	148	.216
Army	572	.324	62	.084	162	.196	807	.352

On these data it may be noted:

1. *Suicidal Deaths* are nearly as two in the navy to five in the army. This large disparity may be, in a great degree, dependent on the difference of modes of life in the sister services. The duties on ships are more continuous and more exciting than those of camps and barracks, where the soldiers have more duty of a solitary character, and longer periods of idleness in which they may withdraw from association with their comrades, and then give way to distressing mental causes; while seamen off duty have no other resort than among their messmates, whose society must tend to banish gloomy thoughts and sentiments, thus counteracting tendencies to suicide.

That a high ratio of suicidal deaths is incidental to military life in general may be inferred from the still higher ratios than those of the English army that prevail among other European nations, of which it has been authoritatively asserted that Austria presents .85; Germany, .54; France, .51; and Belgium, .45 per 1,000; against which ratios that of the English Army, .324, as I find it to be, is rather a flattering result. Probably much of this is attributable to the voluntary service of England and the compulsory service of continental nations, rather than to any superiority of class.

Again, amongst our troops, the tendencies to suicide are developed much more strongly on foreign service than at home, and more in India than elsewhere. Thus of the total 743 suicides in thirteen years, 253 occurred at home, and 324 in India, leaving 166 for all other stations of the British army, affording the following ratios:

Period of Thirteen Years, 1860 to 1872.

Stations	Total Strength.	Suicides.	Ratios per 1,000.
At home	1,026,447	253	.246
India	508,880	324	.415
Other Stations	474,127	166	.344

As the forces at home are made up of recruits in a greater proportion than elsewhere, it becomes clear that suicide is not most frequent among the younger soldiers. With respect to ages, the same law holds good everywhere, that the tendency to suicide gradually increases from manhood up to middle age, at which military and naval service ceases. And it may be assumed that the scale of ratios increases with greatest rapidity on those stations where the total ratio ranges highest.

The men of certain arms of the service are more or less prone than others to the commission of suicide; of which it may be asserted generally that the highest ratios are found amongst ordinary cavalry; * probably from increased liability to vexation and punishment, owing to their double responsibility of horse equipments as well as of personal accoutrements. Next come the artillery, to which in part the same reasons apply, and the dépôt battalions with a greater proportion of recruits, who often find the glitter of military life dulled by its realities of drill and discipline, amidst which they are apt to repine over the causes that have induced them to enlist; next follow the Foot Guards and infantry regiments of trained soldiers; and then come the Engineers, who are skilled workmen, having their time more fully occupied in their various handicrafts, bringing increased pay; and, lastly, the Household Cavalry, whose colonels have unusual facilities in dismissing objectionable characters.

In the navy, suicides are more frequent among the officers than the men, and among the seamen than the marines, who, when embarked, form in some measure an *imperium in imperio*, supervised and in some degree protected by their own officers, which maintains

* Mr. Miller, of the Army Department, has shown that the Hospital Staff present the highest ratio.

among them an *esprit de corps*, which is everywhere a safeguard from suicide.

The classification of the modes of suicide had recourse to is not without interest in this comparison.

	By gunshot	By Cut-throat	By Drowning	By Hanging	By Poison	By Fire	By Fall	By Railway	Multiple	By Beam Injury	Hari-kari	Unstated	Total Suicides.
Army	15	1	4	11	4	1	1	10	7	7	0	15	743
Navy	10	1	1	14				0	1	0	1		

Of the first four modes in this category of criminal deaths, it may be credited that they agree in presenting fewer of the characteristics of premeditation, and more of those of hasty resolve; the victims availing themselves of means at hand to perpetrate the act of self-destruction; the soldier availing himself of his rifle or razor, or of his personal habiliments—his braces or leather straps, or of the tank in, or the stream that flows hard by, his camp; the sailor, of the deep water that floats his home, of his razor, of the rope always at hand, and least frequently of his weapons.* The other modes, which signify a determined premeditation, bear, in both services, but a small proportion to those of hasty resolve. For certainty of action is the one thing sought by those who procure poisons, or walk to precipices, or wait for the advancing train, or inflict upon themselves multiple deadly injuries, which, as shown in this table, are rarely availed of by the seaman in comparison with the soldier. In the naval column, the death by hari-kari was that of a Japanese officer while receiving instruction, who destroyed himself premeditatedly in the mode held in honour by his nation. This is not counted among those of our own crews.

Statistics demonstrate clearly that, whilst suicide is decreasing in the navy, it is increasing in the army. The comparison of the first and last quinquennial periods of the whole term affords these results:

	1830-34 inclusive			1865-69 inclusive		
	Strength	D.D.	Ratio	Strength	D.D.	Ratio
Navy	220,470	31	.174	241,040	22	.091
Army	2,484,470	245	.256	826,526	324	.392

Or, while it has fallen from .174 to .091 per 1,000 in the navy, it has risen from .256 to .392 per 1,000 in the sister service. The primary indication of this more satisfactory condition of the navy, is probably an improving *morale* of the crews, influenced by a milder discipline, regulated more closely by fixed regulations that call into action the reasoning powers of men who know their responsibilities, and the exact sum of their liabilities to punishment, than that obsolete discipline that left them much more subjected to the somewhat arbitrary wills of their officers. The inference may be drawn also that, occurring as it does collaterally with the vast change in the type of our ships in the substitution of more capacious iron ships for those of timber, our seamen find more that is conducive to their physical wellbeing, as shown in the improved health of the service consequent on that change, a sounder state of mind being a natural result of improving bodily health in the mass of men, as it is well known to be by each of us individually. The difference under this head existing in the army may be tabulated thus:

Terms of Service.	At Home.			In India.			Other Stations.		
	Strength	D.D.	Ratio	Strength	D.D.	Ratio	Strength	D.D.	Ratio
Last 5 years	397,711	7	.241	117,807	17	.277	238,520	10	.251
and ditto	1,121,220	100	.242	2,000,000	100	.251	554,150,824	67	.251

This proves that, while the suicidal ratios have undergone no marked change on home service, they have risen from .277 to .553 per 1,000 in India, and from .251 to .512 per 1,000 in other military possessions. Such facts are pregnant with interest to all vital statisticians, but, as they appertain to another service than that to which I belong, I shall not presume to offer any views as to the probable causes, leaving these to be dealt with by more competent heads, who may be in a position to trace out whether the increase is attributable to differences in the stamp and character of the men themselves, or to alterations in the conditions

under which they serve. It appears, however, on the very face of the above table, that suicidal deaths are not increasing in ratio among the home force which consolidates the recruits and younger soldiers while undergoing their hard initiative drills, but among those who, having completed that period, are serving as trained soldiers abroad; and there is strong reason to believe that the ratios show everywhere an increase proportionate to length of service bringing them nearer to the period of discharge.

Murder and Manslaughter.—Under this definition, the Registrar-General's returns for the metropolis in thirteen years give 1,622 deaths, or an annual mean of 125, which gives a ratio of .041 per 1,000 of all ages; and it is found that the returns of the navy and army both present a lower ratio than this—of .026 in the former, and .039 in the latter service, proving that the men are not unduly guilty of this crime, nor exposed to violence from the various peoples amongst whom the service distributes them.

Homicides are more frequent in the army than in the navy by 50 per cent., and in the latter service their occurrence has been reduced to a minimum, while, in the former, they have undergone no decrease, standing in that respect analogous to the ratio of suicides. The navy returns afford some clue to the circumstances, by recording the hands by which murder has been inflicted; thus we learn that, out of eighteen murders, only two were due to shipmates; eleven were perpetrated on the shores of the Pacific Ocean, five by Japanese, four on Vancouver's Island, and two in Central America; two in India, one on the Coast of Africa by a Portuguese soldier, one by a Maltese, and one in England. Loss of life by malice or in quarrels is now happily rare in the navy so long as the men are on board; but it occurs among seamen when on leave ashore, assignable, in all probability, to quarrels in drinking-shops and brothels with men of the place; those, however, in Japan, would appear to have been assassinations during periods of unfriendly national relations, and might be, with strict justice, classed as death by violence on duty, thus diminishing the ratios of homicides in the navy. Doubtless, some of those in the army returns were committed by strangers, but no guide to this is to be found, only the modes of perpetration being shown; but the preponderance of gun-shot would lead to a contrary inference. The modes are thus specified: By gunshot, 39; incisions, 25; fractures, 10; injured brain, 7; injured viscera, 2; hanging, 2; suffocation, 2; unspecified, 3; presenting an assortment resembling in the main the features of the suicidal list; to which another similarity presents itself in the increase from 36 in the first quinquennium to 41 in the last; which, as in the suicides, contrasts with the navy returns, that show in the last nine years only four murders (assassinations unconnected with the service) against 14 in the first four years of the period.

	Total.		1860-74		1865-67.		1868-72	
	No.	Ratio.	No.	Ratio	No.	Ratio	No.	Ratio.
Navy	18	.026	14	.026	2	.026	2	.026
Army	42	.039	28	.039	13	.039	41	.039

Deaths by Judicial Sentence.—Of these, the navy had no example in thirteen years. To account for this, when two murders by shipmates are detailed, it must be supposed that these occurred where the offenders could be handed over to the civil authorities. The general fact of *no record* indicates sufficiently that the naval service is tolerably free from the crimes which are punishable by death under Admiralty Articles of War and the Mutiny Act.

In the army statistics for the same period, not fewer than twenty-three suffered death for crimes unspecified; and of these fifteen fell in the first, and only five in the last five years of the period, showing that, while the ratios of suicide increased, that of death for crimes sank still more remarkably.

The following deductions are evidenced.

1. In the period 1860 to 1872, criminal deaths, in the forms of suicide, homicide, and judicial deaths, have borne much higher ratios in the army than in the navy.

2. These, excepting by judicial sentence, have increased in ratio very substantially in the former service, while in the latter they have undergone an equally well marked decline.

Since these results are opposed, the causes cannot be uniform; they may be assumed to be multiple. To approach these with due caution, the first step will be to ascertain the ratios of death from intoxication, which experience teaches to be a general cause of criminal deaths in every form.

The Results of Intemperance are more definitely shown in the public

* Since 1860, soldiers have not been permitted to retain ammunition in their quarters.

services than they can ever be in private life, so far as relates to death caused by immediate debauch, or consequent—*i. e.*, the form of delirium tremens—on prolonged indulgence. But, beyond these self-evident effects, there are no data to indicate the evil consequences of the immoderate use or abuse of alcoholic stimulants, as the remote but efficient causes of cirrhosis and amyloid diseases of the liver, as well as of acute inflammation of it ending in abscess, of Bright's disease of the kidney, or of degeneration in the coats of the larger arteries, which, although they are indefinite consequences, may be far more widely spread and more largely destructive of life than those results which are self-evident and unmistakable. These I would classify as the primary, the secondary, and the tertiary results of alcoholism, and shall deal with the first two only.

	Total Deaths.		Primary.		Secondary.	
	No.	Ratio.	No.	Ratio.	No.	Ratio.
Navy	148	.20	54	.078	04	.13
Army	807	.35	269	.113	538	.235

All these ratios are favourable to the opinion of a greater degree of sobriety existing in the navy than in the army, which would be more strongly apparent were it easy to eliminate from the navy returns the sickness and mortality among officers, which are not admitted into army medical statistics; for the navy returns include 32 deaths of officers, holding a relatively greater ratio to their strength than the remaining 116 deaths to the mean strength of the crews. Concerning this point, it is worthy of note, that the large number of deaths of officers is, with exception of two only, by the secondary consequences—delirium tremens; while that of the crews stands in proportion of 5 by alcoholism (or primary) to 6 by delirium tremens, etc., secondary results of intoxication, of which the former may arise from casual but excessive, while the latter arises from habitual, indulgence or abuse.

The mortality resulting from the primary conditions of alcoholism has a difference of classification in the two services. In the navy returns, they are separated into alcoholic poisoning, 15, drink-apoplexy, 28, and asphyxia, from solid food finding its way into the larynx during vomiting while intoxicated, 11; making a total of 54. In the army, all cases admitted suffering from the effects of alcoholism not amounting to delirium tremens were classified as "Ebiosias" prior to the introduction of the new nosology in 1868, since which the classification has been similar to that used throughout in the navy in all cases that have perished immediately from drunkenness, while others are returned as dyspepsia, febricula, etc., which are rarely fatal forms of disease; and it is gratifying to notice that there is a rapidly declining ratio of this kind of brutal excess in both services. Comparison of the quinquennial periods shows in the navy a decline from 27 to 15 deaths, and in the army from 117 to 69, the lowest numbers presenting in the last three years of the whole period of thirteen years.

Analogous results are found relating to delirium tremens ending fatally, of which there were in the navy 49 instances in the first quinquennium, against 25 in the last; and in the army there were, similarly, 117 against 69. Thus, judging by these results, the inference follows, that indulgence in alcoholic or intoxicating drinks to an extent causative of disease and death is happily a decreasing vice in both services. But, in estimating these results of intoxication, I would go beyond the official returns in alluding to a wide margin of uncertainty across which the veil of charity is drawn; for it is impossible to deny that many of the casualties in the services are attributable to the wavering nerve-power, conjoined with undue daring, that alcohol engenders amongst men whose very calling renders them familiar with dangers from which untrained men would instinctively shrink. Also, in the numerous instances of "found drowned, without any assignable cause", it needs no argument to convince that some may have been suicidal, and still more of them the consequences of drink. Nor can I in any other way account for the excessive mortality by drowning shown in the army returns, where, through this period, the "drowned" constitute nearly one-half the deaths by violence or negligence in a service free from special dangers by water. Again, from the list of diseases, it may be shown that in deaths by "apoplexy" there is a decrease almost commensurate with that of mortality from primary alcoholism; and that this is more strongly exemplified with reference to "epilepsy", which, as a pathological condition *per se*, is rarely mortal; whereas in the navy returns it is assigned as the cause of 26 deaths in thirteen years, while, as the cause of loss of service by invaliding, it offers the large number of 1,086 disabled men. A striking relationship to the mortality directly assignable to alcoholism is de-

ducible from the parallelism between them, showing from epilepsy 523 invalidings and 15 deaths in the first, reduced to 246 invalidings and 6 deaths in the last quinquennial period: a noteworthy improvement in health-statistics, quite as important and instructive as the simultaneous decline in the mortality from intemperance.

The all important questions now present themselves as to the relations, if any, that exist between this proved decline in habits of intoxication and criminal deaths by suicide and by judicial sentence.

With regard to the first of these, there is found to be in the navy a parallelism that points to a probable relationship; for, side by side with a decline in the stated quinquennial periods, from 76 to 40 deaths by alcoholism and delirium tremens, there is found to be a decline from 51 to 22 suicides, which parallelism does not obtain in the army; where, side by side with a decline of the fatal results from intemperance, from 366 to 231 in the five-yearly periods, there is a positive increase from 245 to 324 in suicides—proving, beyond a doubt, that this deplorable augmentation can have no relationship to habits of indulgence in intoxicating liquors which coexist in a decreasing ratio. This fact alone demands the deepest consideration of military authorities, especially, as in those flagrant crimes towards others which induce death by "judicial sentence", there has been a decline from 15 to 5 in the stated quinquennial periods, proving, that in this important element, there has been an advancing "morale" in the army. Where, then, it may be asked, is search to be made for the great increase of suicide? Does it lie in the nature of the service, or in the characters of the victims?

It having thus been determined by comparison of the medical statistics of the great fighting services of the State, that, coincident with a decline in these services of the fatal results of intoxication, there is a decrease of suicide and of homicide in the navy which is not counterpoised in the army returns, where, indeed, the opposite conditions exist in spite of fresh precautions, it follows that, to explain so marked a contrast, other reasons—adjuvant in the one case, and counteracting in the other—must be sought for; for, if the inference be correct, that the prevention of crime has been chiefly dependent on, and not merely coincident with, a decrease in habits of intemperance, then, to account for the great contrast between the statistics of the sister services, it may be assumed that other causes have co-operated to raise the moral standard of the seamen of the navy; while, as regards the life of the soldier, there are agencies at work that have more than counterbalanced the benefit of comparative sobriety in deterring from criminal acts.

I should fail if I attempted to show further than I have already done, that the difference in the ratios of criminal deaths bears no direct relation to those by intemperance; unless it be that, in the navy, there is a co-operation of other ameliorating causes, whilst in the army the decline of intemperate habits is more than counterbalanced by recently developed productive causes of suicide which lie beyond my power of investigation. With regard to the service to which I belong, I will now proceed to point out what appear to me to be the changes in the position of the seamen of the navy on which their improved *morale* is based.

During the latter half of the present generation, the entire system of educating and training the seamen of our navy has undergone a deep searching revolution, the mainspring of which has been the foreseen difficulty of manning the fleet in war time by means of impressment.

Formerly, even the cream of our man-of-war's men were held to the service by the loosest of ties, and served alternately in the navy and in the merchant service, turning away from the former when wearied by its inseparable restraints, or after undergoing punishment for impropriety of conduct; often, too, when paid off from ships, their money being spent, they were compelled to join merchant ships, there being no men-of-war fitting out, in order to avoid destitution. In this respect, the new system of continuous service has benefited the seaman incalculably in his social condition, as, when paid off, he is no longer cast ashore, but is borne on the books of a guard-ship until drafted into a seagoing ship, and is allowed a reasonable period of leave to visit his friends, wherever they may be, instead of wasting his hard-earned wages in the purlieus of seaports; and he is thus taught to be a self-respecting member of society.

Those who recollect the condition of our naval towns in days gone by, when the paying off of a ship of the line caused the streets to be crowded with drunken sailors and their abandoned associates, are now struck with the wonderful contrast in them. Where a reeling sailor, full of practical jokes, was met at every turn—every allowance being made for the freaks of "Jack ashore", now, on the paying off from a ship, those of the crew who belong to other ports are transferred at once by steamers to their homes, and borne on the guard-ship's books. During their leave, they have civilising places of resort, as well by night as by day, in sailors' homes and institutes, where reading-

rooms and amusements, with means of moderate indulgence without intemperance, are provided to suit their wants; and thus the streets are rendered free from disorderly scenes, and in them a drunken sailor has become as much a *non-esse* as a sea gull would be in an inland town. Formerly, "to hand and reef the sails, to shift the spars, to heave the lead, and to steer the ship and work the guns", were the simple requirements of an able seaman, and the boys for the first time entered were just so many as were wanted to fill the places of officers' servants; now, every seaman must be in every sense a skilled artisan in seamanship and in gunnery, and his improving or deteriorating qualities in each of these, as well as in conduct, are noted every year on his parchment certificate, which forms the criterion for his promotion, as well as the guide to his claims for badges and rewards and for pension on discharge. Encouragement is afforded him by a savings' bank to be prudent in money matters, and, by an easy mode of remittance, to be thoughtful and considerate towards his relatives; thus cultivating good social principles, while, in instruction by a seamen's schoolmaster and the use of a good ship's library, he has the means of improving his mind.

The watchful pains of their superiors in these matters have done much towards changing the characters of our seamen, as is strongly marked in the large proportion of married men having respectable wives, in the voluntary classes they form for religious instruction, also in the benefit societies they maintain in most large ships for the aid of those who are disabled by the accidents incidental to their calling, and in the liberal donations they make to charitable institutions on shore for the benefit of the orphans of their class.

On board his ship, the sailor is surrounded with conditions that enforce regularity of life, and, beyond these, the total abstinence movement is making a most satisfactory progress in the navy, mainly promoted by the philanthropic efforts of a few benevolent ladies, who devote themselves to its diffusion at the seaports. These men are allowed the value of their ration of spirits, while others receive theirs under restrictions that render it difficult to exceed their ration. Twice daily, the whole crew are paraded for inspection, and, during their watches on deck, they are so frequently brought under the notice of their officers, that any approach to intoxication is almost sure of detection during the active exertions they are then frequently called on to make; and, in the routine of ships, the whole crew are often employed in general drills or in exercise aloft; and thus, when at sea, discipline and routine duties combine to render drunkenness an exceptional fault. When in harbour, the discipline is unrelaxed, and, during the daytime, the whole crew are employed on duty while the ship is refitting; in English harbours or in those of friendly nations, leave on shore, by day or by night, according to the degree of safety, is granted; while, in most ships, in order to moderate the desire for the shore, a greater scope of evening amusements on board is permitted; and I have known, in some ships, considerate officers to allow what is termed "the ship's company's cask of beer" to be introduced and dealt out in safe quantities, with much benefit to the health and morality of the ship, because "Jack", enjoying his pint of beer and pipe, with songs and the dance, is a contented man; and in some ships the canteen system is adopted. Under such kindly treatment, drunkenness is rare, and those terrible evils of direct excess, as poisoning by alcohol, alcoholic apoplexy, and suffocation by food in the act of vomiting, which occur among those who indulge to excess in the inferior kinds of spirits which are freely supplied in seamen's haunts ashore, are avoided, and the evil—delirium tremens—to which they are exposed by the sudden withdrawal of stimulants after debauch, is prevented.

Under the obsolete system of entering boys from the shore to each ship, when put in commission, they were exposed to the prolific dangers of example from the worst men of their messes, of which they were the more susceptible from want of primary training; but this is now, in a measure, obviated by the excellent system of educating a superior class of boys for the navy in the schools of Greenwich Hospital, and in the preliminary training so well provided for in our training ships for all boys before drafting them into seagoing ships. In this manner, five thousand boys are brought up for the navy annually, with the good results not only of adapting them to the service, but of eliminating at an early age such as, from defects of constitution, are or will soon be unfitted for the arduous duties of the seaman's calling; thus securing a healthier and more vigorous class of men at the threshold of the service. The age for entry is between 15 and 16½ years, and, after a year's training to qualify for first class, they are drafted into seagoing ships. Each boy, when drafted from a training-ship, takes with him a certificate of his efficiency in the details of "gunnery instruction, seamanship, and school education", in each of which details his proficiency is marked "fair, good, or very good". Boys who pass through the training ships are engaged to complete ten

years in the fleet after their arrival at 18 years of age, with this subsidiary advantage to the mercantile community at large, that, if, after that length of service, they elect to leave the navy, they pour into the merchant navy a large community of well trained seamen, who, for the most part attaching themselves to the Naval Reserve, form a considerable depôt for the navy in the event of war, to which their primary apprenticeship will be the link of safety. During the period of tutelage in training ships, they are taught, if previously uneducated, to read, write, and cypher, and are trained in habits of sobriety, cleanliness, and obedience to command, and those personal adjuncts of making their own clothes, taking care of their "kits", and otherwise providing for their own wants, in which they prove themselves to excel, whenever the calls of the service detach them from their ships on boat service or in naval brigades, of which there are many praiseworthy examples. Fortunately for the country, this admirable system will admit of indefinite extension proportionate to its wants, and thus the service, training its boys at home in boat service, in duties aloft, in sword exercise and gun drill, before they are sent to sea in ships of war, secures all the preliminary rudiments of the "skilled artisan", which every able seaman must be now, when the means of combat have undergone so vast an extension in the altered class of ships, provided with scientific artillery of refined construction.

The training of boys to the specialties of the navy, and the improved treatment of seamen under the modern system of continuous service, are, I believe, the fundamental causes of that remarkable improvement in the *morale* of the seamen of the Royal Navy, which is irrefutably proved to exist in the medical statistics of decreasing intemperance, as well as of criminal deaths by suicide and homicide, which may reasonably be imputed to that enervating and destructive vice.

In offering these facts as a further exemplification of the pervading force of the maxim, "*Obsta principiis*", so far as the State service with which I am familiar is concerned, I would here terminate my inquiry into causations, as I feel my own inability to indicate those which lead to contrary results in the sister service, beyond ascertaining that these results of increasing criminal deaths by suicide and homicide coexist in the army on foreign stations with a decreasing ratio of deaths by intemperance, which is an important leading point in arriving at just conclusions as to the truly efficient causes.

ON "MALTA FEVER": WITH A SUGGESTION.

By W. C. MACLEAN, M.D., C.B., Inspector-General;

Professor of Military Medicine in the Army Medical School, Netley.

IN the course of the invaliding season at Netley now drawing to a close, my colleague Surgeon-Major Webb remarked to me "that many of the invalids from Malta arrive in a more shattered condition than those from India". The remark was just, and suggestive of serious reflection as to the sanitary condition of that important military post.

To what is this "shattered" condition due? The answer must be, "Malta fever". What is this fever? Is it malarial, enteric, or relapsing? or is it a hybrid, *i. e.*, typhoid fever complicated by a thread of malaria—a typho-malarial fever, to use a term now creeping into our nomenclature? It is very desirable that a satisfactory answer should be given to this question; and this answer, it is plain, must come from those who have the opportunity of studying the disease where it arises, with the additional advantage derived from careful observation of the sanitary surroundings of the population, civil and military. This much is certain: it is one of the most distressing forms of fever, both in its primary manifestations and in its sequels, which the British soldier has to face, and the medical officer to treat, in their respective careers; and the latter is often called on not only to treat it, but to suffer from it in his own person.

The most notable part of the disease is its extraordinary duration, extending not unfrequently over seventy days before anything approaching to convalescence is established. We have at this time a young medical officer under observation here, who landed from Malta on June 22nd. At that date, he had been on the sick-report with "Malta fever" for sixty days. His temperature on arrival at Netley was 104 deg. Fahr.; and even now, under the most favourable hygienic conditions, careful diet, and good nursing, this young officer has little more than entered on the distressing stage of neuralgic and rheumatic pain through which the majority of those affected have to pass before convalescence. It will be seen from this that the term "long fever", by which the disease is known among soldiers, is appropriate.

I do not pretend to be able to give a good clinical description of this fever; for, although familiar with its sequels, I have never had an opportunity of studying it in its "home". As in most fevers, there is a stage of *malaise* of some days' duration, followed by a sharp rigor,

with well marked gastric and hepatic disturbance. Sometimes this stage is as well pronounced as in the severe remittents of a malarial locality in the tropics. With the above symptoms, there is severe headache, generally frontal. The temperature-curve differs widely from that in true malarial fever; it does not rise rapidly; and some days elapse before it attains its maximum, which appears to be 104 to 105 deg.; and this, as I have mentioned, is often maintained for forty, fifty, sixty, and even seventy days, with, as the unavoidable result, wasting and degeneration of muscular tissue and excessive prostration. From all I can gather, the disease is not, as a rule, paroxysmal, although in some cases of officers landed from Malta, seen by me in consultation, I have observed a distinct and well-marked morning remission, as in a malarial remittent. Such cases were benefited by quinine, which is seldom found useful in "Malta fever". Sometimes there is diarrhoea, with or without iliac tenderness; the evacuations being sometimes dark-coloured and offensive; at other times, particularly when there is abdominal tenderness, presenting the appearance commonly seen in enteric fever. In a word, if I may venture to judge from what I have gathered from our Malta invalids at Netley, sometimes the symptoms of typhoid, sometimes those of malarial fever, predominate. In the majority of the cases seen by me, the spleen has been more or less affected. We have in our wards at this time a case in which this gland is as much enlarged as if the patient had come direct from the Peshawur valley.

There is one symptom common to every form; viz., a stage of neuralgic and rheumatic pain, sometimes muscular, sometimes articular, not unfrequently both, through which eight out of ten of those affected have to pass before they can be said to be really convalescent. This stage is often not reached till some weeks after the more urgent febrile symptoms have subsided. A rise in the temperature usually precedes the setting in of this fresh addition to the patient's sufferings. A number of weakly young soldiers do not convalesce at all, or only to a partial extent; developing, instead, either tuberculosis or some other form of destructive lung-disease, the result of the metamorphosis of catarrhal or pneumonic deposits which have taken place in the course of the disease, or which may have existed previously.

My friend Staff-Surgeon Lambert, R.N., who served for some time in the Naval Hospital at Malta, and who suffered severely from the disease himself, informs me that a large number of seamen were in his time invalided home, after having gone through this fever, on account of deposits of this kind, which, in the vigorous and those presumably not of a phthisical tendency, were absorbed, as many of them returned after some months' absence, in good health.

It would appear that the treatment of this disease is, to say the least, unsatisfactory. It is certain that, save in cases in which malarial symptoms predominate in a very marked manner—in other words, where the fever is more or less paroxysmal—quinine is useless, if not hurtful, exercising no influence either in reducing temperature, shortening the duration of the disease, or even mitigating the pains of the rheumatic stage. This being so, I have a suggestion to offer on this point for the consideration of those who have to contend with this disease. It may appear very unscientific, very empirical, to discuss remedies before we have settled the proper place of this fever in our nosological system; but I am afraid this is what physicians have to do every day. There is, however, no reason why the use of this or that provisional remedy should in the least interfere with those careful observations which are so much needed here. Let us hope that more than one of our capable medical officers quartered at Malta will take this fever in hand, and, after the manner of Louis, and Jenner, and Parkes, and Stewart, patiently investigate it. Judging from the careful report of those who have studied the sanitary surroundings of the troops, there is much to rouse the suspicion, at the very outset, that a fecal element plays an important part in the genesis of this disease, for the whole inhabited part of this "military hothouse" seems supersaturated with excrementitious matters; so much so that, on looking over the report of the Committee of which Surgeon-General Ker Innes was President, it has often struck me that if, by any accident, yellow fever were introduced into that closely peopled island, with its stercoraceous accumulations in houses, it would find the conditions most favourable for the development of its destructive power.

Some months ago, Dr. Alfred A. Woodhull, of the United States Army, was good enough to send me a copy of a paper of his, reprinted from the *Atlanta Medical and Surgical Journal*, giving an account of his clinical studies with large non-emetic doses of ipecacuanha in the treatment of dysentery. From this, it clearly appears that this method of treatment, once more happily established in India, is not much known or appreciated in the United States. Dr. Woodhull's cases, which are carefully and conscientiously recorded, show that the *radix antidiysenterica* is as effective against the dysenteries of

America as it is in India. I have since received from the same author a reprint of another paper from the same journal, giving his "clinical studies on the use of non-nauseating doses of ipecacuanha in intermittent fevers". Dr. Woodhull gives a series of twenty-eight cases treated with ipecacuanha in doses varying from one to twenty grains. Emesis followed only once or twice, and nausea very seldom, although the author thinks "a good preliminary emetic would sometimes be useful". Dr. Woodhull gives the cases in some detail, with the thermometrical readings; and he notes that they were kept under observation as long as the thermometer gave any indication of a tendency to relapse, whether the patient was or was not sensible of an aguish disposition. Ipecacuanha was the only remedy used, for the most part in grain-doses every three or four hours. There were nine "recurring cases", but in only one did more than two chills recur after beginning the medicine. Four cases had only one chill after resuming the ipecacuanha. In thirteen cases, no chill was experienced after the exhibition of the remedy. It is particularly noted that, when dysenteric symptoms co-existed with those of intermittent fever, they were promptly suppressed by large doses of ipecacuanha. Dr. Woodhull has a theory as to the action of the drug. He regards it as a nerve-stimulant, especially to the ganglionic system. Into this question I do not mean to enter here. The suggestion I beg respectfully to offer to medical officers who have to treat "Malta fever" in its "home", is to give this drug a fair trial in the manner used by Dr. Woodhull. I have long been anxious to see a fair trial given to ipecacuanha in the treatment of the early stages of typhoid fever pure and simple, not for the sake of its emetic properties, but for its power as a blood-depurant. There is abundant evidence that the functions of the liver are much disordered in the early stages of "Malta fever"; and I have elsewhere shown that ipecacuanha is one of our best and safest remedies in acute hyperæmia of this gland. I ask for a fair trial to this method of treatment with confidence, because, if it fail, it is not likely to do harm, or to expose patients to the smallest risk or even inconvenience.

MALIGNANT DISEASE OF BOTH OVARIES.

By M. CHARTERIS, M.D.,

Physician to the Glasgow Royal Infirmary.

A. M., a female aged 21, was admitted into the Glasgow Royal Infirmary on March 27th. She had been sent from a neighbouring mining town to the Maternity Hospital, under the idea that she was pregnant, and was transferred from there to the Royal Infirmary. Her history was as follows.

From the age of fourteen, she had been a prostitute; and she stated, without a blush of shame, that she had often had connection with three or four men in a night. Fifteen months ago, she had a child, which died shortly after birth; and since then she had never been well. As soon as the lochial discharge ceased, having no friends, and no other means of subsistence, she commenced again her calling, and continued at it until two months previously to her coming to Glasgow, when she caught a cold, and noticed her feet and legs swelling; and a pain which had existed in her right side since her confinement became greatly aggravated.

Her symptoms, on admission, were as follows. Her appearance was pale and pasty, with facial palsy of the right side. Her feet and legs were considerably swollen. Her abdomen was distended. On percussing it, dulness was detected over the right iliac region, which became more defined when she lay on the opposite side. What this dulness was due to gave rise to some difference of opinion. By some it was considered to be caused by the ascitic fluid gravitating to the side. Others suggested that it was an enormously enlarged liver: an opinion which her previous dissipated career somewhat favoured. On a subsequent day, however, and on more carefully percussing the region, it was found that the dulness was distinct from the area of hepatic dulness, though this was considerably increased, and was incompatible with the supposition of its being simply ascitic, from the fact that the dulness, though not so well defined in some positions as in others, was never entirely absent from one particular spot in the iliac region. An obscure, ill-defined, dull percussion-sound was also found on the left side of the same region. On examining with the speculum, the introduction of which caused great pain, the os uteri seemed normal. The sound was inserted; and, so far as could be judged, nothing was found wrong with the uterus. There was, however, a purulent discharge from the vagina, which was considered most likely to be of gonorrhœal origin. The urine was albuminous; and, under the microscope, tube-casts were seen in great abundance. The respiratory and cardiac systems were at that time healthy. Her digestion was greatly impaired. She had little

appetite for food, and very frequently, though not constantly, vomited what she was able to take. Her most urgent symptom from her admission to her death was the great pain she had in the right iliac region—a pain increased on the slightest pressure, not confined to the spot touched, but spreading down the thigh on the inner side. Latterly, the pain became most intense and was aggravated by pleurisy of the right side, with subsequent effusion. She died on April 18th, twenty-three days after her admission.

I am indebted to Dr. Foulis, the Pathologist to the Royal Infirmary, for the following report of the *post mortem* examination; and to Dr. Whitaker for the woodcut, which admirably depicts the position and appearance of the tumours.



The abdomen was distended; the legs œdematous. On opening the abdomen, about two and a half pints of turbid yellow fluid was found in the peritoneal cavity. The stomach was contracted, containing a small quantity of yellow fluid. The liver weighed 4 lbs. 7 oz.; the tissues friable. The kidneys were large, weighing ten ounces each. The capsule was not adherent; the surface was smooth and glistening. The colour was pale yellow, mottled here and there with red streaks. On section, the cortical substance was enormously increased; its prevailing colour yellow, mottled with red. The pyramidal substance was of nearly natural appearance. The ovaries were converted into large oval tumours of nearly equal size, six inches long by three inches broad, of a mixed colour, pale salmon mingled with slate colour. The surface was quite smooth, but overlaid in many parts by a layer of firm organised lymph. On section, the surface was smooth and glistening. It was of a mottled yellow and pale brown colour. The fimbriated extremities of the Fallopian tubes were also affected with the same change of structure, though in a much less degree than the ovaries. The uterus was small, not altered. The heart was not abnormal in size. The ventricles were contracted, and contained only a small quantity of a pale clot. In the pericardium were about two and a half ounces of clear reddish serum. In the right pleura were about two pints and a half of turbid yellow fluid; the right lung was compressed against the upper and back part of the pleural cavity. The lower lobe of the right lung was non-crepitant. The left lung was congested. The brain was natural. The spleen weighed five and a half ounces; its structure was soft, and of a dark plum colour. The microscopic examination of the tumour showed a structure of groups and masses of round cells, with a loose interlacing stroma. The structure was that of the round-celled sarcoma.

It will be seen that the structure of the tumour was that of the round-celled sarcoma, which, doubtless, must have increased with amazing rapidity. As previously mentioned, the woman had a child fifteen months before her death, so that the tumours had been formed subsequently to that period. That the tumour in question is extremely rare will be evident from the fact that Rokitsky does not even allude to a case of the kind. Virchow mentions having seen one, and records it as being of the greatest possible rarity, and that it invaded both ovaries. Kiwisch has seen two cases. Of English authors, we find Mr. Spencer Wells, in his last edition of his work, 1872, stating that, until the present year, he doubted their existence, but since then he had seen two distinctly characterised, and taking their origin in the ovarian tissues. In both cases, the right ovary alone was affected. In one case, the tumour weighed nine ounces; in the other, four pounds and a half.

Dr. Wilks, in the *Transactions of the Pathological Society*, vol. x, gives a detailed account of the case of a girl, aged 19, who died under Dr. Addison's care in Guy's Hospital. In this case, the ovaries seem to have been both affected, and the disease also invaded the pyloric half of the stomach. The tumour seems to have been of a fibroid character.

My colleague Dr. Scott Orr has kindly supplied me with the manuscript of a case which came under his care in 1861. It will be observed that, in many particulars, it bears a very striking resemblance to the one I have narrated.

"A poor girl, aged only 18, was admitted into the Royal Infirmary in the winter of 1861. She had only been a few months ill; and yet, on her admission, her abdomen was greatly distended by a large firm swelling, which gave her the appearance of being about seven or eight months pregnant. She was tolerably plump and healthy-looking when first admitted; but soon her sufferings became so great, and she was so wasted with hectic fever and pain, that she quickly assumed the well known cachectic appearance of confirmed malignant disease. I had little doubt from her history that the disease was ovarian, and of a malignant character. On examining her *per vaginam*, however, I was not a little puzzled to find, filling the whole pelvis, a large irregularly nodulated tumour, having the hard scirrhus feel of a carcinomatous uterus. The os uteri was with difficulty reached. It was tilted forwards towards the symphysis pubis. The question now came to be, was the abdominal tumour connected with the supposed uterine swelling, or were there two distinct tumours: the one uterine, the other ovarian. I lean to this latter opinion, believing that such malignant ovarian growths may be associated with like degenerations of other organs. The patient soon sank, and died worn out with exhaustion; and an opportunity was afforded of ascertaining the true condition of morbid parts. One ovary was found loose and unattached, floating among the bowels, enlarged fully to the size of a child's head. The other was not quite, but very nearly, of equal size. It filled the whole pelvis, into which it was pushed down, and pretty firmly attached; and it was its irregular nodulated surfaces which had been felt during life through the vaginal parietes. The structure of the tumours was truly malignant, presenting the soft hair-like character in many places, while in others suppuration had taken place, and in others the hæmorrhagic character revealed itself, as seen in fungus hæmatodes. The uterus was small and contracted, free from disease, but displaced forwards, its os lying as I had felt it during life. It is worthy of notice, also, that the liver was found to be largely infiltrated with cancerous disease.

"These appearances fully explained all the poor girl's sufferings, for they displayed an activity and acuteness of morbid action which could not have gone on without great pain and distress. The early age at which this malignant form of ovarian disease was developed was surely a very peculiar feature in this instance, and it struck me very forcibly at the time, being the only case of cancerous degeneration of the ovary with which I remember to have met."

REMARKS.—In Dr. Scott Orr's case, it is not particularly noted what occupation the girl had; but with regard to my own case, this was very evident. It is probable that the kidneys were first implicated, as their large size and weight abundantly evidence. Albuminuria and a debilitated constitution resulted. Then the girl's mode of life necessitated great ovarian irritation. What part the ovaries play in sexual intercourse, no one can tell; but that they hold an important one, no one will attempt to deny. With a reduced constitution, the woman plied her unhappy calling, and the constant irritation probably originated the form of cell-growth described. The fact that both ovaries were affected materially assists this hypothesis. The woman, it may also be mentioned, seemed, both in her conduct and conversation, to savour more of the lower animal than of the woman. Her talk was such as to disgust nurses and patients; and, latterly, we were obliged to put her into a side room with a typhoid fever patient, who, on the second day afterwards, begged to be placed in the general ward, and to be freed from her society.

ON THE NATURE AND TREATMENT OF ALPECIA AREATA (AREA CELSI).*

By JAMES H. STOWERS, L.R.C.P.Lond., M.R.C.S.Eng.,
Shrewsbury.

AMONG the many cutaneous affections met with in practice, there are few, I believe, that have received more attention from the profession of late than the above. Numerous writers have done much to enlighten us as to the true nature of this disease, especially Jenner, Hutchinson,

* Celsus, *De Medicis*, lib. vi, cap. iv.

Rindfleisch, Bristowe, Duhring, and others. Again, in the *St. Bartholomew's Hospital Reports for 1872* (vol. 8), Dr. Dyce Duckworth contributed one of the most able papers that have been written within the last few years upon the nature and treatment of alopecia areata. Much evidence has been adduced on both sides as to its parasitic or non-parasitic origin; but, notwithstanding, the majority of those who have studied the microscopical characters of the altered hairs obtainable in this affection do certainly speak most emphatically, and I believe with truth, in favour of its being independent of any fungus-element. That this disease may occur associated with other parasitic affections—tinea tonsurans, for example—there can be no possible doubt; but the fact of a fungus being but seldom found with true alopecia proves that that alone cannot be the real cause. The bulk of evidence tends to show that it is an abnormal condition dependent upon nutritional changes in the scalp, producing a disturbing influence upon the hair's growth, loosening it in its follicle, allowing its closely arranged fibrillæ to become separated (thus accounting for the swelling in the shaft in the early stage), and rendering the hair so brittle that it either fractures with the slightest touch, or falls away with many others, leaving the characteristic patch. For my own part, I have examined microscopically many specimens of hairs, and have totally failed to find anything suggestive of a parasite. My attention has lately been drawn to two cases of alopecia successfully treated with local stimulants, and published in the *JOURNAL* of November 14th, 1874, by Mr. C. R. Roose. I wish, therefore, more particularly to speak concerning that form of treatment, and to give my experience in its use.

During the period when I was clinical assistant in the dermatological department of St. Bartholomew's Hospital, I had an opportunity of seeing very many instances of alopecia, and in my note-book I have notes of several cases precisely similar to those referred to by Mr. Roose. Without local stimulants, I believe it impossible to produce a cure. Good nourishing diet, and tonic medicines to improve the general health, as cod-liver oil, steel, mineral acids, and nuxvomica, are indispensable; but even these, without a stimulating topical application, are insufficient. At one time, it was my practice to compare the results of certain local remedies, and note the efficacy of each. Among those used were the blistering fluid of the *Pharmacopœia*, tincture of capsicum, spirit of turpentine, and the strong solution of ammonia, alone and combined. It is interesting to note how the scalp, when its nutrition is impaired, the vitality being lowered, will tolerate the use of such powerful applications for a long period, with less irritating effect than in health. The first remedy—the blistering fluid—was used in several cases with a fair result. However, when the disease is extensive, much inconvenience is experienced by the patient from a large vesicated surface; and, moreover, it was found that the result was not better than that of other applications. Tincture of capsicum in the form of a lotion, with glycerine and rose-water, proved useful, but yet inferior to either spirit of turpentine or solution of ammonia.

The relative merits of the two remaining fluids were then noticed. Cases were chosen in which several patches of the disease existed simultaneously upon the scalp of the same patient, that the influence of each remedy could be the more easily compared. A large number of cases were thus treated. The strong solution of ammonia was applied with a small piece of flannel, and carefully rubbed in night and morning until the surface became reddened. At first, the scalp appeared insensible to it, very little smarting occurring. This was repeated daily until the surface became sensitive, and the strength was reduced, or the application used less often. When the scalp became irritable, it was discontinued for a few days. In a few weeks, fine white downy hairs appeared, and gradually the hair normal in character returned. The scalp was ordered to be shaved periodically, to stimulate the hair's growth, and allow the more thorough application of the fluid. The spirit of turpentine was used in the same way.

A careful prognosis as regards time must always be given; for improvement is but slow in many instances, requiring even months before the patient can be convinced that good is being done. If patience and perseverance, however, be exercised, benefit is sure to follow, although it may seldom happen that some of the hair-follicles are so changed and atrophied that their function cannot be restored to normal.

Dr. Duckworth published in the *St. Bartholomew's Hospital Reports for 1873* (vol. ix), the conclusions that we were able to draw as the result of our observations, and I cannot do better than repeat them in his own words. They were as follows.

1. The local treatment by strong solution of ammonia is apparently more satisfactory than that by spirit of turpentine.
2. The renewal of the hair-forming function is probably hastened more by ammonia than by any other local application.

3. Turpentine appears to be only second in importance as a topical agent.

4. The ammonia treatment is, on the whole, less universally applicable in these cases than turpentine.

5. In certain cases—a decided minority—the ammonia treatment cannot be borne because of its severity, *e. g.*, exciting vesication. Turpentine never produces these effects, and is a less formidable agent in all respects.

6. Ammonia may, therefore, be regarded as a valuable local application in these cases.

I will only add that, since the publication of these conclusions, I am able to speak even more highly in favour of ammonia as a curative agent.

A RARE INJURY OF THE SHOULDER-JOINT.

By GUSTAVUS FOOTE, M.R.C.S., Kington, Herefordshire.

ON March 18th, 1871, a man named David Higgins came to my surgery, saying he had fallen down when he was very drunk three days previously, and had hurt his arm. On examination, the arm from the shoulder downwards was found enormously swollen, especially about the elbow, and for the most part hard and brawny; there was flattening of the shoulder. I told him the arm was out of joint, and proceeded to reduce it, which was easily effected, but it fell back immediately into the old place. On a more careful examination, I discovered the upper portion of the shaft of the humerus loose in the axilla, broken off at about the surgical neck; I had merely reduced the broken shaft, leaving the upper end in the axilla. The diagnosis then was, a dislocation into the axilla and a fracture of the bone at the surgical neck occurring at the same moment. Two days later, my friend Mr. Garrard saw him; and, after a long and careful examination, he agreed with me as to the nature of the accident. The treatment I adopted was merely to make sure that the ends of the bone should be kept in apposition, and to place the arm in a sling; the object being to cure the fractured humerus, and promote the formation of a false joint under the coracoid process of the scapula. The swelling gradually subsided, the bone readily united, and a fairly good joint was formed. The patient was able to continue his employment as a mason, having free use of his arm; he could not, however, raise it upwards so as to bring the hand above the head.

I did not see the man again until September 5th, 1874, three years and a half after the accident. He was then suffering from alcoholism; the symptoms being general paralysis and vital prostration. As he had no home, I had him conveyed to the infirmary at the union house, where he slowly sank, dying on the morning of the 10th. A *post mortem* examination was made twelve hours afterwards. The arm presented an appearance of dislocation downward into the axilla. An incision was carried from above the acromion process down the arm, to below the insertion of the deltoid, which appeared wasted, then across the upper part, and the bone was completely exposed by dissection. A singular condition of things was discovered. There had been fracture of the humerus at the anatomical neck and at the surgical neck of the bone; the head of the humerus was still in the glenoid cavity, and its attachments were firm. The lower end of the loose fragment had become united most accurately with the shaft, and the upper extremity had formed for itself a very good false joint, the cavity being formed by the under surface of the coracoid process, and the corresponding portions of the second and third ribs. At the point of union between the two ends of the bone on the outer side, callus had been thrown out, and a bony union had been formed with head of the bone still in the glenoid cavity. There were in fact two joints, the false and the true one. While *in situ* the arm could be moved freely in any direction, except upwards. The diagnosis proved to be nearly accurate, for practical purposes quite so. The only way in which I can account for this singular accident is by supposing, that when the man fell down the shoulder must have struck against a smooth projecting stone in the road.

The only case at all similar that I can find recorded is one mentioned by Sir Astley Cooper in his treatise of *Dislocations and Fractures*. A Mr. Blackburn fell from his horse and was declared to have dislocated his shoulder. It was not until after his death that the real nature of the accident was discovered; it was then found there had been a dislocation of the humerus, with a fracture at the anatomical neck; the detached head of the bone had become fixed by osseous union to the inner edge of the coracoid process, and the upper end of the shaft had formed a good useful joint.

FORTY-THIRD ANNUAL MEETING
OF THE
BRITISH MEDICAL ASSOCIATION.

Held in EDINBURGH August 3rd, 4th, 5th, and 6th, 1875.

PROCEEDINGS OF SECTIONS.

SUBJOINED are abstracts of most of the papers presented to the several Sections of the Association at the Annual Meeting. The papers themselves, as opportunities occur, will be published in full in the JOURNAL.

SECTION A.—MEDICINE.

Wednesday, August 4th.

In the absence of the President, Dr. R. QUAIN, F.R.S., the Chair was taken by Dr. W. T. GAIRDNER, Vice-President, who delivered an introductory address, which was published at page 200 of last week's JOURNAL.

On Types of Continued Fever. By JOHN BEDDOE, M.D., F.R.S., etc., Clifton.—The author touched very briefly on the modern classification of continued fevers; and, having related the history of two cases occurring in his own practice which had lasted over two months, expressed his belief in the existence of a type of fever of protracted duration, specifically different from the enteric, and related to synochus.—Sir ROBERT CHRISTISON said that Dr. Beddoe's paper opened two subjects; first, an instance of a different form of fever from those which were at present generally recognised by physicians and in books; and, secondly, the relation which that form of fever might have to other forms. Sir Robert then directed attention to an instance of a fever such as Dr. Beddoe had described as different from ordinary typhus, and different from that which was improperly called typhoid fever, and which more properly should be called enteric. This form of fever was tedious and slow, and the approaching convalescence was followed by the return of the fever in about two months. He believed this peculiar fever to be due to a life of great excitement, and also to living too well, although not intemperately. County magistrates, he thought, constituted a considerable portion of the number of patients he had seen. He had had a long experience of fevers, and he had never seen such a case in the hospitals. He came to the conclusion that there were more forms of fever than those who had written on the subject were disposed to allow. The observations of Dr. Cullen, who was one of the most accurate physicians that ever lived, had been neglected; and they must treat him with great respect, because he did not found his conclusions upon pathological anatomy, but upon minute and accurate observation of the disease. He had described fevers that were not known in the present day.—Dr. JOHN HADDON (Manchester) hoped that the discussion would direct the attention of general physicians to recording the symptoms of fevers, so that, by a comprehensive grasp, they might be enabled to generalise to some useful purpose.—Dr. DAVID YOUNG (Florence) called attention to the Roman, Venetian, and Naples fevers, which were malarious and intermittent. Apart from the pure malaria and the malarious typhoid, there was a fever very common, and which seemed to resemble that described by Dr. Beddoe. He had noticed forty cases of that fever in the last three years, not one of which bore the least resemblance to typhus or pure typhoid, and not one of which lasted longer than five weeks.—Dr. T. D. GRIFFITHS (Swansea) thought that these low fevers had their origin in a diseased state of some of the organs of the body. Medical men ought to study fevers more than they had hitherto done before increasing the number of types.—Sir JOHN ROSE CORMACK (Paris) said that the conditions under which such a class of fevers occurred should always be carefully studied before deciding that it was different from the usually received types. What was known, for instance, as Roman fever was, so far as he could see, a description of obscure or irregular ague.—Dr. MACLAREN (Glasgow) agreed with Sir John Cormack in his last statement, and, in the absence of *post mortem* proof, would be inclined to put down the cases mentioned by Dr. Beddoe and Sir Robert Christison as cases of enteric fever.—In answer to the Chairman, Sir ROBERT CHRISTISON said the cases to which he had referred were quite unconnected with one another.—The CHAIRMAN said he very much doubted whether a classification of fevers could yet be made upon any basis but the three recognised types and a number of anomalous types.

Treatment of Aneurism of the Arch of the Aorta by Means of Galvano-Puncture. By T. MCCALL ANDERSON, M.D., Glasgow.—After giving a report of two cases in which this treatment was carried out

with success, Dr. Anderson laid down the following rules. 1. The continuous current battery should always be employed, never the induction apparatus. 2. The kind of battery is of less consequence, if it be in good working order; but the cells should be large, so as to increase the chemical effect. 3. The needles should not be very thick, but very sharp, and should be oiled before being introduced, and that portion of them which traverses the skin, walls of the sac, and intervening tissues, should be insulated by means of a coating of vulcanite. 4. The needles should be connected with the positive pole of the battery. 5. A weak current of electricity should be used (from four to eight cells of a large Stöhrer's battery), and the operation may be continued for about an hour. 6. The number of operations, and the length of the intervals between each, must depend upon the effect of those which preceded them. Dr. Anderson concluded by referring to the dangers connected with the electrolytic treatment; viz., inflammation, and the entrance of air and of clots into the circulation; and observed that it was a question to which attention should be specially directed in the future, whether the consolidation of that portion of the aneurism which approaches the surface may not, in some cases at least, favour the extension of the disease in other directions, and lead to internal pressure-symptoms, and to rupture into internal organs.—Dr. CLIFFORD ALLBUTT (Leeds) stated, as the result of his experience, which was drawn from five or six cases, that the mode of treatment described by the author must be considered as successful. The points on which success depended he regarded as the use of a feeble current (five cells), with Ladd's galvanometer, derived from large plates, and the introduction of the positive pole only. It was well also to use several needles, all connected with the same pole. Strong currents were injurious, and small plates did not give so good results. Notwithstanding this, the author said, embolism must be regarded as a risk. It occurred the day following one of his operations, in which he had introduced both poles into the sac.—Dr. ANDERSON, in replying, remarked that it must be remembered that, when embolism occurred after an operation, it did not necessarily follow that it was due to the mode of treatment.

Auscultation of the Œsophagus. By T. CLIFFORD ALLBUTT, M.D., Leeds.—Dr. Clifford Allbutt read a paper on the investigation of the œsophagus by means of the stethoscope, and stated that this method deserved to be better known to physicians than it is at present. He referred to Hamburger (*Österreich. Med. Jahrbücher*, 1867, et seq.) as the only person who to his knowledge had given much attention to the matter. Hamburger's papers contained much information of solid value, mingled probably with some exaggeration and inaccuracy. He (Dr. Clifford Allbutt) had, however, been able to verify the more important part of Hamburger's observations, and had found the stethoscope most valuable in distinguishing spasmodic from organic dysphagia, and in ascertaining the site and the degree of constriction. He gave instructions in the method of using the stethoscope for these conditions, and described in some detail the normal œsophageal sounds. He then proceeded to compare the variations from the normal sounds which are met with in disease, dividing them into variations of—1. Tone; 2. Apparent size of the morsel; 3. Rapidity of its translation; 4. Direction of its passage; 5. Energy of œsophageal contraction.—Dr. GAIRDNER remarked that this was undoubtedly a very valuable paper. The subject was new; it demonstrated the powers of clearly defining and diagnosing between various diseases, and was, therefore, of the highest importance.—Dr. CRICHTON (Perth) confirmed the result of the author's investigation by his experience in one case where, by the stethoscope, he had been able to find the exact seat of a stricture.

The Appearance of the Tongue in Health and Disease. By R. TORRANCE, L.R.C.P. Ed., Matfen.—In this paper the appearance of the tongue was described, in the first place, in a state of perfect health; and, in connection with this state, the author referred to the effect of an exalted nervous system upon it, as illustrated in persons of a highly nervous temperament. Then its appearance in the various inflammatory disorders followed, inflammation being a subject which engaged a large share of the attention of both physician and surgeon, it being continually the object of treatment and watchful care. Next was described the appearance of the tongue in the diseases of the digestive organs; it being a good index to the state in which they offer themselves for treatment. The appearance of the tongue in fevers formed an important addition; and the paper concluded with that in connection with the various diseases of the organs of respiration and circulation.

Notes of Four Cases of Thoracic Aneurism. By E. RICKARDS, M.B., Birmingham.

Erysipelas and Scarlet Fever occurring almost simultaneously in one Family. By J. D. GILLESPIE, M.D., Edinburgh.

The Treatment of Lupous Disease of the Skin by Erosion and Acupuncture. By BALMANNO SQUIRE, M.B., London.

Thursday, August 5th.

The chair was taken by Dr. GRAINGER STEWART, Vice-President.

Treatment of Acute Rheumatism by Tincture of Perchloride of Iron. By J. RUSSELL REYNOLDS, M.D., F.R.S., London.—Dr. Reynolds commenced by referring to the paper on the same subject, which he read at the meeting of the Association in 1869. He now, by the citation of a number of cases, showed how early relief had been afforded, not only from pain, but from the abnormal heat, by the use of the remedy referred to. Of the cases cited, 44 per cent. of first attacks were convalescent within the first week, while of those in their second, third, or fourth attacks, 42 per cent. recovered within the same period.

Rheumatic Fever and its Treatment. By JAS. JOHNSTON, M.B., Birmingham.—The author brought forward for consideration, with regard to the causation of rheumatic fever, the non-conversion of starchy food into glucose, in consequence of irritation from improper food or from exposure to cold and damp, and the conversion in the cæcum of the undigested starch into lactic acid, which, being absorbed, produced the phenomena of the disease. In regard to the treatment to be observed, he advocated the use of bicarbonate of soda given in enema, instead of potash. In twenty cases so treated, the temperature had gone down to below the normal state in the course of seven days.—Dr. LONG FOX (Bristol) said that, in spite of all that had been said by the two authors of the papers, and especially by Dr. Reynolds, he did not think that heart-disease accompanied so often as had been represented cases of rheumatic fever. In fact, he believed that in many of the sixty cases referred to by Dr. Reynolds, the patients had come to him with heart-disease to a great extent already developed before the attack of rheumatic fever. That disease had been treated in a good many different ways by different physicians; and he thought he was quite within the mark in stating that few of them were satisfied that the system advocated by Dr. Reynolds was superior to any other of the modes of treatment. For his own part, he was more content with the practice of frequent blistering of the joints than he was with anything else; especially when that was combined with alkalis, and when the patient was watched with the utmost possible care, and the greatest attention at the same time paid to the bed and blankets.—Dr. CRIGHTON (Tavistock) said he had been in the habit of treating cases of rheumatic fever with large doses of tincture of perchloride of iron, combined with liquor ammoniæ acetatis, and the results had been that the fever, which otherwise would not have been subdued within, say six weeks, had been reduced within ten days or a fortnight. At the same time, under that treatment he found that the amount of heart-disease accompanying rheumatism had been very greatly reduced.—Dr. W. STEPHENSON (Edinburgh) said he thought that, in investigating such subjects, or in drawing conclusions from their treatment, they should keep in view the age of the patients. They all knew that children suffering from rheumatic fever were much more subject to have their hearts affected by it than adults were. In fact, it was now generally understood that, after thirty years of age a man's heart was pretty safe from the effects of rheumatic fever. He concluded by stating that, in his opinion, the results of Dr. Reynolds' method of treatment had been very satisfactory indeed.—Mr. MEACHAM (Manchester) said he was on one occasion laid up for six months with rheumatism in the knee; therefore, he could speak from experience. All sorts of remedies were applied, but he objected altogether to blistering. He believed that carbonate of soda was one of the very best remedies they had in medicine for rheumatic fever or rheumatism. He had not had an attack now for nineteen years. He had taken he could not say how much carbonate of soda, and he should not have any objection to take two drachms at any time when he suspected an attack was approaching.—After some observations by Dr. RICHARDS (Bangor), and by Dr. SHANN (York), Dr. REYNOLDS and Dr. JOHNSTON replied.

The Pneumonias of Childhood, as illustrated by Clinical Charts. By W. STEPHENSON, M.D., Edinburgh.—The author remarked that the views generally entertained on the subject were in many respects erroneous, and that the manner in which it was handled in our books on diseases of children failed in presenting it accurately, and led to confounding the different views one with another. After criticising the ordinary terms applied to the inflammations of the lungs in children, as showing the inaccurate ideas existing regarding the subject, he demonstrated the character of the disease in its two chief forms by means of charts of the temperature, night and morning, taken in the Children's Hospital. He showed that by the chart the character of the disease might be recognised at times when otherwise it might be overlooked, or before evidence of its existence could be found in the lungs. The recognition of distinctive types in thermometric charts gave a truer perception of the constitutional condition than could be gained by other means, and furnished more reliable indications for treatment than physical signs.

Tetany. By JOHN HADDON, M.D., Manchester.—After commenting on the very recent date at which this disorder had been described in the country, he related two cases which he observed in March 1875. Case I had suffered for more than twelve months from menorrhagia and diarrhœa, and, during the attack, which was one of medium severity, there was one-fifth of albumen in the urine. Bromide of potassium was given in half-drachm doses every hour, and the tetany soon disappeared. Case II had a mild attack. She had been troubled for two years with diarrhœa, which was caused by a constriction in the rectum. The same treatment as in Case I was followed by a like satisfactory result. After commenting on the probable cause in each case, he concluded by urging the profession to watch for and record cases of tetany, seeing that we must have a wider experience of this affection before we can hope to ascertain its real cause.—Dr. STEPHENSON gave details of a case which he had met with, in reference to the etiology. Pregnancy aggravated the affection, but the patient had suffered from the disease before marriage.—Dr. GRIFFITHS (Swansea) had met with a case, in which masturbation was believed to be the cause. A brother of the boy, who also masturbated, suffered from intermitting hæmaturia, which occurred after the act, and no other cause could be assigned.

Account of some Experiments relating to the Pathological Anatomy of Myelitis. By D. J. HAMILTON, L.R.C.P. & S., Falkirk.—Experiments were made on small animals. The spinal cord was artificially inflamed by having a thread passed through it. The appearances found were contraction of the axis-cylinders, subsequent fissiparous division of the contracted portions, and the formation of pus from these. The nerve-cells were affected with granular or "œdematous" degeneration. The neuroglia was somewhat increased, but not to a great extent. The perivascular lymphatic spaces of the surrounding pia mater were filled with lymphocypuscles. One or two cases were quoted in confirmation of the facts.

Some further Remarks on the Use of Spirometry in Medicine, demonstrated by a New Double Spirometer. By V. JAGIELSKI, M.D.

Remarks on Hooping-Cough and its Treatment with Carbolic Acid Vapour, with Description of a Steam-draft Inhaler. By ROBERT J. LEE, M.D., London.—Dr. Lee directed attention to the very slight variation in the annual mortality from hooping-cough, to its widespread geographical distribution, and to the results of various kinds of treatment. The conclusions which he deduced were the results of observation of six hundred cases, and the most important remarks were connected with the rise and fall of the disease at the first or second quarter of the year, and the frequency with which the disease was not diagnosed on account of the absence of the laryngeal spasm or whoop. The use of carbolic acid was recommended as proving more satisfactory than any other kind of remedy; and the method of administering it in the form of vapour by means of the steam-draft inhaler was explained. A solution of one part of carbolic acid in ten of water was kept as a standard for mixture in the proportion of two drachms to four ounces of water. This was introduced into the inhaler, and every four hours its vapour was inspired for ten minutes or a quarter of an hour. Dr. Lee explained the construction of the steam-draft inhaler, and the advantages of its use in other maladies of the respiratory organs, as well as in hooping-cough.

Case of Paralysis of the Serratus Magnus Muscle. By SAMUEL WOODMAN, F.R.C.S., Ramsgate.—The patient was a man, aged 39, who had been appointed lamplighter in a temporary ship, the lamps of which were placed high above the platform on which he stood. Six months after his appointment (about May 1874), he felt a weakness in his right shoulder, which continued to increase until he became unable to use the arm. When he came under Mr. Woodman's care, there were the usual signs of paralysis of the serratus magnus; he had bulging of the ribs and raising of the affected shoulder. There was no paralysis of any other muscle than the serratus magnus. He had been treated by daily faradisation, cold douches, rest of the arm in a sling, and doses of quinine and strychnia. There had been considerable improvement in the course of two months.

Friday, August 6th.

The chair was taken by Dr. LOWE, and afterwards by Dr. GAIRDNER.

Case of Abnormal Disposition to Sleep alternated with Choreic Movements. By W. T. GAIRDNER, M.D., Glasgow.—The phenomena of the case were unique, and were observed over three years. The patient, a young girl, was not cataleptic; the muscular movements had no resemblance whatever to the peculiar rigidity of catalepsy, and differed from choreic movements in the fact that they alternated with states of consciousness. When asleep, she was still and tranquil; when awake, almost without intermission, she was a prey to involuntary muscular movement. She was not subject to any condition of hysterical coma, ecstasy, or trance; had been subject to no known cause of hysterical

derangement; and I had never sought to attract attention, or been in any way made an exhibition of, publicly or privately. In her waking moments, she was cheerful, and even lively, presenting no trace of exaggerated self-consciousness and no dramatic or inventive faculty. She had no religious or metaphysical prepossessions; in fact, apart from the peculiarities of her case, she was a normal person of her years. She was not somnolent, and there was an entire absence of any form of externally controlled will. There only remained one hypothesis: that this girl was a malingerer; but anything like premeditated deception or scheming would imply powers as well as motives for deception, which seemed to be wholly absent. The involuntary muscular movements were in themselves wholly painless, however disturbing. By far the most persistent involuntary jerking movements were a slight rapid motion of the head, twitching of the left side of the mouth, and jerking of the right arm. There never was any nodding movement. To a certain extent, the movements were increased by mental emotion, but ceased when the girl was asleep. The shakings were entirely beyond the control of her will. The sleep was very deep, sound, and natural, and the girl could not be roused by agitation, concussion, or ordinary noises; but she could be readily awakened by calling her name close to her ear. The most startling feature of the case was the sudden transition between sleep and thorough waking. So great was the tendency to fall asleep, that she had frequently been known to drop asleep when walking about or standing; but, if kept awake, she could read, play the piano, or do ordinary woman's work. If allowed to fall asleep and then suddenly awakened, she showed no want of self-possession, and resumed her occupation or conversation exactly at the point where she had been interrupted. Very rarely a spasmodic movement was observed when passing from sleep to waking. On two occasions, she slept for eight days without waking, and in several instances she slept continuously for two or three days, but, on waking spontaneously, she had no conception of having slept more than one night. There was, finally, a certain amount of dull pain or uneasiness in the left temple.—Dr. CLOUSTON (Edinburgh) said this was a very extraordinary case described in a very interesting manner. He had seen a case with many parallel features occurring in the course of general paralysis, and after an epileptic attack. He had had the case of a lady who suffered from twitches of the left side of the face and of the right arm and shoulder. She also, for two or three days, had a very extraordinary tendency to somnolence. He had never been in the least degree satisfied with any of the ordinary theories of sleep. It always seemed to him that there must be a sleep-centre, and that this must be in the upper part of the brain, where the conditions of consciousness were determined. The present instance confirmed the theory that the sleep-centre could act instantaneously in certain cases.—Dr. J. MILNER FOTHERGILL (London) and Dr. GRAINGER STEWART (Edinburgh) commended the paper.

Notes of a Series of Cases of Rubella Notha. By G. E. SHUTTLEWORTH, M.D., Lancaster.—The author remarked that, in many of the standard text-books on medicine, considerable obscurity existed with regard to the disease described by Dr. Benjamin Babington in 1864 as rubeola notha. He attributed some of this obscurity to the varying names under which the affection had been described by various writers, citing those of rubella, rubeola notha, bastard measles, anomalous exanthem or rosella, rosalia, rubeola sine catarrho, and epidemic roseola. Noticing that the London College of Physicians gives no place in its nomenclature to the term rubeola notha, but no longer applies to measles the old name rubeola, he suggested that the latter term might with advantage be officially defined as the pathological equivalent in this country of the roscole of Trousseau, the rôtheln of Vogel, and the rosalia of Italian authors. He mentioned, however, that the name epidemic roseola has been adopted by Dr. William Squire, who gave an excellent account of the affection in the BRITISH MEDICAL JOURNAL for January 29th, 1870. Having quoted from Dr. Tilbury Fox (*Skin-Diseases*, 3rd edition, page 93) a graphic description of the disease under discussion, the author went on to give an account of the series of twenty-seven cases which fell under his notice at the Royal Albert Asylum, Lancaster, in July, August, and September, 1874. He exhibited, in a tabular form, an account of the leading symptoms in each case, such as the character and duration of the rash, the state of throat and tongue, the range of temperature and pulse, the condition as to sequelæ, desquamation, etc., with a statement of the exanthems previously undergone. From this it appeared that, while some of the early cases resembled mild cases of scarlatina, others were rather of the type of measles; but that the majority presented merely a brownish-red elevated discrete papular rash, lasting two or three days, with slight elevation of pulse and temperature on the first and second days. There were no serious sequelæ, and only in two cases desquamation was discovered, and that of the finest furfuraceous character. The question was, What was the exact pathology of the affec-

tion? There was no doubt that the 27 cases bore a homogeneous relation to each other; they were not mere summer roseola, for the weather was even cold at one period of the epidemic; they were not cases of scarlatina, for in no case were there the full characteristic signs or sequelæ of this disease; they were not measles simply, for there was an almost universal absence of catarrhal symptoms, and more than half the patients had previously had measles; and there was no reason to suspect that the rash was dependent upon any error of diet or hygiene. It was argued, therefore, that the author was justified in describing these cases under the designation of rubeola notha; and it was urged that the diagnosis of this affection as entirely distinct, on the one hand, from scarlatina, and, on the other, from measles, might often be a matter of great moment to the practitioner.—Dr. FARQUHARSON (London) made a few remarks on the paper.

Case of Pulmonary and Tricuspid Valvular Disease. By ALEXANDER MORISON, M.B., C.M., London.—E. W. G. M., aged 20, fair, well grown, but with an anxious expression and cardiac symptoms, had scarlatina at 5 or 6 years old, and was known to have heart-disease at the age of 8. His paternal and maternal family history was rheumatic, cardiac, and phthisical. Till 18 years of age, he performed his duties as bank clerk satisfactorily, when the unwonted exercise of cricket seems to have upset the compensatory balance, effected probably by hypertrophy in his diseased heart, and cardiac symptoms became urgent. The pulse was 78 to 84, regular, small, but distinct. There were undulatory pulsations in the suprasternal fossa, and regurgitation into the external jugulars. The carotids were normal. The præcordial region bulged forward. There were flattening under the left clavicle, visible systolic pulsation from the second left intercostal space to below the nipple, well marked epigastric pulsation, increase of the transverse heart-dulness, and coarse *frémissement cataire*. A systolic bruit was heard close to the left edge of the sternum, below and to the inner side of the nipple, not traceable round the left chest. There was a double murmur, best heard over the third left cartilage, harsh and grating, not propagated into the large arteries, but towards the left shoulder. He had angina passing to the right shoulder and down the right arm. The breathing was harsh. There was no marked dulness, no crepitation. The liver was enlarged. He had albuminuria. The bowels were regular; but latterly he had had some diarrhoea. There was purpura, chiefly on the legs and fore-arms, most abundant round the joints; some on the right half of the trunk. Shortly before death, he had œdema of the right eye and the right half of the scalp, less so of the left eye. This passed off; the urine, which had been nearly suppressed, having apparently, by means of a diuretic, become more abundant. He died without convulsion, and was only unconscious during the last half hour of life. At the necropsy, there was found valvular obstruction at, and regurgitation through, the pulmonary and tricuspid valves, which were much altered by warty vegetations. The tricuspid obstruction was not so pronounced as the other conditions. The right ventricle and auricle were dilated, the latter somewhat hypertrophied. There was a partially defibrinated clot in the auriculo-ventricular orifice, and another passing through the pulmonary opening and stretching into the two chief bifurcations of the pulmonary artery. The mitral and aortic valves were healthy, though there was some deposit on the mitral segments. The left ventricle was not hypertrophied. The muscular fibres were healthy. The lungs were small, crepitating, but with scattered patches of induration. Both extreme bases were solid. All the organs behind the seat of obstruction were enlarged and engorged. The kidneys were much engorged. There was slight effusion into the pericardium, and on the surface of some other serous membranes were scattered ecchymoses. Mr. Morison, after pointing out the extreme rarity of such cases, and the difficulty of diagnosing acquired from congenital disease, ascribed the valvular lesions to scarlatinal endocarditis; and considered the kidney-affection as more recent than the heart-disease, indicating as points of interest in the case the great dyspnoea simulating pulmonary thrombosis, and un-influenced by position, the remarkable absence of dropsy and the right-sided angina, œdema, and purpura, the last of which might be attributable to the patient's habitually lying on his right side, and perhaps also in some measure to the quality of the blood and the nature of the obstruction.

The Syphon Stomach-tube, a Substitute for the ordinary Stomach-pump. By A. HARVEY, M.D., Aberdeen.—Dr. Harvey exhibited and described a new syphon stomach-tube, a substitute for the ordinary stomach-pump. The instrument was a flexible India-rubber tube, which, when inserted into the stomach by the mouth, was filled with fluid. This being done, the ordinary conditions of a syphon were fulfilled, and the stomach emptied. In a similar manner, the tube could be employed in filling the stomach.—Dr. GAIRDNER and Dr. MOIR, (Edinburgh) commended the value and simplicity of the instrument.

SECTION C.—OBSTETRIC MEDICINE.

Wednesday, August 4th.

THE President, Dr. MATTHEWS DUNCAN, delivered an address, which was published at page 171 of the JOURNAL for August 7th.

Eniotomy, its Various Modes of Procedure, and those of the Craniotomy.

By A. KEILLER, M.D., Edinburgh.—Dr. Keiller exhibited a considerable number of instruments, old and new, and drew particular attention to a modification of Ziegler's forceps which he had devised, so as to constitute a small cephalotribe.—Dr. MOIR (Edinburgh), while acknowledging great advantage from the introduction of the cephalotribe, thought it right to remark that he had operated with the perforator, small forceps, and blunt hook, without any very great difficulty, many times before the introduction of the newer instrument.—Dr. STEELE (Liverpool) said that, in his own practice, the cephalotribe had been but seldom necessary. It was, however, very desirable to have the most perfect possible instrument for the rarer and more extreme cases.—Dr. BASSETT (Birmingham) said that Dr. Braxton Hicks's cephalotribe had answered every requirement in his (Dr. Bassett's) hands.—Dr. ATTHILL (Dublin) was not enamoured of the new instrument introduced to the notice of the Section. He thought it too small to exert the necessary force.—Dr. GIBSON (Newcastle-on-Tyne) thought the cephalotribe ought to be much more generally used.—Dr. KEILLER briefly replied to the several speakers.

Turning versus the Forceps in Cases of Difficult Labour. By T. MORE MADDEN, M.D., Dublin.

On a Form of Accidental Hemorrhage alternating with Watery Discharge. By I. HARRINSON, F.R.C.S., Reading.—Mr. Harrinson described two cases that had lately come under his notice, in which, after a fall in one case and a shock in the other, hæmorrhage occurred at monthly intervals, there being also a continuous watery discharge. In both cases, the placenta were pale and soft, and there was partial separation of the membranes.

A New Kind of Midwifery Forceps; and an Obstetric Thimble for Rupturing the Membranes. By DAVID GORDON, M.D., Edinburgh.—The forceps was described as possessing the following characteristics. 1. The blades are separable from the handles, and much curved where they join the shanks. 2. The shanks or stems are very close to each other, and have sockets to receive the ends of the handles. 3. The handles are curved, and imitable by a movable screw. They have nipples to glide into the sockets of the stems, with strong catch-springs to fix them there. 4. The handles, united by the screw, are easily attached to the blades, and no locking is needed.—Dr. Gordon also showed a thimble which fits the index finger, exposes the point of the finger opposite to the nail, and has a sharp point which curves over the free edge of the nail.—Dr. SWAYNE (Clifton) doubted whether the forceps would prove generally applicable.—Dr. STEELE (Liverpool) thought that the so-called improvement was really a retrograde step.—Dr. BASSETT (Birmingham) thought that the best kind of midwifery forceps was the long one with double curve.

Ovarian Dropsy: Some Points in its Pathological Treatment. By PROTHEROE SMITH, M.D., London.—Dr. Smith called attention to the greater frequency of ovarian dropsy now, as compared with what was known of its occurrence forty years ago. He invited discussion as to its predisposing cause, and the means best calculated to arrest it. He stated his grounds for believing that, to a certain extent, the increase in the disease may find some explanation in the general abandonment of venesection in practice in this country. He advocated the adoption of blood-letting, under certain restrictions, as a prophylactic measure, when indicated by symptoms diagnostic of uterine and ovarian engorgement. He divided his paper into three parts by asking: 1. Can any reliable prophylactic means be devised to lessen the frequency of ovarian disease, by obviating *in limine* its cause? 2. What is the best manner of preparing patients for ovariectomy, and of performing the operation, with a view to success? 3. What treatment, after the operation, is best calculated to ensure the recovery of the patient? Dr. Protheroe Smith hoped the answers to these questions elicited in the course of discussion would greatly enrich, if not exhaust, a theme of such grave importance. Whilst calling upon those whose more extensive experience specially qualified them to speak on the subject, he gave the result of his own observations as to several important points regarding the preparation of the patient for ovariectomy, the mode of performing the operation, and the after-treatment.—Dr. GRIFFITHS (Swansea) thought that it was very doubtful whether Dr. Smith was right in stating that ovarian dropsy was more frequent now than formerly. He also thought it was an unsupported statement that this condition was due to congestion; and as for prophylactic measures, who was to say when ovarian dropsy was impending?

On the Prevention and Management of Miscarriages. By ARTHUR W. EDIS, M.D., London.—A brief allusion was made to the mortality occasioned by miscarriages, the life of the foetus being invariably sacrificed and the mother's life often jeopardised; and not only this, but the fecundity of the female was often destroyed from the effects of uterine disorder following a miscarriage, to say nothing of the distress and suffering often occasioned. In a series of 2,000 cases observed by the author, there were no fewer than 1,147 miscarriages compared with 4,588 children born at full time. Miscarriages were far too lightly esteemed, both by the public at large as well as by practitioners. Patients with well marked flexion of the uterus, constitutional syphilis, chronic metritis, and numberless other affections, were allowed to go on aborting without sufficient pains being taken to prevent a recurrence. The prevention of miscarriages depended entirely upon proper measures being employed to avoid the contingency of a recurrence of the cause or combination of causes that induced the expulsion of the ovum in the first instance. To say that a patient had acquired the "habit of aborting" was merely asserting our ignorance of the cause, and expressing in other terms the fact that the woman aborted because she aborted. As regards the management of miscarriages, the necessity of a vaginal examination was strongly insisted on. The influence of ergot in the early stage, in arresting threatened miscarriages, was favourably alluded to, and the employment of carbolic acid injections where any portion of the products of conception were retained was urgently recommended. The author concluded by urging a more careful study of the subject; miscarriages being frequently the starting-point of a long course of uterine distress: dysmenorrhœa, sterility, etc.—An interesting discussion followed, in which Dr. BASSETT, Dr. JOHN HADDON, and Dr. SIMPSON, joined.

Placenta Prævia. By W. DONOVAN, L.R.C.P.Ed., Carrignavar.—Dr. Donovan said that he believed the cause of hæmorrhage in placenta prævia to be that the part of the placenta lying directly over the os internum uteri, is unattached by blood-vessels or otherwise, and, therefore, does not expand uniformly with that part attached to the uterine walls. Consequently, during the latter month of pregnancy, the rapid enlargement of the uterus causes an amount of strain on the zonal vessels of the placenta sufficient to rupture them.

Case of Inversion of the Uterus of three months' standing. By J. H. EWART, Esq., Manchester.—The patient was a young married woman, who had been attended in her first confinement by a midwife. She was at full term, and the labour went on well to the end of the second stage; there was then, according to her account, some difficulty with the after-birth, which the midwife endeavoured to overcome by pulling at the cord. Eventually, a surgeon was called in, and he and his assistant attended the patient up to the time of her admission into hospital three months afterwards, during the whole of which time she suffered more or less from hæmorrhage, sometimes quite alarming in its character. No vaginal examination was made before her admission. When she was examined at the hospital, there was found to be an inversion of the uterus. The author used as much manual force as he deemed advisable; and then one of his colleagues, thinking further efforts at reduction were necessary, proceeded to use great force. He ultimately succeeded in reducing the inversion, but at the expense of some laceration of the vaginal wall and of the perinæum. The patient, however, had no bad symptom. Attention was called to the valuable papers of Drs. Barnes and Braxton Hicks; and the author said that in any future case he would firmly discountenance the treatment adopted in the case here recorded.

Thursday, August 5th.

Memoir of the Life of William Smellie, M.D. By ALFRED H. MCCLINTOCK, M.D. Dublin.—Owing to the limitation of time, he had to confine his paper to the personal history of Smellie, about whom he had been able to collect some new and interesting particulars. He was a native of Lanarkshire, and was born some time in the year 1697. He studied midwifery in Paris under the celebrated Gregoire. About the year 1722, he settled down to general medical practice, in the neighbourhood of Lanark, where he remained till the year 1739, when he changed his residence to London. Soon after this, he had the celebrated William Hunter residing in the house with him. Smellie began to give lectures on midwifery, and to attend labour cases at their own homes, along with his class, about a year or two subsequently to his settling in London. These lectures attracted large numbers of pupils; for, in the course of ten years, he says he had nine hundred pupils, exclusive of females. The first volume of his *Midwifery* appeared in 1752, and was the result of thirty years' experience, and of six years' careful preparation. It was followed at different times by two other volumes, chiefly taken up with the narration of cases, there being about 540 of these recorded in the two volumes. This work at once attracted

great attention, and was translated into French, German, and Dutch; so that it soon came to be regarded as the highest obstetrical authority. It will ever hold the place of a most valuable standard work upon midwifery, and be carefully read by all earnest students of this branch of medicine. This treatise of Smellie's did more to improve the practice and raise the character of the British school of midwifery than any other work that ever appeared before or since, and has most justly immortalised the name of its author. Towards the end of the year 1759, Smellie resolved to leave London. Accordingly, having made over his class, museum, and teaching appliances, to Dr. Harvie, he left London, and returned to his native county of Lanark. This Dr. Harvie is supposed to be the same who married a niece of Smellie's, and to whom he bequeathed his property, etc., Smellie himself not having had any issue by his marriage with Eupham Borland. Having established himself near to the town of Lanark, in a place called after him, "Smyllum" or "Smylane", he spent his leisure hours in preparing the third volume of his *Midwifery*. He only just lived to complete this great work. Mr. Onslow, writing of Smellie in 1821, said he did not know where Smellie died and was buried. However, Dr. Maxwell Adams, of Lanark, cleared up this matter by the discovery of Smellie's tomb in the old churchyard of Lanark, on which it is stated that "he died March 5th, 1763, aged 66". He bequeathed a sum of £200, all his books, and some other matters, to the Grammar School of the town of Lanark. There is a portrait in oils of Smellie in the Royal College of Surgeons, Edinburgh. This is supposed to be the one mentioned in his will as having been painted by himself. Where Smellie received his medical education or obtained his degree, are questions that yet remain to be answered. He was a man of close and accurate observation, of great diligence, very methodical, and withal of a very philosophic turn of mind, which made him candid in confessing his faults, and ready to admit the merits of others. He inaugurated a new era in English midwifery, and contributed very materially in overcoming the strong prejudices then existing against the use of the forceps, and against male obstetric practitioners. His writings contained many and original observations, especially upon the mechanism of parturition, the thickness of the gravid uterus, the process of labour; the shape, application, and use of the forceps; the management of the placenta, etc. The cases recorded in his second and third volumes, not only were a mine of clinical experience that would amply repay the reader, but they abounded in observations rich in practical wisdom. So remarkable a man as Smellie could not possibly avoid having detractors and opponents, and foremost among these was Dr. John Burton of York—the original of Sterne's Dr. Slop. But Smellie treated all their attacks with great indifference, and only once condescended to reply to them.—Dr. PRIESTLEY (London) had listened with the greatest possible pleasure to the memoir, and was glad to be able to announce to the Section that Dr. McClintock had undertaken the editorship of Smellie's works on behalf of the New Sydenham Society.

The Examination of the Female Bladder. By J. MATTHEWS DUNCAN, M.D., Edinburgh.—Dr. Duncan proposed that, after dilatation with the dilator of the shops—an instrument much in need of improvement—a speculum be introduced similar to the rectum-speculum.—Dr. PRIESTLEY (London) asked what were the results as to frequency of urination and power of retaining the urine.—Dr. LEGAT (South Shields) asked if Dr. Duncan had found female urethrae to vary considerably in size.—Dr. STEELE (Liverpool) asked if the mode recommended revealed a large surface of the mucous membrane.—Dr. Moore, Dr. Lombe Atthill, Dr. McClintock, Dr. Copeman, Dr. Protheroe Smith, Dr. Young, Dr. Wallace, and Dr. Chambers, took part in the discussion.—Dr. MATTHEWS DUNCAN said that, so far from having met with any ill effects, the dilatation had, in his hands, given so much relief to the symptoms, that a repetition of the proceedings was desired on the part of the patients. He had found that female urethrae differed extremely in calibre. In reply to Dr. Steele, he said his impression was, that the whole surface of the bladder could be brought into view by the specula now shown and recommended.

Intemperance in Women, with Suggestions for its Prevention and the Reproductive System. By JOHN HADDON, M.D., Manchester. Dr. Haddon first considered the existence of intemperance amongst women. Secondly, he pointed out its causes, the principle of which he believed to be; 1, the common practice of using stimulants in some form as a beverage in the family, and as a mark of hospitality to strangers; 2, the frequent prescription of stimulants by the profession, and; 3, domestic or other cares which make many drunkards. He then considered its effects on the woman's constitution, and pointed out some symptoms likely to be met with, among which he specially referred to its tendency to cause irregularity of the menses, menorrhagia, and abortion. He next endeavoured to show that no child-bearing woman should use any alcoholic stimulant; and concluded with some

remarks on the remedy for female intemperance.—Dr. E. LONG FOX (Clifton) strongly objected to the view that the habit of drinking was in any measure due to the dangerous prescribing of medical men.—Mrs. GARRETT ANDERSON (London) thought the prevalence of intemperance in women had been greatly exaggerated; but she was ready to acknowledge that it was much too common, and she could not wholly free medical men from blame in the matter.—Mr. Morgan (Lichfield), Dr. Priestley, Mr. Meacham (Manchester), and Dr. Moir, also took part in the discussion.

Obstetrical Statistics. By J. G. SWAYNE, M.D., Clifton.—Correct obstetrical statistics, especially of cases attended in private practice, are of great importance just at the present time, when the principles and practice of midwifery are undergoing radical changes. The records of private practice will supply what we cannot obtain from lying-in hospitals, viz., correct statistics of midwifery practice amongst the richer classes of society. Dr. Swayne then referred to statistics derived from his own practice, in order to show that the process of labour, especially in the third stage, is attended with greater danger amongst these than amongst the poor, in consequence of the greater liability to hæmorrhage and adhesion of the placenta. He also referred to his own statistics of the varieties of cranial presentation, and pointed out that they differed from those usually given, in assigning a greater frequency to the fourth than to the third position of the head. With respect to forceps operations, his own figures show that the modern practice of employing that instrument with much greater freedom, is attended with very good results, but that further researches are needed to determine the relative advantages of the long forceps and turning, in deformity of the pelvis. With regard to puerperal convulsions, they show that there is no good reason for abandoning the old practice of bleeding, whilst fully bearing out the utility of anaesthetics. Lastly, good statistics of private practice are more than ever needed in order to throw light upon the etiology of puerperal fever, a disease which has been lately very prevalent, and of which the prevention is a far more promising subject for consideration than the cure.—Remarks were made on the paper by Dr. Bassett, Dr. Nesfield, Dr. Steele, Dr. W. Macdonald, Dr. Moir, and Dr. Keeling.

On Uterine Flexions and Displacements; and their Mechanical Treatment. By J. G. S. COGHILL, M.D., Edinburgh.—Dr. Sinclair Coghill confined his remarks mainly to the mechanical treatment of uterine flexions and displacements, only referring incidentally to their pathology. He alluded to the association of the Edinburgh Medical School with this department of medicine; and, in this connection, paid a warm tribute to the practice and inventive skill of the late occupant of the midwifery chair, Sir James Y. Simpson. He referred to the reaction which set in against his teaching and example, explained its causes, and suggested that probably the rule *in medio tutissimus ibis* in this as in other debated questions would be the safest guide. The author next pointed out the leading principles on which this treatment should be based, in the various forms of uterine distortion and dislocation. He concluded by deprecating strongly the *nimia diligentia* in this as in other departments of practice. Several interesting cases were described in illustration of the views submitted; and a variety of instruments, several of original design, were exhibited, and their use demonstrated.

Nitric Acid as a Caustic in Uterine Practice, and its Superiority as such to Nitrate of Silver. By JAMES BRAITHWAITE, M.D., Leeds.—Nitric acid is the caustic which, of all others, is the best adapted for use in cases of chronic inflammatory disease of the os and cervix uteri, resulting in erosion or ulceration. Nitrate of silver is inefficient, and requires frequent reapplication, to atone for its defects both in degree and in the nature of its action. Nitric acid, on the other hand, acts as a caustic in these cases with certainty, and neither does too much nor too little. Its application is productive of little or no pain; and, when it has once been properly applied in some cases, no further speculum-examination is required, such reliance may be placed upon its effects. If an examination be made, which is always better, it need only be after an interval of a month, and then the acid may be applied again to any spot which appears to require it. The resulting sore has a very strong tendency to heal, and does so partly by contraction and partly by fresh formation of mucous membrane, which is not cicatricial in appearance. The contraction is greater than follows the application of any other caustic, and is the very thing required to ensure the permanence of the cure. The contraction in cases of cervical catarrh is only contraction to a healthy size of the canal, provided the acid is used with proper care. The peculiarly lasting and permanent action of nitric acid enables us to do away with the repeated speculum-examinations, so distasteful to both patient and surgeon; and gives the latter a feeling of confidence of success which he cannot have with any other caustic. The use of nitric acid, common as it is in

other diseases, is referred to by very few writers, and is entirely omitted by most of our standard authors upon diseases of women, all of whom recommend nitrate of silver, or mention its use as the usual practice.

On the Management of the Lying-in Woman. By THOMAS WHITE-SIDE HIME, B.A., M.B., Sheffield.—Dr. Hime began his paper by stating that the old and still established theory which represents the lying-in woman as being in a state similar to that of a person after a serious amputation, the uterus being compared to the part operated on, is unscientific and untenable. Parturition is a physiological process, the fulfilment of a natural function, and has no analogy with an operation which is an interference with function. Amputation, whether the result of disease or accident, involves consequences which have no analogue in the process of parturition. The uterus after labour is no more comparable to a stump after amputation than the uterus after or during menstruation. After natural labour (to which Dr. Hime's paper chiefly referred) there is nothing comparable to the collapse succeeding a major amputation; there is no fever, no suppression of secretions, no suppuration, or, if pus be present, it is not derived from the uterus at all, but from the vagina or external genitals, in the great majority of cases. The insignificant rise in temperature, from 0.5 deg. C. in multiparæ, to 0.8 deg. C. in primiparæ, is due to normal physiological and not to morbid action, being the effect of muscular exertion, increased activity of the lungs, liver, and other organs, when relieved from the pressure of the gravid uterus, and is only fleeting. Milk fever is far more talked of and written about than seen, and is of rare occurrence. The rise in temperature which accompanies the commencement of mammary activity is slight, temporary, and unaccompanied by mental depression or constitutional disturbance of any kind. Operations performed immediately after labour will yield kindly, of which Dr. Hime related several instances in his own practice. Regarding parturition as a normal physiological process, Dr. Hime urged the importance of a decided alteration in the common mode of treating lying-in women as *patients*, and confining them to bed for ten or twelve days on low diet; the ordinary puerperal dietary being such as would certainly not be given to any patient after amputation. He urged that water-gruel, barley-water, tea, and dry toast, should be abandoned for milk, eggs, good soup, chickens, and other digestible meat, to be given from the first, and of course in quantities suitable to the conditions of individuality, want of exercise, etc. Stimulants are decidedly injurious, except in special cases. It is often urged that, as a large amount of waste uterine tissue, etc., has to be got rid of, low diet should be adhered to; but milk has also to be secreted, and any how health and vigour will promote excretion, and the performance of all vital functions better than a state of debility. Opiates, ergot, and other drugs should only be given under necessity. The child should be applied as soon as the mother's state permits; if there be no milk at first, only for a minute or so to encourage its secretion, and the involution of the uterus. The binder is more of an euthanæsia than a benefit after the first twelve hours, but not so the early removal into a fresh bed, and room, if possible, and this may be done within forty-eight hours. The woman may sit up in bed for a short time from the first, a continual maintenance of the recumbent posture for ten or twelve days being as injurious as it is unnecessary, and most patients may be on the sofa on the fourth or fifth days. Above all things, the medical attendant should see that his directions are carried out, and not trust they will be so, especially as to the speedy removal of soiled linen, etc.; not that its presence, any more than the neighbourhood of privies, want of ventilation, etc., will *per se* develop metria any more than typhoid; otherwise, eight or nine tenths of lying-in women must inevitably suffer from it, a result equally certain if medical men could convey the germs of disease with them as readily as is assumed. Cleanliness and ventilation always tend to preserve health and check disease, but they are no more needful for the lying-in woman than good nourishing food. After natural labour a woman is not in a diseased state, and the maintenance of health and vigour will be the most successful means of averting all risks.

Notes of a Case of Transfusion by Aveling's Apparatus. By GEORGE HOGGAN, M.D. Lond.—The case was one of secondary hæmorrhage after removal of a diseased cervix uteri. The patient sank.

Friday, August 6th.

Notes on a Case of Triplets complicated by Double Uterus. By A. G. DUNCAN, M.B., Crimond.—This was a very rare and interesting case, in which there was a depression in the abdomen indicating a division between two tumours formed of the two halves of the uterus, one containing two children, and the other one. The children, all females, were born alive; their united weight was 20 lbs. On subsequent examination, the uterus was felt to be divided by a septum.

On Dysmenorrhœa. By E. GARRETT ANDERSON, M.D.—In this paper, Mrs. Garrett Anderson discussed the following questions. I.

How far is the mechanical theory of dysmenorrhœa supported by facts? 2. What is the relation between mechanical or obstructive dysmenorrhœa and the so-called neuralgic, congestive, and rheumatic forms of the complaint? 3. To what extent ought the mechanical theory, if we accept it, to guide our treatment? With regard to the first question, Mrs. Garrett Anderson agreed with Dr. Marion Sims and Dr. Barnes, that the essential cause of dysmenorrhœa was retention of the uterine secretion. This view was supported by the curative influence of parturition. The author differed, however, from Dr. Sims when he denied the existence of constitutional dysmenorrhœa; for in a large number of cases the retention might depend on a constitutional condition. The anæmic, congestive, and rheumatic forms of dysmenorrhœa were commented on; also that dependent on uterine flexion. Mrs. Garrett Anderson did not believe in neuralgic dysmenorrhœa, as the term was commonly understood. The form thus described might depend on obstruction, or on abrasion of the os, with endometritis of the cervix or fundus. Cases of ovarian origin were believed not to be common in early woman, nor to be often primary. "Intermenstrual" dysmenorrhœa was not dysmenorrhœa at all, and was probably due to ovarian congestion. In regard to the treatment, Mrs. Garrett Anderson pointed out that there were facts which seem to indicate that, in accepting the mechanical theory of dysmenorrhœa, it is not necessary to adopt in the first instance and in most cases a mechanical line of treatment. Various constitutional conditions frequently gave rise to obstructive dysmenorrhœa, which could often be removed by constitutional measures.—Dr. ATTHILL (Dublin) thought that, in girls menstruating recently, dysmenorrhœa might be due to anæmia; but in others to some form of inflammation. He did not agree with the view of child-bearing curing obstruction. He did not think flexion *per se* the cause of dysmenorrhœa. A perfectly healthy uterus could not flex itself. After marriage, dysmenorrhœa occurred from endometritis. In the cases where dysmenorrhœa began after marriage, there was nearly always a painful point at the os internum; and the pain could be produced by touching this point. He thought mechanical treatment was carried to too great a length. He did not agree with Mrs. Garrett Anderson that no mechanical treatment should be adopted before the age of thirty, as it sometimes was useful at a much earlier age.—Mr. SPENCER WELLS (London) thought the few words in which Mrs. Garrett Anderson alluded to ovarian dysmenorrhœa scarcely did the subject justice. It might be observed that, two days before menstruation, pain was often present, alternating at different periods in one side and the other. No doubt it was due to constitutional causes, but also to inflammations; and the pain arose before the excretion found its way into the uterus and vagina. He thought that the introduction of a sponge-tent before the menstrual period often was of great use.—Dr. A. SIMPSON (Edinburgh) remarked that it was overlooked in the paper that, after dysmenorrhœa was established, it was rare to find that there was not some organic affection of the uterus; but it was not easy always to say the exact cause of the pain, as that might be various. He did not think there was any medical practitioner in Great Britain who would not at once, in a young girl even, make a vaginal examination, and would not at once have recourse to surgical treatment. He alluded to cases in the unmarried, and also to the state of the uterus during the menstrual period. In his experience, the uterus became erect during menstruation; and this was a fortunate thing; for antelexions were so common that, without this erection, dysmenorrhœa would be much more common. He alluded to the effects of marriage in relieving pain, but without pregnancy; and this led to the mechanical treatment being introduced. The treatment was often used by men who did not know the value of it.—Dr. STEELE (Liverpool) thought the many differences of opinion could be removed if dysmenorrhœa were regarded as a symptom, and not as a disease. He agreed with Mr. Spencer Wells, that many cases were of ovarian origin. Sufficient attention was not given by the author of the paper to the state of the excretions of the bowels. The treatment must be purely eclectic.—Mr. HARRINSON (Reading) asked Mr. Spencer Wells whether the use of tents was free from danger.—Mr. SPENCER WELLS thought the danger arose from the way in which the tent was used. If it were carefully introduced, and not left too long, he did not see any danger.—Dr. KEILLER (Edinburgh) expressed his hearty approval and admiration of the paper. It was just what he would have expected from his old pupil. He thought that much danger was done by indiscriminate surgical and mechanical treatment. He did not now use the dilating instruments so frequently as he did when a younger man.—Dr. MCCLINTOCK (Dublin) expressed his approval of the paper, and seconded the observations of Dr. Keiller. He was satisfied that the large majority of cases which came under his own observation could be treated by medical means.—Mr. FREER added his opinion to that of Dr. Steele, that the overloading of the intestines must not be overlooked. It was

due to two causes: sedentary occupation, and the ligature worn for the sake of symmetry, which tended to increase the weight of the uterus.—Dr. LEGAT (Shields) observed that there was one point not alluded to. The pains of dysmenorrhœa resembled after-pains. These vessels in the placenta were contracted, and there was no obstruction and no flexion in these cases.—Dr. G. BUCHANAN (Glasgow), being a pure surgeon, could not express an opinion on the subject; but he moved a vote of thanks to Mrs. Garrett Anderson for her excellent paper. This was seconded by Dr. PRIESTLEY, and carried.—Mrs. GARRETT ANDERSON returned thanks for the compliment paid her. She did not intend to convey the idea that endometritis did not occur before marriage. She did not mean that surgical treatment should not be adopted before the age of thirty; but in London she thought it was too frequently adopted in young girls, such as frequently, coming from the country, became anæmic and subjects of dysmenorrhœa. Nor did she mean to imply that there was not ovarian pain; but she thought it was secondary. She was not competent to give an opinion on Dr. Simpson's question, but was under an impression the reverse of that stated by him. She included Dr. Steele's treatment under the ordinary routine treatment. In reply to Dr. McClintock, she said she believed that obstruction might exist. Although a sound could be passed, the passage would be very different when in a state of congestion. She hesitated about doing good with pessaries, without postural treatment at the same time. She used Chambers's and often Wood's pessaries. The danger of pessaries ought never to be overlooked. As to the question of Dr. Legat, no doubt the pains were much the same, both being due to irregular contraction of the uterus; but she was not prepared, in the present discussion, to go into the subject of after-pains. She concluded by thanking the meeting for her reception.

Syphilitic Placenta. By ANGUS MACDONALD, M.D., Edinburgh.—Syphilitic disease of the placenta had of late attracted some attention on the continent, but had commanded little attention from the British profession. The paper embodied the result of a careful microscopical examination of two undoubted specimens of the disease. The chief difficulties that lay in the way of ascertaining the true nature of the disease were twofold. 1. It was liable to be mistaken for fatty degeneration of the placenta, and had been so mistaken by excellent observers, such as Kilian and Robin. 2. It was frequently almost impossible to arrive at a satisfactory proof of constitutional syphilis till the discovery by Wagner of osteochondritis syphilitica. Microscopical and chemical examination of the placenta were sufficient to show that such cases were not fatty degeneration. It was easy, also, to prove in a foetus born dead, and even macerated, whether it was constitutionally syphilitic or not. If the foetus were syphilitic, there would be a band of tissue between the bone of the shaft and the cartilage of the epiphysis of the long bone, in a condition of inflammatory irritation. This band was bounded by very irregular outlines both towards the cartilage and towards the true bone, and consisted, according to the advancement of the disease, either, 1. Of cartilaginous cells hypertrophied and greatly increased by proliferation, as also prematurely infiltrated with earthy matter; or 2. Of the above, combined with premature sclerosis of the intercellular tissue, and premature osteogenic formation within the cartilage, and arrest of true bony transformation; or 3. The higher degrees of inflammation might come on, softening and interruption of the connection between bone and cartilage, and inflammatory exudation with even suppuration. The results of those changes might be seen both by the naked eye and the microscope, as the reddened or greyish yellow band was quite visible to the naked eye, and the hardened prolongations of premature calcified cartilage were easily seen and felt. The change in the placenta was equally distinct, but varied, 1. According as the father was primarily affected by syphilis; 2. According as the mother was first affected; 3. According as both were syphilitic early in the pregnancy. If the father were primarily affected, the villi were the site of the disease in the first instance. They were the seat of a peculiar cellular hypertrophy and multiplication, named by Fränkel "disfiguring granulation-cell disease", and which consisted of an immense multiplication of the cellular contents of the villi and of the epithelial mantle of the villus, together with an increase of the thickness of the wall of the included vessel. This cellular multiplication and increase proceeded outwards from this vessel as a centre, and the rows of connective tissue nuclei were seen to be arranged in circles, reminding one of the appearance of an Haversian canal. In consequence of this cellular multiplication, the villi were enormously increased in size and weight, the vessels were ultimately completely obstructed, and by and by the hypertrophy was followed by atrophy and abortion of the villus. The unaffected portions of the placenta were liable to become congested; extravasations were likely to be hence formed, and the ultimate result was suffocation of the foetus. If the

mother were primarily affected, the disease attacked the maternal placenta, and consisted essentially of increased growth of the connective tissue framework of the placental decidua, and enormous hypertrophy of the large cells of the decidua, leading to obstruction of the villi by compression. The affection described by Virchow, Slavjansky, and Kleinwächter as endometritis, placentaris nummosa, was probably syphilitic disease of the maternal placenta. If both father and mother were primarily syphilitic, or became so in the early months of pregnancy, both conditions exist conjointly. In two placentas examined by Dr. Macdonald, the history proved syphilis of father and of mother; the bones showed well developed osteochondritis syphilitica, and the placental tissue was affected by both forms of the syphilitic degeneration of tissue. From his researches, Dr. Macdonald drew the following conclusions. 1. A large number of intrauterine deaths from diseased placenta are due to the existence of constitutional syphilis in either or both parents, and the death is the result of progressively increasing defective blood-supply, owing to the changes described above. 2. The changes taking place in the placenta give the organ a pale appearance, and increase its size; and, in consequence, the appearance it presents is liable to be mistaken for fatty degeneration. This mistake is easily prevented by microscopical and chemical examination of the diseased organ. 3. The bones of the dead foetus will (as they will show osteochondritis syphilitica, if the constitutional disease be present), afford a valuable and infallible means of deciding whether the corresponding placenta is syphilitic or not. 4. Medicines thought to be beneficial by their action upon the blood, as oxygen given in such cases, most probably are useful, if they really do good, as blood-depurators, and may be beneficially replaced by iodide of potassium and other accredited antisiphilitic measures. 5. On the whole, there is little good to be expected from premature labour in such cases, as the child, though born alive, is saturated by the disease. We may expect better results by antisiphilitic measures acting through the mother on the placenta and the child at the same time.—Mr. LAWSON TAIT (Birmingham) thought the view of the paper an error, and referred to his own recent paper on the subject. The change occurred in the arteries, and was analogous to the changes in vessels of the kidney described by Dr. Johnson. It was a conservative change.—Dr. SWAYNE (Clifton) made observations on the size of the placenta.—Dr. MACDONALD replied.

Mode of Inquiry and the Various Plans in the Management of the Third Stage of Labour. By J. WALLACE, M.D., Liverpool.—In this inquiry, Dr. Wallace considered, first, the rules of guidance and practice generally followed; first, as regards the treatment of the placenta; and, secondly, that of the uterus subsequently. The position of the placenta was shown to be most frequently on the middle zone of the uterus; and, next, on the fundal zone; and, according to its position, was traced the mechanism of expulsion. Here it was pointed out that Smellie and others knew the true mechanism of expulsion and delivery of the placenta, which has been readily brought under the notice of the profession by Matthews Duncan, Lemser, Caseaux, Leishman, and others, in contradistinction to the descriptions given by Baudelocque, Schultze, etc. The different methods recommended by various obstetric authorities of management of the placenta were referred to, and the author's views and practice stated. The paper was concluded by a reference to the uses and abuses of the binder, a routine habit of practice being condemned both in that and in the habit of giving ergot, opium, cordials, etc., after delivery. It was especially shown that the binder, as applied with pads, converted an abdominal organ, as the uterus is at that stage, into a pelvic one, and hence caused, instead of prevented, flooding, and was one of the main factors in producing subsequent uterine trouble in the way of flexions and displacements.

Management of the Third Stage of Labour. By J. HAVERSHAM, M.B. **Febrile Reaction in the Third Stage of Labour.** By H. LEE SMITH, M.B. Oxon.—Pregnancy causes a generally exalted condition of the nervous system. Reflex action is readily exhibited. Nausea and vomiting in the early months of pregnancy is coincident with the development of the corpus luteum in the ovary. The gastric symptoms appear usually in the morning, because the blood has become tainted with an extra amount of carbonic acid gas breathed during the night. Exposure of the skin to fresh air acts reflexly on the morbidly excitable centre commanding the pylorus; closure of this valve causes the stomach to empty itself by way of the œsophagus instead of the duodenum. The vomiting may proceed to an obstinate and uncontrollable form, endangering life by inanition. This, too, occurs apart from any organic lesion, whether of the digestive track or other organ; the uterus and ovaries may also be apparently in a normal condition. Treatment directed immediately to the stomach has frequently failed. Certain observers having found that leeches to the cervix has been followed by remission of the gastric symptoms have, therefore, thought

that inflammation of the cervix originated the reflex action of the stomach. In some cases, redressment of a retroverted womb has succeeded. Dr. Grailly Hewitt asserts that there is always in these cases flexion of the cervix. Dubois observed that, having dilated the cervix for the induction of labour, the vomiting forth with ceased without interruption to the pregnancy. Dr. Copeman of Norwich has recently published three cases, when similar treatment was followed by a like success. All authors agree that, in extreme cases, drugs fail. It will appear, then, that the uterus itself should be attached with the view of subduing inflammation if it exist, or redressing the womb if it be displaced, or dilating the cervix as an empirically successful treatment.

Neuralgic Dysmenorrhœa. By CHARLES R. DRYSDALE, M.D.—The author thought that a salutary revolution was now setting in against the surgical doctrines held by Dr. Marion Sims and others upon dysmenorrhœa and its causes. Dr. Drysdale very rarely indeed witnessed any case where he had found any service to arise from operations on the uterus; whilst he had seen some cases of pelvic abscess and pelvic peritonitis occur from such interference. He was lately consulted by a patient, single, aged 32, who had suffered since the age of sixteen from dysmenorrhœa, and who on consulting two eminent specialists was advised by the one to have recourse to incision of the cervix, and by the other to wear a pessary. In this case, the uterine sound passed in its normal direction without difficulty, and the patient had no leucorrhœa nor prolapse of the organ, which was quite normal in size. There was no ulceration of the os uteri, although another eminent specialist had considered this as the cause of her dysmenorrhœa. The author held that there was still too great a tendency to expect to find an evident physical cause for all painful menstruation. Spasm and neuralgia were quite sufficient to account for the vast majority of cases. Membranous shreds, also, were frequent causes of obstruction to the monthly flow. An illustrative case was recorded. The rational treatment of dysmenorrhœa commencing at an early period, consisted not in the use of pessaries, or of incision of the uterus, surely; but in the use of cold baths in the morning, with short walks in the open air afterwards; in hot baths, a few days previously to the menstrual periods; and in palliative treatment of the paroxysms by means of antispasmodics at the epoch of pain. Marriage sometimes cured such cases at once; at other times, it was of no use.

Case of Rupture of the Umbilical Cord during Delivery, followed by Death of the Child. By W. HAINING, M.D., Chester.—The chief points of interest noted in this case were the following. The duration of the pregnancy, as fixed by well proved circumstances, could not have exceeded 274 days, whilst, according to the mother's showing, it must have been not more than 267 days. 2. Menstruation was prolonged for four, if not five periods after the occurrence of impregnation; and the continuance of the function, the cessation of which was regarded by the mother, aged eighteen years, as the only certain evidence of pregnancy, caused her to miscalculate her "time". 3. The labour which, appeared to have been completed within two hours of the time at which the pains first called for attention, though not of the kind which they required, their nature not being apprehended. This time is unusually short for a primipara under ordinary circumstances. 4. The cord was of the usual thickness, but measured only eight inches in length; the length at the placental end being about five inches and a half. There was no hæmorrhage from either of the ruptured ends. 5. The death of the child was interesting medico-legally. It died twenty-three hours after its birth; there was no suspicion of foul play, and there had been no concealment of pregnancy. The only *post mortem* fact noted, was a bruise of the scalp over the left occipito-parietal suture, but there was no internal effusion of any kind. The birth took place in a house, in the presence of married women; but, had it occurred in a privy or water-closet, in the case of a woman who had never confessed her shame, she would, however innocent her intention might have been, have certainly been required to stand her trial upon a criminal charge.

THE DINNER.

THE annual dinner of the Association was held in the Music Hall on Thursday, August 5th, and was attended by a company numbering nearly five hundred. The hall was set out with thirteen tables, in addition to the one on the platform, and the tables as well as the orchestra were adorned with shrubs, bouquets, and flowering plants, arranged in tasteful groups. Sir Robert Christison, Bart., President of the Association, presided, and was supported on the right by the Right Hon. the Lord Provost; Dr. Copeman, Norwich; Dr. Lowe, President of the Royal College of Physicians; Surgeon-General Elliot; Dr. Waters, Chester; Professor Balfour, Dr. McClintock, Dublin; Prof. Spence; Mr. Alfred Baker, Birmingham; Professor Lister; Professor Macleod,

Glasgow; and on the left by the Rev. Lindsay Alexander, D.D.; the Right Hon. Lyon Playfair, M.P.; Principal Sir Alex. Grant; Dr. Falconer, Bath; Bishop Cotterill; Sir J. Cordy Burrows, Brighton; Dr. Matthews Duncan; Mr. Husband, York; Dr. Gueneau de Mussy, Paris; Dr. Warburton Begbie; Dr. Chadwick, Leeds; and Mr. Ernest Hart. The centres of the various tables were occupied by Dr. John Chiene, and Dr. Angus Macdonald, with Bailie Methven; Councillor Dr. Coghill, with Bailie Muirhead and Dr. Hutchison, New York; Dr. Brackenridge, with Bailie Tawse, Mr. Skinner, City Clerk, and the Rev. Dr. Bell; Dr. Littlejohn, with Treasurer Colston; Dr. John Smith, jun.; Dr. Grainger Stewart; Dr. Thomas Keith, with Professor Pacchiotti, of Turin; Dr. Keiller, Professor Simpson, Dr. Argyll Robertson. The following gentlemen were croupiers:—Professor Crum Brown, with Dr. Championnière, Paris; Dr. Batty Tuke; Dr. M'Kendrick, with Professors Dewar and Dr. Charles, Belfast; Dr. Cadell Dr. Gillespie, with the Master of the Merchant Company, Mr. Hugh Rollo, W.S., and Mr. Cripps. A number of ladies occupied places in the gallery.

The Rev. Dr. Lindsay Alexander said grace, and Bishop Cotterill returned thanks after dinner.

The CHAIRMAN proposed "Her Majesty the Queen".

The toast having been drunk with enthusiasm, four pipers of the Queen's Edinburgh Rifle Volunteer Brigade marched round the room playing the national music, which was received with great cheering.

The CHAIRMAN proposed "The Prince and Princess of Wales, and the other members of the Royal Family." He hoped His Royal Highness may have great enjoyment in his approaching visit to our Indian dominion, and that he may come back instructed in mind and improved in health, and with the assurance that his visit has helped to tighten the bonds that connect this country with that glorious land in the East. [*Applause.*]

The PRESIDENT intimated that apologies for absence had been received from the Lord Justice-General, the Lord Justice-Clerk, the Solicitor-General, Inspector-General Smart, the Lord Advocate, Surgeon-Major White, King's Dragoon Guards, and Surgeon-Major Lithgow, 79th Highlanders.

The CHAIRMAN gave "The Army, Navy, and Reserve Forces". A great deal had been said in the newspapers about the efficiency of our navy and army, and likewise of our reserve forces. In regard to the navy, all he could say was that he saw our jolly tars sometimes parading the streets, and he observed that they wore the same dress and walked about with the same rolling independent gait as ever, with their faces raised exactly as if they were about to board an enemy's ship a great deal bigger than their own. [*Laughter.*] He saw no difference between them and the tars he used to see in his young days, when our navy extended over the whole world, and no enemy dared to meet us; and he saw no reason, therefore, why our seamen now-a-days should not discharge their duty just as well as their predecessors. In regard to the fitness of our ships and their armaments, he had only to say he should pity very much any of our adversaries who should come into contact with a ball weighing 600 or 1,000 lbs. discharged from an 80 ton gun. [*Laughter.*] We were accustomed lately to hear complaints about the youth and want of stamina of our soldiers, and their inability to march long distances; but they were all well aware, without quoting what had happened in our own days, that the great victories of the French Revolution were gained by the young soldiers; while, as to the marching, they would not consider that so doubtful a matter, when they recollected the long walks of twenty miles or more they used to make when they were young men, and that too with pretty heavy bags upon their shoulders. Why our young soldiers could not do the same thing, he could not see. Respecting the reserve forces, he would only remark that their motto was "In Defence", and that they had served their purpose so well that since they came into existence no enemy had dared to land upon our shores. [*Applause.*] He coupled the toast with the name of Dr. Dickson, of the Royal Navy, and Surgeon-General Elliot.

Dr. DICKSON and Surgeon-General ELLIOT replied, the latter remarking that there was no reason to despair of our so-called "weedy" soldiers, for they possessed a fine physique and great power of endurance, as proved in the recent manoeuvres at Aldershot.

The PRESIDENT, in giving "The Clergy", said it would be observed that the toast was given in general terms. In Scotland they had a great variety of clergymen, all of whom claimed that their own particular denomination was "the Church". [*Laughter.*] They could not, therefore, in a general assembly like the present, drink "The Church", because any one clergyman might rise and say, "I am the Church"—[*renewed laughter*—] and the poor chairman would not know what he was about. He therefore proposed the far more comprehensive toast of the clergy. There was a great connection betwixt the medical profession and that of the clergy. In ancient times the priests were the only

doctors, and even in later days the priests of the Catholic Church were the principal physicians. In these days a complete separation had very properly taken place between the profession of theology and that of medicine; but, at the same time, the one was very well known to be an auxiliary to the other. Many a time they knew how desirable it was that the courage of a patient in an unfortunate crisis should be sustained by the equanimity which came over his spirit through the ministrations of a clergyman. He had had to request that aid; and never was it granted without his observing a beneficial result—so much so, that he should almost say they should have in the pharmacopœia "*sacerdotes*" as one of their remedies. They would often find it useful indeed to send a prescription—*Sacerdotis quantum solet, et quamprimum.* [Applause.]

Bishop COTTERILL, in responding, said he trusted that medical men realised now, as they did not do half a century ago, that the clerical office, when rightly administered, was really an aid to the medical profession. [Hear, hear.] Unfortunately in former times religion had been represented, most unhappily, as unfavourable to science, whereas science was its nearest ally; and, on the other hand, science had looked with some suspicion on religion. But he trusted that kind of feeling, not only as regarded the relations between medicine and the clerical office, but generally between science and religion, was gradually passing away. [Applause.]

Dr. LOWE proposed "The Houses of Parliament", remarking that in no other country in the world did institutions of a similar nature give such general satisfaction. He coupled with the toast the name of Dr. Lyon Playfair, M.P.

The Right Hon. LYON PLAYFAIR, on rising to respond, was received with cheers. He said the President of the Royal College of Physicians did all things well in Edinburgh, but he had made a very bad speech, for, in proposing that they should drink to the welfare of the Houses of Parliament, two great institutions in this country, he had forgotten them altogether, and proposed the health of a very little man. [Laughter.] He returned thanks on behalf of the Houses of Parliament which legislated for this country with confidence on this occasion, because, when the present Parliament was brought into existence, they were told by the distinguished man who is now at the head of the Government that the keynote of the Parliament was to be "*Sanitas sanitatum omnia sanitas*". [Applause.] How far the Parliament had fulfilled that promise, he had not now to tell them. He had criticised its action very freely that day in his presidential address; but one thing he might say, that whenever any subject relating to the public health of the community, to such subjects as this great Association had chiefly an interest in, and relating to all subjects connected with the social welfare of the people, he had always admired this, that the House of Commons, of which he had had the most experience, forgot altogether that it was divided into two great political parties—[hear, hear, and cheers]—and acted as one body in trying to frame measures most productive of good for the public interest. [Renewed cheering.] But, whilst he said that, there was another thing which had both amused and perplexed him until he found for it an explanation. There was a great theoretical terror in the House of Commons of the doctors. [Oh, and laughter.] There was a determination expressed very loudly that they would not place communities in this country under the despotism of medical men; but there was conjoined with that a very curious practical confidence in the doctors. The reason for that, after a little while, was not difficult to see. In the first place, when local authorities were entrusted with the carrying into effect of Sanitary Acts, one saw the explanation easily. The science and intelligence of the doctor was often, in regard to a knowledge of local evils, in advance of the authorities themselves; and they felt that the knowledge and science of the doctor often made him in reality the master, although he was only the servant, of the local authority. But that did not explain the difficulty in the House of Commons. The constant speaking against the doctors, coupled with the practical confidence reposed in them, as shown by the fact that every Act gave more and more power, and threw the motive power of all sanitary legislation into the hands of medical men, arose from this circumstance: communities found themselves diseased just as individuals did, and they were now appointing everywhere State physicians, just as an individual appointed his own physician; and they knew that when a patient was diseased he was extremely submissive to their will. He allowed the will of the doctor to overcome his own will; but when he became well he began to be refractory. He thought then that he knew a great deal better than the doctor, and would not follow the regimen which was necessary to keep him in health. And so it was with communities. They trusted the doctor when there were great maladies abroad, but they began to show their independence of them when they were sound. Parliament was an aggregation of communities, so that when they passed legislative measures they showed

that curious conflict between distrust and confidence. They said when everything was well that they would not allow themselves to be put under medical despotism, that they were not going to hand over the country to medical despots, but when they passed laws they threw all power into their hands. They might take, for example, the Artisans' Dwellings Bill which had just been passed. There was a great determination not to throw everything into the hands of the doctors, but the doctors had been made the primary motive power of the whole measure. So it was with every measure of a like nature which they passed; they showed practical confidence, whilst they had theoretical terror. That sometimes made men, inexperienced in the ways of the House, do things which those who had experience in legislative assemblies were astonished at. He would give them one example: there was no more clamant wrong connected with the medical interest just now than the injustice to which the medical officers of the army were exposed. [Hear, hear.] The medical officers of the army were good enough this session to give him several excellently prepared memorials setting forth their grievances in an extremely temperate manner. These memorials were placed in the hands of the War Secretary, with whom he had several conferences, and whom he found extremely anxious to study and master the subject. But the patience of the medical officers of the army, as was naturally to be expected, was a little exhausted, and they wished to appeal to the House of Commons. His own conviction, based upon the knowledge of those feelings of distrust and practical confidence in medical men, made him convinced that this would have a hardening, instead of a softening, effect with regard to their cause, and he did all he could to discourage such an appeal, because he was quite certain the Secretary of War would give it a full and kindly consideration, and that it was much better to make it an act of administration than an appeal to the legislature. That showed that they could not always trust the legislature in cases of prejudice. But that prejudice was certain to be removed. Medical men, when well educated, had obtained the respect of their patients wherever they settled; and so in time would the public officers of health, if they devoted themselves, as they were doing now, to the welfare of the public, with a single desire to prevent disease as well as to cure it. By their excellent conduct in these as in other respects, they would remove the prejudices which the legislature might have in regard to their profession, and they would receive that recognition and honour, as regards their position as officers of the State, which, perhaps, was given to them in a grudging manner. [Cheers.] He again thanked them for the honour they had done him in coupling his name with the toast of the Houses of Parliament. [Applause.]

The PRESIDENT next gave the "British Medical Association". In doing so, Sir Robert said there was no doubt that all acquainted with the British Medical Association would allow that it had been in this country a very great success. [Cheers.] It commenced as a provincial Association, but it gradually extended itself over England, reached the capital, and then became the British Medical Association. Wisely, it was not called the English Medical Association; for then, of course, they would not have had a Scotchman or Irishman in it. [Laughter and applause.] But, as he had said, all divisions of the kingdom had justice done them in naming the Association the "British Medical". He had often been amused at the facility with which in the south the term "England" was substituted for "Britain". The Duke of Wellington would never have said in his despatches that he did this with his English army. [Cheers.] But yet, to such a ridiculous extent had it gone, that when during the Indian mutiny, when the 78th and 64th Regiments—one a Scotch, and the other an English regiment—advanced against immense odds and carried everything before them, on one occasion the 78th charged a battery of artillery of the enemy, and in defiance of their opposition carried it, one of the newspapers—he would not say which of them, but a newspaper which professed to regulate a great deal of what goes on in the world, in describing the great gallantry of the Highlanders, said that nothing could resist English pluck. [Laughter.] The originators of this Association had great credit in choosing for it the comprehensive and, to his ear, euphonious sound of the British Medical Association, and much had they been rewarded. In the course of a few years, the numbers of the Association increased to about 2,500; and he understood now from Mr. Ernest Hart, who knew the fact well, that, since he became Editor of their JOURNAL, the number had increased to 6,100; and the result of their visit to Edinburgh would probably be the means of adding 500 Scotchmen to the Association. [Loud applause.] It was impossible for him to go over the various incidents that had marked the progress of this body. It was leaving its mark upon the country, upon medical history, and upon the sanitary history of the country—and he used the word sanitary in its largest possible sense. It would be endless were he to go over all the important measures in which they had taken part.

What he would advert to just now, however, was their enormous power, and the caution with which they should exercise it. [*Hear, hear.*] There was no member of the House of Peers, or member of the House of Commons, who had not got his doctor, and he doubted very much whether he had not got a doctor who was not a member of this Association. Now, if a man's doctor was worth his salt, the patient could not help giving him a very considerable part of his conscience. [*Laughter.*] He could not help it, fight as he might, and he begged to suggest that this was the cause why, as Dr. Lyon Playfair said, members of Parliament had a horror of doctors. They knew their great power over them. But it could not be denied that that power was just—[*laughter*—]but still a man scorned to be under the influence of another. The medical profession, as all admitted, was a very powerful body; and he ventured to question whether, since the days of the institution of the Jesuits, there was a body who possessed such great influence, or exercised it in so quiet a way. This was the reason why they should take care what steps they took for the improvement of medicine for the benefit of the nation at large. Every step they took depended upon their organisation. [*Hear, hear.*] It was quite impossible for a great Association such as this to discharge its own business in such a limited time. They had already seen that, during the history of the present meeting, they had been obliged to homologate a great number of the transactions of the Council without taking them into consideration. Sir Robert then proceeded to refer in eulogistic terms to the services rendered to the Association by the Local Secretaries, the Council, and the Staff of the JOURNAL of the Association. In concluding, he made allusion to the Benevolent Fund of the Association, for the relief of the decayed members of the profession, remarking that it was only proper that they should all become members of this branch. He had the greatest pleasure in giving "Health and prosperity to the British Medical Association".

The toast was drunk with enthusiasm.

Dr. FALCONER (Bath), in replying to the toast, referred with satisfaction to the work which had been accomplished at this meeting, and said that, even on the ground of an aid to scientific discovery, this Association could justify its existence. A larger sum of money had this year been granted by the Association for the prosecution of scientific inquiry than in the preceding year, and, therefore, they were now in a position to wipe out the complaint that had been frequently urged against them, that they had made use of their resources more for their internal management than for the promotion of scientific inquiry. In the Bill which had just passed through Parliament, the finger of the Association was clearly to be traced; and if the Association could press to a successful issue the Habitual Drunkards question, which would assume a new aspect from this date, and show how best to defend against themselves those unfortunate beings who could not resist the temptation to rob themselves of reason and physical power, they would have accomplished much. After referring to the hardship exercised by the Scotch Poor-law on the medical profession, and speaking of the good effected by the aid of the Association in England and Ireland in reforming the Poor-law system, he said he agreed with Sir Robert Christison on the responsibility attached to the Association, and advised the members to exercise the greatest care, wisdom, and foresight in using their power in Parliament, so that it might never be turned against them.

Mr. ERNEST HART (Editor of the BRITISH MEDICAL JOURNAL), being called upon from all quarters of the room, said he felt deeply honoured by being thus spontaneously called upon to respond to the name of the Association. The position in which they had, by their kindness, thus placed him was embarrassing, for he felt that, as he had opportunities of addressing them weekly from a position as absolute as that of a clergyman in his pulpit, it was hardly fair that he should trespass upon their attention at this gathering. He would acknowledge that the serious and responsible work of editing the BRITISH MEDICAL JOURNAL was a labour of love to him, and one that he felt to be the most interesting work of his life. For this work, he had readily sacrificed other opportunities of professional usefulness and advancement, and he felt that in the expression of kindly feeling he had experienced that evening this had been acknowledged. [*Cheers.*] He was deeply gratified at seeing how steadily the Association had progressed during the last seven years, in numbers and in power. It had extended itself far and wide, and had an influence which was constantly making itself felt in Parliament, the press, and in the public mind. [*Cheers.*] This extensive and extended influence enabled it to press forward any measure for the public good; and its power and the power of the JOURNAL was unexampled in the history of the press. [*Cheers.*] It only remained for the members to sacrifice their private ends to public duty, and then the Association would have a parliamentary power which could be used for the prevention of disease and the promotion

of the public good, which, rightly and discreetly used, would make the Association one of the great benefactors of the country. [*Cheers.*]

Mr. HUSBAND proposed the health of Sir Robert Christison. He said that the excellence of their Chairman recommended him to every class of society in Edinburgh. [*Cheers.*] It was well known that Sir Robert never spoke but he edified, instructed, and amused. When he remembered that their President was one of the first toxicologists of the day, that he had been one of the best therapists and practical physicians which Edinburgh ever produced, and when he also remembered that Sir Robert was renowned as a man of science, and that another association seemed to foreshadow the high honour of electing him president next year, he would say that such a man was an honour to their profession. [*Loud cheers.*]

The toast having been received with the utmost cordiality,

Sir ROBERT briefly replied, expressing himself as deeply gratified by the position in which he had been placed, stating that he never would forget the visit of the British Medical Association to this city.

Dr. MATTHEWS DUNCAN proposed "The Lord Provost, Magistrates, and Council", remarking that the Lord Provost had, in order to be present at their gathering that evening, put himself to great inconvenience by travelling from London.

The LORD PROVOST, after expressing regret for not being present at the opening of the Association's meeting on Tuesday, said that still his absence could scarcely have been missed when the gentlemen of the medical profession had been welcomed in such a friendly way by his friend Baillie Tawse. He proceeded to say that a charge had been committed to the Town Council of Edinburgh, not only to preserve the city's natural beauties—[*applause*—]but also to open up, by means of the City Improvement Act which they had received, many of the old and confined closes, so as to improve the social condition of the people. [*Applause.*] A great deal had been done, but still a great deal of work remained to be executed. But Rome, they must remember, was not built in a day; and in time this city would carry out those aids to health which this Association so much desired. He next referred to the Bill which the Corporation received to introduce a new supply of water, which, when accomplished, he thought would double the present supply. [*Applause.*]

Dr. PRIESTLEY gave "The Universities and Medical Schools of Scotland", and, in doing so, said he could not look over twenty years of the history of the University of Edinburgh without feelings of the greatest regret. He now missed the names of the professors who had been his old masters—names such as those of Professors Davidson, Alison, Sir James Simpson, and Goodsir; and now the name of Professor Bennett was removed from the list, although they rejoiced that he was still in life. They were all, however, glad that there was yet a great phalanx of teaching power representing the University of Edinburgh as well as the other Universities of the country, and these were fittingly represented by Sir Alexander Grant. [*Cheers.*]

Sir ALEXANDER GRANT, in reply, took the opportunity of expressing the great pleasure which he felt in welcoming, on the part of his University, the British Medical Association to Edinburgh. It was an occasion to the University of great pride, in the first instance, because its senior professor, their well-beloved brother, had been chosen as their President—[*cheers*—]and, secondly, because the University of Edinburgh was the *alma mater* of many of the members now present among the members of the Association. [*Cheers.*] He might say that they of the outer world, who looked with such deep reverence upon what their medical advisers told them upon every subject, looked with some interest to this banquet, because it had given them much satisfaction to know that men of such high authority did not object to moderate indulgence. [*Loud laughter.*] There had been a rumour last week in Edinburgh that five hundred quails had been ordered for this banquet, which led to the opinion that the theory of those medical advisers who discouraged the use of all grosser kinds of meat was to receive sanction this evening. But he must say that those who felt some alarm as to that subject, had their minds immediately relieved on entering the hall, and taking up the *carte* which was laid before them. He hoped that, on their next visit to Edinburgh, the University authorities would have the pleasure of receiving the Association in rooms more worthy of such an University. [*Cheers.*]

Dr. MACLEOD, Glasgow, also replied, remarking that, if the Association visited Glasgow or Aberdeen, they would find they were not sluggards, and that they had endeavoured not to betray the great interests of the profession.

The other toasts were, "The Orators and Presidents of Sections", proposed by Dr. Edward Waters, and responded to by Mr. Spence; "Our Guests", by Professor Lister, replied to by M. Noel Gueneau de Mussy; "The Reception Committee and the Local Committee", by Sir J. Cordy Burrows, replied to by Drs. Gillespie and Batty Tuke.

The PRESIDENT, at the conclusion, said he would give one more toast, one consisting of three words only, which had been given at all medical gatherings at Edinburgh since the middle of last century. It was not known to some of the strangers, but he had got it from one of his oldest professors, Dr. Duncan. It was, "Floreat res medica", which was translated by the doctor as "Long live and ill health".

[Loud laughter.]

The assembly then broke up shortly before twelve o'clock.

PRESIDENT'S RECEPTION.

At nine o'clock in the evening of Tuesday, August 3rd, the President, Sir Robert Christison, held a reception in the Music Hall and Assembly Rooms. There was no attempt at decoration of the Assembly Rooms, but the space beneath the gallery of the Music Hall was arranged as a drawing-room; while refreshment buffets were placed in the east and west wings, and the orchestra was effectively decorated with palms, dracenas, ferns, and plants in bloom. As the company, which numbered upwards of 1,600 ladies and gentlemen, arrived at the rooms, they were received by Sir Robert Christison, Dr. Gillespie, Dr. Lowe, Dr. Batty Tuke, and Bailie Tawse. The reception over, an agreeable promenade and *conversazione* ensued in the Assembly Room, where Mr. Daly's orchestra played a programme of dance music; and also in the Music Hall, where the platform was occupied by the band of the 1st King's Dragoon Guards, who also played a programme of selected music. A very pleasant evening was spent.

CONVERSAZIONE.

In connection with the visit of the Association, the President and Fellows of the Royal College of Physicians gave a *conversazione* at the Museum of Science and Art on Wednesday, August 4th, which was attended by a very large assemblage. A general invitation had been issued to members and non-members attending the Association meetings—special cards being sent only to the municipal authorities, the Lords of Session, the officers of the Garrison, and a few other public functionaries; and the hearty manner in which the invitations were responded to may be judged from the fact that in course of the evening no fewer than one thousand five hundred and sixty-three ladies and gentlemen passed the turnstiles. The company on their arrival were received by Dr. Lowe, the President of the College, and Mrs. Lowe—the reception ceremony lasting over an hour. The suitability of the Industrial Museum for a gathering of this character has been often demonstrated, and on this occasion the brilliantly lighted halls, graced as they were with many elegantly dressed ladies, presented a gay and exhilarating scene. Refreshments were served in the south rooms, which were most tastefully decorated with greenhouse plants and flowers; and the whole of the arrangements were admirably carried out. The proceedings lasted until about half-past eleven o'clock. During the evening the bands of the 1st King's Dragoon Guards and Queen's Edinburgh Rifle Volunteer Brigade, which were stationed one at each end of the central hall, played an excellent programme of music. The band of the Dragoons opened the programme, and the pieces were afterwards played alternately by each band.

GARDEN PARTY.

On Friday, August 6th, on the invitation of Principal Sir Alexander Grant and the Senatus Academicus of the University, upwards of three thousand ladies and gentlemen attended a garden party in the Royal Botanic Gardens. Sir Alexander Grant, in his official robes as Principal of the University; Lady Grant; Professor Balfour, also in his official robes as Regius Keeper of the Gardens; and Mrs. Balfour, received the guests on their arrival, at the end of the entrance avenue, just in front of a fine specimen of the *Wellingtonia Gigantea*, planted as a memorial tree in 1861 by Sir Robert Christison. The gardeners attached to the gardens were employed to conduct visitors through the grounds, to point out the more notable plants, and indicate the views of greatest interest. Among the medicinal and economical plants which were specially exhibited were the following: *Drimys Winteri* (Winter's bark), *Bixa orellana* (Arnoth plant), *Gossypium herbaceum* (cotton), *Theobroma cacao* (chocolate), *Cinchona succirubra* (jute), *Thea sinensis* and *T. viridis* (tea), *Citrus aurantium* (orange), *C. Limonum* (lemon), *Azle marmelos* (Indian bael), *Garcinia morella* (gamboge), *Guaiacum officinale* (guaiac), *Quassia amara* (quassia), *Mangifera indica* (mango), *Astragalus verus* (tracaganth), *Myrospermum Pereire* (balsam of Peru), *Tamarindus indica* (tamarind), *Acacia Arabica* (gum Arabic), *Caryophyllus aromaticus* (clove), *Eugenia pimenta* (allspice), *Eucalyptus globulus* (blue gum), *Cinchona ipecacuanha* (ipecacuan), *Cinchona calisaya*

(yellow bark), *Cinchona succirubra* (red bark), *Coffea Arabica* (coffee), *Richardsonia scabra* (white ipecacuan), *Styrax officinale* (storax), *Ilex Paraguensis* (Yerba, Inate, or Paraguay tea), *Isouandra gutta* (gutta percha), *Olea Europaea* (olive), *Convolvulus scammonia* (scammony), *Exogonium purga* (jalap), *Nicotiana tabacum* (tobacco), *Camphora officinarum* (camphor), *Cinnamomum cassia* (cinnamon), *Cinnamomum ceylanicum* (cinnamon), *Myristica officinalis* (nutmeg), *Fanipha manihot* (cassava), *Stillingia sebifera* (tallow tree of China), *Antiaris toxicaria* (upas antiar tree), *Artocopus incisa* (bread fruit), *Ficus religiosa* (pippul or sacred fig of India), *Brosimum utile* (cow-trees), *Piper nigrum* (black pepper), *P. cubeba* (cubeb pepper), *Zingiber officinale* (ginger), *Maranta arundinacea* (arrowroot), *Aloe vulgaris* (Barbadoes aloes), *A. socotrina* (Socotrine aloes), *Elais quincensis* (oil palm), *Andropogon Schenanthus* (lemon grass), *Saccharum officinarum* (sugar-cane), etc. In the walls of the class-room there were suspended large coloured drawings of medicinal and economical plants, such as aconite, squill, Calabar-bean, belladonna, henbane, capsicum, jalap, senna, asafetida, hemlock, sarsaparilla, squinting cucumber, etc. Living plants of *Dionaea muscipula* (Venus's flytrap); species of *Drosera* and *Drosophyllum* (sundews); and other insectivorous plants, such as species of *Sarracenia*, *Dartingtonia*, *Nepenthes* and *Cephalotus*, were also exhibited.

In the Herbarium Hall, the large collections of dried plants were open for inspection, and on the tables was laid out a map representing Ben Lavers, with dried specimens of the principal plants stuck on, which are to be met with at different heights on that mountain. Specimens of the rarer Scotch plants were also exhibited, especially those species which are found only in single localities.

In the class-room adjoining the museum, a beautiful collection of models and fresh specimens of fungi were exhibited, amounting to over three hundred specimens. The table, which was thirty feet long, was covered with a convex bank of dry sand into which the fungi were stuck, and had a fine effect. Some of the most conspicuous kinds were as follows: 1. Edible Species—*Agaricus campestris*, *A. nudus*, *A. pomone*, *A. procerus*, *A. rachodes*, *A. rubescens*, *A. pantherinus*, *Boletus edulis*, *B. scaber*, *Cantharellus cibarius*, *Clavaria coralloides*, *Coprinus comatus*, *Pistachia hepatica*, *Hysterium repandum*, *H. perforans*, *H. pratensis*, *H. triviale*, *Lactaria ditissima*, *L. stipitata*, *Marasmius oreadus*, *Morchella esculenta*, *Russula alutacea*, *R. heterophylla*, *Tuber aestivum*, etc. 2. Poisonous Species—*Agaricus aruginosus*, *A. fascicularis*, *A. fertilis*, *A. muscarius*, *A. semiglobatus*, *Boletus luridus*, *B. piperatus*, *B. satanus*, *Clathrus cancellatus*, *Coprinus micaceus*, *Lacarius piperatus*, *L. rufus*, *Phallus impudicus*,† etc. 3. Species which cause disease among plants; these included models of species of *Aecidium*, *Erysiphe*, *Mucor*, *Peiza*, *Phaenitis*, *Polystigma*, *Puccinia*, *Sphaeria*, *Uredo*, *Valsa*, *Merulius lachrymans*, or dry-rot fungus in various stages of growth. Large coloured drawings of many of these and other fungi were exhibited on the walls of the room.

Leaving the houses, the visitors went to the arboretum, passing on the way the general collections of plants arranged according to their natural orders; and from the high grounds of the main avenue what are recognised as the finest peeps of Edinburgh were enjoyed. The *pinetum*, with its fine collection of the newest and best coniferae, was surveyed, and visitors passed on to the rock garden. Between the rock garden and the herbarium is a beautiful lawn, and here gradually all the guests congregated. In the centre of the lawn was stationed the band of the Dragoon Guards and the pipers of the Queen's Edinburgh Rifle Volunteer Brigade, which performed a selection of music in the course of the afternoon. The promenade seemed to be generally enjoyed, and between five and six o'clock the terraces overlooking the lawn and the grass slopes presented a gay and animated appearance, the bright colours of the ladies' dresses harmonising well with the more sober attire of the gentlemen and the fresh greenery of the turf. Refreshments were served in the winter garden. Among those present, in addition to the members of the Association, were: Sir John Don Wauchope, Sir Douglas Stewart, Sergeant Bailey, the Bishop of Edinburgh, Provost Cazenove, Dean Montgomery, Rev. Dr. Lindsay Alexander, Rev. Dr. Sandford, Sheriff Hallard, Sheriff Nicolson, Sheriff Hamilton, the Lord Provost, Bailies Muirhead, Howden, Tawse, Methven, Treasurer Colston, Dean of Guild Craig, Councillors Turnbull, Sloan, Boyd, M'Laren, Rowatt, Hall, Mossman, Wellstood, Donald, M'Dougald, Sinclair, Coghill, and Durham; Colonel T. B. Butt, Lieutenant-Col. Lindsay, Colonel Trouson, Colonel Playfair, Majors T. Cadell, V.C., Allan, 79th Highlanders, Smith, 1st K.D. Guards, Leith, 79th Highlanders; Captains Davies, Douglas, Phipps, Pittman, Benthall, Bryne, Hills, Campbell, Clays, and Everett, etc.

† This large puff ball is delicious when young and properly cooked. The mature spores, however, when swallowed, have given rise to violent irritation of the mucous membrane.

‡ This species has been occasionally eaten when young without any bad results.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st, Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, AUGUST 21ST, 1875.

PROGRESS IN SURGERY.

THE Addresses in Medicine and in Surgery, delivered at the recent meeting of the Association in Edinburgh, had an interesting feature in common, which gave them a special value beyond that which they possessed as containing the expressions of opinions of two representative men. Both Dr. Begbie and Mr. Spence extended their view beyond the present into the distant past of their respective departments of the healing art; and, while recognising the progress which medicine and surgery have made in modern times, vindicated the claims of the ancient practitioners of medicine and surgery to our respect and admiration for their honest and earnest endeavours to improve their art, even though, in so doing, they acted on erroneous or imperfectly known principles, or followed cumbrous and unwieldy methods in carrying their principles into practice. It would be very satisfactory if the perusal of these addresses would lead to a more careful study of the history of medicine and surgery. The value of such study in relation to surgery was well set forth by Mr. Spence when he said:

"I believe it is only by reviewing the advance in relation to the past, that we will be able to estimate what real progress our science has made, and in what that progress consists, whether in the discovery of something absolutely new, or in modifying and improving methods of treatment, the intrinsic value of which had not been fully appreciated, or which had fallen into disuse owing to the imperfect method in which the principle had been carried out."

No more appropriate illustration of this could be found than that which was selected by Mr. Spence as the first subject of his comments: the treatment of fracture of the thigh-bone. It must have been obvious from the first that extension and counterextension were necessary for maintaining the bone in its proper position; and hence, from the time of Hippocrates downwards, we find the ingenuity of surgeons exercised in devising the means of carrying out this object. But, as Mr. Spence observed, the body was treated too much as a mere machine, and too little regard was paid to what it could bear. The most interesting point in Mr. Spence's remarks on this subject was his demonstration of the fact that the practice of extension by weights and pulleys, which is deservedly coming into favour with modern surgeons, is not at all a new thing; for Hildanus, more than two centuries ago, described and figured an apparatus for permanent extension which, though rude, bears a striking resemblance to the modern weight and pulley apparatus. Mr. Spence did justice to the mechanical skill of this sagacious old surgeon, when he vindicated his extension-bed from the contemptuous sarcasm of John Bell, and remarked that it would have been better to endeavour to simplify and improve it, than to hold it up to ridicule as "lumber" "not unworthy of the chambers of the Inquisition". After describing the modern method of applying the extension-apparatus in its most simple and effective form, Mr. Spence concludes his remarks on the subject in words with which we heartily agree.

"Looking to the extension method, thus improved and simplified, I think we may fairly reckon it as progress in a most important department of surgery; but, whilst we congratulate ourselves on our advance, and replace the bed and weight of Hildanus in the *armamentarium antiquorum*, et us regard it not as 'lumber', but reverently, with the homage due to the perception of a true principle, however rude in design and execution the apparatus may be."

Following this vindication of the merits of ancient surgery in respect of the treatment of fractures of the femur, there come some practical remarks on the process of union in fractures, on refracture in badly set fractures, and on operations for the cure of ununited fractures. The chief point in Mr. Spence's remarks on the first of these topics is, that he denies the existence of, or necessity for, the so-called "provisional callus" in cases where the bones are kept in proper apposition and muscular action is prevented.

In speaking of the subperiosteal method, Mr. Spence, while acknowledging the claims of Ollier of Lyons in connection with this branch of surgery, called to the remembrance of his audience the labours of his former colleagues, Syme and Goodsir, as having contributed in no small degree to our advance. The practical application of the method he held to be of most value in cases of acute necrosis.

The brief remarks on the manual method of reducing dislocations of the hip, and the comparison of the "American method" with the plan made known by a French surgeon forty years ago, are interesting. Indeed, as Mr. Spence hinted, the manual method of reducing these dislocations is of still greater antiquity. He quoted Pouteau as stating that it was known to the ancients, and was mentioned by Hippocrates and Paulus Egineta. On referring to the translation of the works of the last named author by the late Francis Adams, we find the following, under the head of "Dislocation at the Hip-joint" (vol. ii, p. 498).

"When the luxation is recent, it may be managed in the way recommended by Hippocrates. We must then proceed immediately to the reduction; for dislocations at the hip-joint, when allowed to remain long, are wholly irremediable. In general, then, the reduction may be accomplished by rotating it, by bending the limb, and by extension. For, if the accident be recent and the patient young, we may sometimes succeed in reducing the limb by grasping and rotating the limb this way and that. When the dislocation is inwards, we may sometimes accomplish our purpose by bending the limb at the groin inwards frequently and strongly. If the dislocation does not yield to these means, we must have recourse to extension," etc.

Here we have another instance of the antiquity of things often regarded as new: the difference between the ancient and the modern practice being, that the more accurate anatomical knowledge possessed by the surgeons of the present day enables them to carry out the principle with a greater proportion of success than fell to the lot of the men of old time.

The observations of Mr. Spence on the various methods of bloodless surgery, on tumours, and on operations on the air-passages, have less of antiquarian interest than is attached to his remarks on other topics. At the same time, they are of much value as the expression of the results obtained by an observant practical surgeon; and his defence of the judicious employment of venesection, and his remarks on the distinction between croup and diphtheria, will have been read by our associates with interest as the expressions of his opinion on two important topics, which have become subjects of professional disputation in recent years.

The last, and perhaps the most interesting, matter treated of by Mr. Spence, was the treatment of wounds and surgical dressings. After recalling to the recollection of his hearers the old practice by which a wound was never allowed to heal by the first intention, but was put through a process of "digestion, mundification" (for which one is almost tempted to read *immundification*) "and carnification", he went on to show how, even when a more simple method of healing wounds was introduced, the idea that something must be done or a great fuss made had such a hold on men's minds, that such reformers of this department of surgical practice as Paracelsus, Coldbatch, and Sir Kenelm Digby, were obliged to have recourse to incantations, sympathetic powders, and such like means of satisfying the patient that "some great thing" was being done. As regards the antiseptic method, of which his distinguished colleague Professor Lister is the chief exponent, Mr. Spence holds that it occupies too great a share of attention to the exclusion of conditions which he considers as equally if not more important. We do not propose, in this place, to enter on a consideration of the merits of the antiseptic method; but will merely remark

that, while the evidence in favour of the value of this plan of treating wounds is very strong, we must not, on the other hand, lose sight of the facts referred to by Mr. Spence in his address, and given in detail by Dr. Kirkwood in a recently published *Statistical Report of the Major Operations performed by Professor Spence in the Edinburgh Royal Infirmary; with Remarks by Professor Spence*. It is there shown that, during the two years from October 1872 to October 1874, in 30 amputations of the lower extremity there were 7 deaths; in 6 of the upper extremity, 5 deaths; in 23 cases of excision of joints, there was one death; in 31 cases of removal of tumours, 4 deaths; in 14 operations for necrosis, 4 deaths; and in 8 other operations (tracheotomy, etc.), 4 deaths. Further, Mr. Spence states that, during the three years 1861-63 the mortality in 105 capital operations of various kinds was only 7. These favourable results are attributed, not to any special antiseptic treatment, which he does not employ, but to attention to the conditions of the patient and to the cleanliness of the wound, conjoined with the use of simple dressing. Such facts as these must receive weighty consideration in any attempt to decide the real value of the antiseptic method.

Mr. Spence's Address was not, and, under the circumstances, could not be, exhaustive of all the topics which could be brought forward. But, in regard to those on which he treated, it possesses a twofold value; first, as conveying the opinions of a practical surgeon who has enjoyed large opportunities, and has made good use of them; and, secondly, as showing that much of what many of us are accustomed to regard as new belongs in fact to antiquity—some of it, perhaps, to the prehistoric age of medicine, and that modern advance in surgery consists in great part in the general recognition of the value of old principles, and the improvement and simplification of the methods by which they are applied in practice.

HAMPSTEAD ASYLUM.

THE Select Committee of the House of Commons appointed to inquire into, and report upon, the proceedings of the Metropolitan Asylums Board presented their Report to the House on the 27th ultimo.

The Committee find that the action of the Asylums Board "has been strictly in accordance with their duties, powers, and responsibilities, as derived from the Metropolitan Poor Act, 1867"; that, although some alarm existed in the neighbourhood of the Hampstead Asylum, and some risk was encountered by residents or pedestrians passing near, and loitering about, ambulances, nevertheless these evils have been, in the opinion of the Committee, exaggerated; that they are not of necessity incidental to the existence of contagious hospitals, "but are mainly due to the carelessness of persons entering or leaving the same"; and that, by efficient administration, the dangers inseparable from the existence of infectious hospitals "may be reduced to a minimum".

The Committee also find that, from the medical evidence on both sides, infectious hospitals are not necessarily dangerous to their immediate neighbourhoods, but only become so by bad management. Of the alternative site, No. 3, the Committee consider that it is too remote from the population to be benefited; and that owners of property and others would make objections similar to those of the Hampstead residents. The Committee pass a high eulogium on the conduct of the asylum managers in undertaking, at great risk to themselves, the work of providing for the treatment of contagious fevers. "The Committee cannot quit this part of the subject without expressing their strong sense of the great services which have been rendered to the metropolis by the managers; who, with a courage, and in a spirit of devotion scarcely less than heroic, applied their energies and abilities, not merely to the establishment and supervision of the asylums, but were in constant personal attendance therein during the worst periods of the epidemic."

In reading the evidence given before the Committee, the following points struck us as worthy of attention. In the majority of cases, the medical witnesses simply stated their opinion, without stating the grounds on which the opinion was founded. Of the very slight and

insufficient grounds on which some opinions are founded, the following is an example. A servant girl, whilst driving down Haverstock Hill, passed a small-pox ambulance, after which she was seized with small-pox; ergo, conclude the servant and the medical friend of the family, the small-pox was communicated from the ambulance. On the fallacy of such a mode of argument it is needless, we hope, to insist; but this is almost the only kind of argument which has been used against the hospital. Again, on the question of large and small hospitals, it was contended by Dr. Septimus Gibbon that the latter were preferable to the former, and that small-pox patients were treated more safely at home than in large hospitals. This opinion he founded on a comparison of death-rates, than which no more fallacious test of hospital salubrity could be found. The death-rate of a hospital is influenced unfavourably by a variety of circumstances which have nothing whatever to do with its salubrity; its situation as regards proximity to large manufactories, and consequent liability to the reception of severe accidents; pressure on the resources of the hospital involving the refusal of the minor cases; the extension of a hospital, by means of which minor cases are admitted; the proportion of medical and surgical cases, the mortality of the former, without any regard to sanitary conditions, being always much larger than the latter. It was at one time thought that the Paris hospitals were more unhealthy than the London hospitals, the opinion being founded on a comparison of death-rates. Inquiry showed that the number of beds devoted to surgical cases in the London hospitals exceeded the number devoted to medical cases; whilst in Paris, the exact reverse was the case. When the necessary correction for this was made, the medical mortality of the Paris hospitals was 13.52 per cent.; that of Guy's Hospital, 14.08; and the surgical mortality was at Guy's, 5.33; and at Paris, 5.48. The admission or rejection of infectious cases, phthisis, dead and dying cases; skin, syphilitic, and eye cases; lying-in cases, etc., all exercise an important influence on the death-rate, irrespectively of any sanitary or unsanitary conditions peculiar to hospitals. As Dr. Bristowe and Mr. Holmes say in their Report to Mr. Simon (Privy Council Report, 1863, p. 529), "A high death-rate indicates, as a rule, that a hospital fulfils efficiently the purposes for which it was designed; and that a low death-rate, on the other hand, indicates (*ceteris paribus*) comparative inefficiency."

In reference to the mortality in certain cases of small-pox treated in their own homes, Dr. Gibbon's statistics are not only valueless, but absolutely misleading, unless the state of vaccination and the revaccination, the age and the variety of the disease, be taken into account. As a rule, mild cases of illness are treated at home, and severe cases sent to the hospital.

Objection has been taken to the present site on the ground that the approaches are bad. Now, on the theory that ambulances spread contagion through the streets which they pass, it is obvious that the wider the streets the less the danger to the pedestrians on either pavement, or to carriage passengers on the road or street itself. In this view, the Mill Lane sites are very unsuitable as compared with the present site, inasmuch as the approach to the former is by a narrow lane, scarcely permitting the passage of two carriages freely; whereas the approach to the latter is by an unusually wide road, which will permit the passage of several carriages abreast. If, also, the ambulances spread contagion in the streets through which they pass, the less the number of streets to be passed, of course, the better; but the Hampstead residents, notwithstanding their own theory, desire the ambulances to pass through a greater number of streets.

The medical witnesses for Hampstead, at least the two ablest, Dr. Murchison and Dr. Ford Anderson, admitted that no danger would arise from the *existence* of the hospital, but only from the passage of visitors, nurses, and ambulances. But how, we beg to ask, would this be avoided by placing the hospital at Mill Lane? Visitors, nurses, and ambulances would still pass through Hampstead in going to and from the alternative site; and the ambulances from several of the districts to be benefited by the hospital would pass through a larger portion

of Hampstead in going to and from the alternative site than to and from the present site. Thus the Hampstead residents would, by their own action, increase the danger which they assert they desire to avert. Great danger has been predicted to pedestrians in Haverstock Hill from the existence of the Hospital on the present site; but the Hampstead residents, when they proposed site No. 1, forgot this same danger to the thousands of railway passengers who would have been compelled to pass under the very walls of the hospital; whereas Haverstock Hill is 300 feet from the present hospital.

THE QUARTERLY RETURN OF THE REGISTRAR-GENERAL.

DURING the first three months of the present year, the registered number of persons married in the United Kingdom was 114,258; and the marriage-rate was 14.2 per 1,000 persons living. In England, the rate was 14.3, and slightly exceeded the average. It was so low as 7.1 in Westmoreland, and 7.7 in Cambridgeshire, whereas it was 18.2 in Lancashire, and 18.8 in Northumberland. In Monmouthshire and South Wales, the marriages were 14 per cent. less than the average, one result of the extensive strike and lock-out in the coal and iron trade of the district.

During the quarter that ended on 30th June last, the births of 284,356 children were registered in the United Kingdom; the rate being 34.8 per 1,000. In England, the birth-rate for the quarter was 36.0 per 1,000, which was 0.2 below the average rate in the second quarter of the ten years 1865-74. The experience of the first six months of Compulsory Registration of Births in England (the new Registration Act having come into operation on the 1st January last) shows no appreciable effect upon the birth-rate, although it has been estimated that, during the ten years 1861-70, the average annual number of births that escaped registration was 13,614. Indeed, the births registered in England and Wales during the six months ending 30th June last were actually less by 2,141 than the number returned in the corresponding period of 1874, when the population of the country was undoubtedly less than it now is. The birth-rate during the quarter was but 29.5 and 30.0 in the principally agricultural population of the South-Western and South-Eastern Registration Divisions, whereas it was 39.8 and 43.8 in the manufacturing and mining population of the North-Western and Northern Divisions. In the eighteen large English towns, the rate was 1.3 above the average rate in all England; it ranged from 32.8 in Portsmouth and Norwich, to 43.5 in Sunderland and Oldham, and 45.8 in Salford. In fifty other large towns, the rate was 36.5; in Cheltenham, it was 21.7; and 25.5 in Exeter and Bath; whereas it was 46.8 in Wigan, and 47.2 in Gateshead. The estimate of the present population of Wigan has been revised.

During the three months ending on June 30th, the deaths of 175,689 persons of both sexes were registered in the United Kingdom; and the death-rate was 21.5. In England, 130,797 deaths were recorded, equal to an annual rate of 21.9 per 1,000, which exceeded by 0.5 the average rate in the corresponding quarter of the ten years 1865-74, and was higher than in the spring quarter of any year since 1866. The alternations of temperature during April were unusually severe, and the weather during the greater part of June was unseasonably cold. These meteorological conditions appear to have been especially unfavourable to the health of infants and elderly persons. As the death-rate from the seven principal zymotic diseases was considerably below the average, a large increase of deaths must have occurred in some of the other classes of disease. A complete examination of the causes of death throughout the country is not yet possible, but it may be safely assumed that there was an exceptional fatality from diseases of the respiratory organs. In London, for instance, the deaths during the quarter exceeded the average by 1.1 per cent. only; whereas the deaths referred to diseases of the respiratory organs were 22 per cent. above the average. The death-rate amongst the 13,500,000 persons residing in towns was 22.7 per 1,000; amongst the rural population of 10,000,000 it was 20.8 per 1,000. The urban rate was 0.2 below, whilst the rural rate

was 1.4 above, the average. The decline in the fatality of zymotic diseases favourably affected the urban death-rates, whilst the inclemency of the weather during the spring increased the death-rate of elderly persons, especially in rural populations.

In the eighteen largest English towns, the death-rate was 23.2; and ranged from 17.3 in Portsmouth and 21.2 in Wolverhampton and Sunderland, to 28.1 and 30.3 in Manchester and Oldham. Infant mortality per 1,000 was 111 in Portsmouth, and 137 in Salford and Sheffield; and ranged to 182 in Leicester, and 191 in Norwich. The zymotic death-rate was 1.4 in Portsmouth, and 2.1 in Newcastle-upon-Tyne; and ranged upwards to 4.5 in Norwich and Salford, and 5.8 in Hull. Among fifty other large towns, the lowest rates were 14.6 in Dover, 17.1 in Devonport, and 17.4 in Colchester; the highest rates were 28.3 in Rochdale, 28.5 in Stockport and Wigan, and 28.8 in Preston. The zymotic rate ranged from 0.5 in Dover and Cheltenham to 5.3 and 5.4 in Birkenhead and Wigan respectively.

There were 29,839 deaths of infants under one year of age, equal to a rate of 139 per 1,000; 67,847 deaths of children and adults between 1 and 60 years, giving a rate of 12.7; and 33,111 deaths of persons aged 60 years and upwards, equal to a rate of 74.2 per 1,000. The rates were above the average in the first and last classes; and 3,000 elderly persons died in England and Wales who would have survived had the death-rate amongst persons aged 60 years and upwards not exceeded the average in the five preceding corresponding quarters.

To the seven principal zymotic diseases, 15,419 deaths were referred; 4,063 resulted from scarlet fever, 3,640 from whooping-cough, 2,728 from different forms of fever, 2,463 from diarrhoea, 1,432 from measles, and 348 from small-pox. The zymotic rate was 2.6 against 3.1, the average rate in the five preceding corresponding quarters. Scarlet fever was especially prevalent in the East Riding of Yorkshire; and in Cowbridge, Flint, and Festiniog. Diphtheria prevailed in Sandwich, Hailsham, and Swinefleet near Goole. Whooping-cough was more than ordinarily fatal in London, Norwich, Birmingham, Wigan, Sunderland, and South Shields. Measles was less fatal than usual, but there were several local outbreaks of the disease. The death-rate from fever was lower than in any quarter since the end of 1869. In many counties, no death from small-pox was recorded; 73 deaths were referred to that cause in Birmingham, and 44 in Keighley—in which latter town the outbreak of the disease was remarkable for its intensity among the unvaccinated, and afforded a standing protest against the conduct of the Keighley guardians in refusing to fulfil the provisions of the Compulsory Vaccination Act.

The death-rates of 46 of the principal English watering-places during the quarter are given in this report, and, in the following districts, the zymotic rate exceeded 2 per 1,000; in Eastbourne and Seaford, 10 deaths were referred to whooping cough, 4 to fever; in Blackpool and Fleetwood, 3 deaths were due to diarrhoea, 2 to fever, 2 to scarlet fever, and 2 to whooping cough; in Folkestone, 15 deaths were referred to measles; in Whitby, 11 deaths were caused by whooping-cough, 2 by fever; in Aberystwith, 7 deaths were referred to measles; in Southport, 7 deaths were referred to whooping-cough, 4 to diphtheria, 2 to fever, and 2 to diarrhoea; and, in Llandudno, 2 deaths were referred to whooping-cough, 2 to fever, and 2 to diarrhoea.

The natural increase of population in the United Kingdom, produced by the excess of births over deaths during the quarter, was 108,667; and, in England, that increase was 83,853. The emigrants of British origin who left the United Kingdom during the quarter were 51,178, a smaller number than in any corresponding quarter since 1862.

The temperature during April was remarkably changeable; during May the weather was unusually warm, the mean temperature exceeding the average by 2.2 degs.; the first ten days of June were also warm, but, from the 11th to the 30th day of the month, the mean daily temperature was nearly 3 degs. below the average. The fall of rain during the quarter at Greenwich was 5.4 inches. The price of wheat and potatoes was low; but the price of meat, especially of mutton, showed a marked increase.

THE Library of the Royal Medical and Chirurgical Society was closed on Monday last, the 16th instant, and will be reopened on Thursday, September 16th.

It is stated in the *Pioneer of India*, under the date of Allahabad, July 21st, that "in eighteen or nineteen days, out of seventy-three persons attacked by cholera at Simla, fifty-five have died".

It is intended to form a section of Military Hygiene at the meeting of the Association of German Naturalists and Physicians, to be held in Gratz in September.

PROFESSOR M. J. WEBER, for some time co-director with Max Schultz of the Anatomical Institute in Bonn, died on July 28th, in his eightieth year. He was the author of a well known anatomical atlas.

STAFF SURGEON-MAJOR PORTER, late 97th Regiment, has been elected an Honorary Associate of the Order of St. John of Jerusalem in England, and presented with a cross of the order in recognition of his services in aid of the wounded in war.

THE CHOLERA IN SYRIA.

By latest advices received from Syria, it appears that the number of cases of cholera in Damascus and Antioch are happily on the decrease. At Damascus, from the 20th to the 26th of July, there were 680 cases and 531 deaths; and at Antioch, from the 19th to the 26th, there were 186 cases and 114 deaths. The cholera, it is stated, of the sporadic form, has appeared at Aleppo, where, from the 19th to the 26th July, 39 cases occurred with 20 deaths.

THE SANITARY STATE OF CONSTANTINOPLE.

OUR Constantinople correspondent writes:—Alarm is spreading itself amongst the Christian population of this city; and they are gradually awakening to the fact that we have the dread enemy cholera once more nearly amongst us. It is in vain that sanitary reformation and measures time after time have been suggested to the municipal authorities; but, heedless and apathetic, they have allowed the city and suburbs to remain in the same unsanitary state as ten years ago, when the cholera invaded us, sweeping off the inhabitants by thousands—the death-rate at the time, it will be remembered, was over 2,000 a day. We still have uncovered sewers, pestilential ditches, decomposing animal and vegetable *debris*, insufficient water-supply, etc.

THE FAMINE IN ASIA MINOR.

OUR correspondent in Constantinople writes:—Very unsatisfactory reports still continue to reach us from the famine-stricken districts of Asia Minor, relative to the health of the inhabitants who, it appears, are still suffering most severely, not only from actual want and starvation, but also from disease; the mortality from various causes being terrible. Typhus and bubo plague are endemic throughout the country. The Government are accused of endeavouring to ignore the present state of affairs, the consequence of which has been a fierce ebullition of public feeling both against the Government and their medical representatives, whose reports to the sanitary council lately published, have been most severely censured by the public press. Much has been done by private enterprise to relieve the most urgent wants of the people in the famine districts, about £26,000 having been subscribed for that purpose; but this is now nearly expended, and the demand for relief continues. The Italian Government authorities have ordered quarantine regulations to be enforced upon all vessels arriving at their ports from Syria, Alexandretta included.

OUT-PATIENTS AT LONDON HOSPITALS.

A CONTEMPORARY has recently called attention to the fact, that out-patients are kept waiting for hours at a time when they go to a hospital for advice. With regard to the subject of waiting in out-patient rooms until the honorary staff can get through the cases which present

themselves, we will merely point out, first, that, if a rich man pay a fee and apply to any eminent member of the profession in large practice, he will have to wait his turn, it may be for hours; and, perhaps, even then without success, as we have known instances where private patients who have not made a special appointment have been unsuccessful in their application on more than one occasion, although they could afford and were prepared to pay a liberal fee. Secondly, we very much doubt the wisdom of offering undue facilities to all classes of out-patients who apply for treatment at the London hospitals, by which they will be guaranteed instant attention. These out-patient departments are, under the present system, with all its disadvantages, too much abused in practice; and we cannot, therefore, endorse the hope expressed by our contemporary that steps will be taken to insure immediate attention to all applicants for relief. This subject is far too large an one to be treated piecemeal; and, until the whole system is reorganised, we cannot, in the interests of the poor themselves, support a suggestion which, in practice, will only tend to increase the pauper roll.

THE RIBERI PRIZE.

AT the meeting of the Royal Academy of Turin on August 6th, the Riberi prize of 20,000 *lire* (£800) was awarded to Professor Schiff of Florence, for his work entitled *Contributions to the Pathological Physiology of the Spinal Cord*. This is the fourth occasion on which the prize (a triennial one) has been awarded.

THE JOHN HUNTER MEMORIAL.

FOUR years ago, a proposal was made to commemorate John Hunter's long residence in Kensington, where for thirty years he carried on those labours which have immortalised his name, by placing a window in memory of him in the parish church; and a subscription was opened for the purpose of raising the necessary funds. The carrying out of the proposal has been delayed in consequence of the church being encumbered with a heavy debt, and of other local circumstances; but we learn with pleasure from a circular recently issued by the honorary secretaries, Mr. Frank Buckland of 4, Old Palace Yard, and Mr. John J. Merriman of 45, Kensington Square, that all difficulties have been removed, and that they propose to complete the subscription list by October 31st, so that the window may be in position, if possible, by February 14th of next year. The amount already subscribed is £80; and further subscriptions (limited to one guinea each) are solicited. A list of donors will be published after October 31st; and a drawing of John Hunter's house and grounds will be forwarded to each subscriber.

THE GREAT NORTHERN HOSPITAL.

THE Great Northern Hospital deserves credit for the manner in which it has dealt with the question of out-patient abuse. If other institutions, which, by reason of their position and their wealth, might have been expected to lead the way in this matter, had shown the same zeal, the difficulties connected with out-patient relief might by this time have been solved. The following extract from the recently published Report of the Great Northern Hospital shows the beneficial results which have flowed from a systematic inquiry into the circumstances of all applicants for out-patients' treatment.

"The Registrar of Out-patients commenced his duties on the re-opening of the department (on October 19th, 1874). As mentioned in last year's Report, this officer was appointed to endeavour to check the abuse of out-patients' relief by a careful and yet liberal inquiry into the circumstances and position of applicants. The return of out-patients relieved for the past year is for eight months, in respect to physicians' and surgeons' patients, against six months for the year ending 30th June, 1874; the return for the other departments being for twelve months in respect to both years. From this return, it will be perceived that the system of registration has not by any means checked the stream of applicants, although it is believed that it has deterred people who are able to pay for medical relief from seeking gratuitous aid. The Registrar has visited the homes of 863 patients, and has found that only 37 have given wrong addresses. Such persons have not been readmitted. Further, 140 applicants, whose circum-

stances did not warrant their being admitted to the benefits of the charity have been referred to the local dispensaries. Taking, therefore, into consideration the result of the working of the department for the last eight months, the Committee are, on the whole, satisfied that the knowledge that the circumstances of the applicants will be inquired into, and their homes visited, has had a deterrent effect on imposture, and they believe that the abuse of out-patients' relief has been materially checked thereby."

We observe with pleasure that it is proposed to rebuild and enlarge the hospital. The extension of an institution which is conducted on such sound principles cannot fail to be a boon to the crowded neighbourhood in which it is situated.

THE DEAF AND DUMB IN AUSTRIA.

ACCORDING to the *Wiener Medizinische Presse*, the proportions of deaf and dumb persons per 10,000 inhabitants in the Austrian provinces are as follows: in Salzburg, 21.4; in Styria, 17.9; in Upper Austria, 10.9; in Silesia, 10.4; in the Bukowina, 9.5; in Moravia, 8; in Galicia, 6.9; in the Tyrol, 6.3; in Vorarlberg, 4.2. A large number are not in any public institution. Cretinism in many instances runs nearly parallel with deaf-dumbness, the proportion of cretins per 10,000 being: in Salzburg, 38.9; in Upper Austria, 18.3; in Styria, 16.9; in Silesia, 9.2; in the Tyrol, 7.6; in the Bukowina, 4.2; in Vorarlberg, 2.4; in Moravia, 2.2; in Galicia, 1.9.

EXCISION OF THE LARYNX.

THE operation of excision of the larynx has been lately performed in Berlin by Professor von Langenbeck. The patient was a man aged 57, who came into hospital on November 29th, 1874, suffering from symptoms of laryngeal obstruction and irritation, for the relief of which tracheotomy was performed the next day. Laryngoscopic examination showed much oedematous swelling of the epiglottis and aryepiglottic ligaments; and there was enlargement of the inframaxillary lymphatic glands on the right side. Extirpation of the larynx was recommended, but refused; and the patient left the hospital in January. On July 14th, he returned. Respiration had been carried on through a trachea-tube; but the spread of the disease had impeded deglutition to such an extent that he could only swallow fluids. On July 21st, extirpation of the larynx was performed, Trendelenburg's apparatus being applied to the trachea, and chloroform administered through it. A transverse incision was made above the hyoid bone, and a perpendicular one carried down from it; and the two flaps of skin having been turned aside, the diseased parts were removed. The specimen was shown by Dr. von Langenbeck at a meeting of the Berlin Medical Society. The anterior wall of the œsophagus and pharynx was divided, the larynx cut away, and the hyoid bone sawn through in the middle. The disease, which was cancerous, had involved the upper part of the larynx, the epiglottis, and the hyoid bone, to such an extent that it was difficult to distinguish the several parts. The inner surface of the cricoid and thyroid cartilages as far as the laryngeal pouches, and the inferior vocal cords, were free. The disease commenced close above the ventricles of the larynx, in the form of nodular masses which completely filled the upper part of the organ. The arytenoid cartilages and the aryepiglottic ligaments, the hyoid bone, and the base of the tongue, were all involved in the disease, and were removed. On July 28th, a week after the operation, the patient was free from fever, and his general condition was satisfactory. A solution of salicylic acid was used as an antiseptic.

THE GERMAN SANITARY CONGRESS.

THE following subjects will be discussed at the third meeting of the German Sanitary Association, to be held at Munich on September 13th, 14th, and 15th. 1. The determination of a plan for the investigation of the occurrence, as to place and time, of epidemics of typhus: reporter, Professor von Pettenkofer (Munich); co-reporter, Staff-Surgeon Dr. Port (Munich). 2. Hygienic requirements of new buildings, especially in the new quarters of large towns: reporter, Dr. Varrentrapp (Frankfort); co-reporter, Engineer Bürkli-Ziegler (Zürich). 3.

The demands of public health in relation to food, in orphan-asylums, barracks, prisons, and almshouses for old persons, and also in public kitchens: reporter, Professor Voit (Munich). 4. The aims, means, and limits of sanitary police control over certain important articles of food, especially bread and meat: reporter, Dr. Heusner (Barmen). 5. Public slaughter-houses, and the introduction of a general regulation of the slaughtering of animals; also the compulsory examination of meat, with special reference to the obligation of the district authorities to recompense the butchers: reporter, Herr Gobbin (Görlitz); co-reporter, Dr. P. Börner (Berlin). 6. The formation of a general registration of deaths in Germany, with, if possible, medical certificates of the causes of death.

RECENT URBAN MORTALITY.

DURING last week, 5,382 births and 3,551 deaths were registered in London and twenty other large towns of the United Kingdom. The average annual death-rate was 24 per 1,000 persons living. In Norwich, it was 17; Edinburgh, Dublin, Sunderland, and Portsmouth, 18; Wolverhampton, 19; Bradford and London, 22; Oldham, 23; Sheffield and Manchester, 24; Liverpool and Bristol, 25; Glasgow, 26; Birmingham, 27; Leeds, 28; Hull, 31; Nottingham, 32; Salford, 33; Newcastle-upon-Tyne, 36; and Leicester, 40. The annual zymotic death-rate averaged 6.5 in the eighteen English towns, and ranged from 1.3 and 1.8 in Norwich and Oldham to 10.4 in both Birmingham and Salford, and 18.5 in Leicester. The fatality from diarrhœa equalled a rate of 3.7. No death from the disease was registered in Norwich; but the rate in the other towns ranged upwards to 7.8 in Birmingham and 14.7 in Leicester. The fatal cases of scarlet fever showed an excess in Bristol, and those of fever in Sheffield. In London, 2,395 births and 1,483 deaths were registered; the former were 128 above, the latter 210 below, the average. The annual death-rate was 22.5. Amongst the deaths were 1 from small-pox, 36 from measles, 87 from scarlet fever, 7 from diphtheria, 50 from whooping-cough, 22 from fever, and 147 from diarrhœa; in all, 350 deaths, which were 160 below the average. The 147 deaths from diarrhœa were 178 below the corrected average; 75 per cent. were the deaths of infants under one year of age. In greater London, 2,872 births and 1,738 deaths were registered, equal to annual rates of 35.6 and 21.6 per 1,000. In outer London, the general and zymotic death-rate were 17.5 and 2.9 respectively, against 22.5 and 5.2 in inner London. The mean reading of the barometer at Greenwich was 29.74 inches. The mean temperature of the air was 65.2 deg., or 3.1 deg. above the average; and there was an excess on each day of the week. The mean degree of humidity of the air was 84; the general direction of the wind was S.W.; and the horizontal movement of the air averaged 10.3 miles per hour. Rain fell on five days, to the amount of .21 of an inch.

PROMOTION, ETC., OF ARMY MEDICAL OFFICERS.—The promotion to the rank of Surgeon-Major of Surgeon C. H. Y. Godwin, which appeared in the *Gazette* of July 6th, 1875, is to be dated May 14th, instead of April 25th, as therein stated.—Surgeon F. Gillespie, M.D., to be Surgeon-Major, *vice* H. Titterton, M.D., retired upon temporary half-pay.—Surgeon-Major A. E. T. Longhurst, M.D., retires upon temporary half-pay.—Surgeon C. H. Swayne is transferred temporarily to the half-pay list, without half-pay.—Surgeon-Major West has been removed from the 2nd Battalion 11th Regiment to the 58th Brigade Depot.

INSPECTOR-GENERAL H. FRANKLIN, C.B., on the half-pay list, died at Folkestone on August 2nd, aged 82. He joined the Service as hospital mate August 13th, 1808; was promoted assistant-surgeon June 29th, 1809; surgeon, May 26th, 1814; surgeon-major, November 19th, 1830; deputy inspector-general, January 14th, 1842; inspector-general, June 25th, 1847; and retired upon half-pay November 29th, 1850. He served in the Peninsula from September 1808 to the end of that war, in 1814, including the battles of Vittoria, Pampeluna, Pyrenees, Nivelle, Orthes, and Toulouse, and siege of Badajoz (medal with six clasps). He served also in the American war, including the battle of Plattsburg. He served in India from April 1842 to June 1850, and was present at the battles of Chillianwallah and Goojerat, in the Punjab campaign (medal with two clasps and C.B.).

DR. HUGHES BENNETT.

At the presentation of the bust of Dr. Hughes Bennett to the University of Edinburgh on August 3rd, Dr. Andrew Clark of London spoke in the following terms, on behalf of the subscribers.

When some time ago it became known that Dr. Hughes Bennett had been compelled, unhappily by failing health, to resign his chair in this University, there arose in the minds of some of the pupils and friends a desire that the important work which he had done in this place should in this place find some abiding record and acknowledgment. Accordingly, it was agreed to offer a bust of Dr. Bennett to the University; and the University having graciously accepted the offer, I am here to-day to make formal presentation of our offering. Had this duty fallen into the hands of some one of higher rank and of greater eminence, the ceremony of presentation would have been invested with greater importance. Nevertheless, what it has lost in importance it has gained in fitness. I was once his pupil, and for a long time his assistant, in the pathological department of the Royal Infirmary. From him I got not only knowledge, but the love of work. He laughed me out of youthful conceits, provoked me into perseverance, and drilled me into habits of exact observation. To the habits of thought and work begotten and established under the influence of Dr. Bennett's teaching and example, I owe in great part such success as I have had in life, and I rejoice in this opportunity of making grateful acknowledgment of what I owe him. And now, in this place, where Dr. Bennett has dwelt for over thirty years, and where his history may be supposed to need no recapitulation, I might here bring my task of presentation to an end. But we may be too familiar with a man to know what he really is; we may be too close to his work to see it quite distinctly; and as this is an occasion when Dr. Bennett's work may be justly brought to mind by one sufficiently far removed from the sphere of it to see it undisturbed, I trust you will bear with me whilst, in a few plain words, I strive to set forth some of Dr. Bennett's claims to a place of lasting honour in this University and in the history of his art. It is no abuse of language to say that Dr. Bennett was a great teacher. Earnest, exact, methodical, practical, he had the power of communicating to others his love of work and his methods of working. Probably, he has made more original inquirers and given a greater impetus to exactness of inquiry in pathological histology than any other medical teacher in the empire. The cardinal points of his teaching, the points upon which he was never weary of dwelling, were minute care in observation and literal exactness in recording the results of it. He would never allow hypothetical assumptions to mingle with actual descriptions. He was not content to tell students how a thing was to be done; he made them do it. Loving knowledge for its own sake, and unceasing in his condemnation of an unreasoned empiricism, he nevertheless kept before the minds of his pupils the great fact that the end of all their studies was the acquirement of an art: the art of preventing disease, and of relieving human suffering. To Dr. Bennett we owe in this country the introduction of the use of the microscope in diagnosis; of the experimental methods of teaching normal and pathological histology, physiology, and pathology; and of great improvements in the manner of communicating clinical instruction. One who has thus taught for over thirty years must have taught for some purpose in his time, and I am well assured that among practitioners, professors, and investigators throughout this kingdom and its dependencies, the influence of Dr. Bennett's teaching and the example of his industry and boldness, are happily and fruitfully at work. But Dr. Bennett is still more than a great teacher. As a pathologist and as a physician, he has made his mark upon the theories and the practice of these days. For the last quarter of a century there have been few additions to our knowledge and few improvements in our art in which he has not taken some share. He is, indeed, the father of pathological histology in this country, and has managed to steer a middle and, as I think, a just course, between the extravagant extremes of Rokitsansky and of Virchow. By his studies of inflammation as a process of abnormal nutrition, he opened new paths of inquiry, and started trains of thought leading to discoveries of which as yet we cannot discern the end. He has shown that disease is not a new or a foreign thing, but a series of altered states; that the laws which regulate the evolution of normal products are the very same laws which, in different conditions, regulate the evolution of morbid products; that between physiology and pathology there is an unbroken continuity; and that, for all the purposes of our art and its progress, both are to be treated after the same fashion. Although Dr. Bennett's views of cancer have not been generally adopted, it cannot be doubted that his work on *Cancer and Canceroid Growths* was in

advance of the knowledge of the time, and that his hypothesis of the local origin of cancerous tumours, illustrated with much ingenuity and argued with great earnestness, was a substantial and fruitful addition to our stock of pathological ideas. By his discovery of the facts of the leucocythæmic condition, and by the interpretation which at first he put upon them, he has brought to light the existence of a series of allied states of equal interest and importance. By his practical illustrations of the natural history of disease, he has given us in some instances a true criterion of the value of remedies; whilst, by his implacable opposition to indiscriminate bleeding and the use of other depressing agents in the treatment of inflammations, by his introduction into practice of cod-liver oil, and by his advocacy of restorative methods of treatment, he has sensibly prolonged the life of the consumptive, and diminished the mortality of many acute and chronic diseases. And we are indebted to Dr. Bennett not only for what he has done, but for what he has forborne from doing. He has made no sacrifices at the shrine of popularity for the sake of the favours which she might grant him. He has not degraded the exercise of his profession into a mere matter of money-making; and, looking back along the thirty years of his public life, I can see nothing but unswerving loyalty to the dignity of his art and the welfare of his brethren therein. Thus much have I said in words, I trust, of truth and soberness. But Dr. Bennett's enemies (and he is of doubtful honesty who has none) may allege that there is another side to the subject of my speaking. I am not blind to the fact, and I know that an indiscriminating eulogy would be unworthy of the place, the occasion, and the man. Too outspoken to be widely popular; too unsparing in his chastisement of faults from which he is himself free, to escape the resentment of those who suffer; too slow to recognise the virtue which sometimes lies even in antagonism, and too prone to see personal animosities in public opposition—I do not claim for Dr. Bennett an exemption from frailties and faults from which no human excellence is wholly privileged. But when all is said, and the worst is said, I am convinced that many a capping day will come and go, and many a physician and professor will have here his day and die, ere one shall appear amongst them worthier on all grounds of worthiness than Dr. Bennett is worthy of the place of honour which I now claim for him at your hands.

REPORT OF THE COMMITTEE OF COUNCIL UPON THE SUBJECT OF STATE MEDICINE QUALIFICATION.

1. It is desirable that every person holding any public appointment connected with medical attendance upon the poor should have a fair knowledge of the principles of Public Hygiene.
2. It is also desirable that every medical man should be competent (as proved by examination) to fill any such office, and that every candidate for admission into the medical profession should, therefore, have a fair knowledge of the principles of Public Hygiene.
3. It is desirable that every person holding the office of Medical Officer of Health should have passed through the ordinary curriculum of medical education, and should be possessed of such medical qualification as shall entitle him to registration in the *Medical Register*.
4. It is desirable that every corporation duly entitled to grant such qualifications as shall confer the legal right to registration in the *Medical Register*, should be further entitled to grant a special qualification in State Medicine also.
5. This qualification should include an adequate knowledge both of *Legal Medicine*, or *Medical Jurisprudence*, and of *Preventive Medicine*, or *Public Hygiene*, comprehending *Medical Police* and the management of medical institutions supported by national or local taxation.
6. Every one holding this qualification should be entitled to register it as an additional qualification (see *Medical Act, 1858*).
7. The General Medical Council should be empowered and required to prepare a scheme for the examination in State Medicine to be carried out by all licensing bodies. The scheme to specify: *a.* The number, qualifications, duration in office, duties and remuneration, of the examiners; *b.* The subjects of examination; *c.* The nature and methods of examination; *d.* The form of special diploma or special certificate to be granted by any Board of qualified examiners; *e.* The fees to be paid, if any, by candidates for examination; *f.* The places and times for holding the examination.
8. Each licensing body should be empowered to grant the diploma in State Medicine to qualified medical men now holding office of a certain standing, and to medical officers of the army and navy, after a practical *visà voce* examination.
9. Until January 1st, 1880, matters should be permitted to remain *in statu quo*; and that after January 1st, 1880, no medical officer duly

appointed before that time shall be disturbed in his office or appointment in consequence of not holding such special diploma or certificate.

10. After a given time—say the first day of January 1880—no candidate for any appointment as Medical Officer of Health should be eligible for election unless he is able to produce a special diploma from some of the recognised authorities of having passed an examination in State Medicine, in addition to his diploma entitling him to practise medicine generally, and to be enrolled in the *Medical Register*.

THE RECENT CHARGE OF MANSLAUGHTER AT BOSTON.

THE following is Dr. G. M. Lowe's account of the *post mortem* examination in the case of Mary Elizabeth Wright, for the manslaughter of whom Mr. Wood of Boston was recently tried, as reported in the *JOURNAL* of July 31st.

On the 9th day of April, 1875, at the house of — Wright in Skirbeck Quarter, Boston, at 8.50 A.M., I made a *post mortem* examination of the body of Mary Elizabeth Wright, aged 32 years, who was confined (as I am informed) on April 6th, 1875, and died shortly afterwards. This examination was made in the presence of Dr. Morris of Spalding, at the desire of the medical attendant on the deceased, Mr. Wood of Boston. The body was well developed; the rigor mortis was strongly marked; the perinæum was uninjured; the cellular tissue of the thighs and abdomen was crepitant with air. On opening the thorax, the several organs within its cavity were perfectly healthy. The liver was pale, and rather large; the stomach and bowels were somewhat distended with flatus. Upon removing the contents of the abdominal cavity, the cellular tissue covering its posterior part and lying under the peritoneum, were distended with air, and crepitant on pressure. There was an effusion of blood in the cellular tissue under the peritoneum, on the left side, corresponding to the brim of the pelvis, both posteriorly and anteriorly; and there was also a slight effusion of blood on the right side within the pelvic cavity. The general surface of the uterus was pale, its substance flabby and uncontracted; in the neighbourhood of the right Fallopian tube, there was effusion of blood; blood was also effused under the peritoneal fold surrounding the right Fallopian tube and broad ligament generally; right ovary healthy. The left broad ligament was in a similar condition; but there was more extensive effusion of blood; left ovary healthy. The cellular tissue in the posterior part of the cavity of the pelvis was also infiltrated with blood. The uterus, with all its attachments, together with the bladder and rectum, with their peritoneal coverings, were then carefully removed. The uterus and vagina were then carefully laid open along their entire length. There was a slit through the utero-vaginal walls, extending three inches in length, commencing about one inch above the neck of the uterus, extending through it down the vagina, on the left side, and corresponding with the position of the effusion of blood in the pelvis previously described. The length of the uterus from cervix to fundus was nine inches. The internal surface of the uterus was pale, but healthy; its cavity was empty; and the placental attachment had been evidently in the neighbourhood of the right Fallopian opening. The uterus, with its parts, was then replaced in the body. The stomach was examined; its mucous surface was pale, and contained about two ounces of fluid; it presented no remarkable appearance, and was replaced with its contents within the body. The rest of the abdominal organs were pale, but healthy. I have no hesitation in stating that the rupture of the uterus was the immediate cause of death.

ASSOCIATION INTELLIGENCE.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

A SPECIAL meeting of the members of the district will be held in the Library of the County Hospital, Canterbury, at 3.30 P.M., on Thursday, September 2nd, "To further develop and carry out the details for the formation of an Ethical Committee, which was agreed to at the last meeting of the district, and which was then adjourned to a future meeting."

EDWARD WHITEFIELD THURSTON, *Honorary Secretary*.
Ashford, August 17th, 1875.

WEST SOMERSET BRANCH: ANNUAL MEETING.

THE thirty-second annual meeting of this Branch was held at the Railway Hotel, Taunton, on Thursday, July 22nd, at 2.30 P.M. Fourteen members and two visitors attended. The retiring President, Mr. RAN-

DOLPH, shortly addressed the meeting, and then resigned the chair to Dr. CORDWENT, the President for the ensuing year.

Report of Council and Treasurer's Accounts.—The following report of Council was read by the secretary. The treasurer's accounts and balance-sheet, which had been examined by Dr. Meredith and found correct, were taken as read.

"1. Your Council have pleasure in reporting to the members of the West Somerset Branch, on this its thirty-second anniversary, that during the past year the work of the Branch has gone on in a most satisfactory manner. The meetings have been well attended, and the business carried on with much vigour and spirit.

"2. The year having been inaugurated at Milverton with the most agreeable of associations, under the presidency of Mr. Randolph, it will be recollected that important resolutions relative to Club practice were then passed (and which, it may be hoped, will in time be not unproductive of beneficial results, although none have as yet been observed). The interesting communications from the President, and the scientific paper of Mr. Parsons on Addison's Disease, will be fresh in the recollection of those who had the good fortune to be present on that occasion.

"3. At the autumnal and spring meetings, besides excellent papers on What is a Tonic? by Dr. Cordwent, and the Causation of Typhoid Fever, by Dr. H. J. Alford, the questions of the Treatment of Whooping-cough, and How best to deal with Habitual Drunkards?—led to spirited discussions; on the latter question, the following resolution was passed:

"That this meeting is of opinion that the legislature should be petitioned to enact some measure for dealing with habitual drunkards, and placing them under proper restraint."

"4. With a view to carrying into effect this resolution, your Council herewith submits a form of petition which is recommended by the Council for the adoption of this meeting.

"5. A communication having been received by Dr. Kelly from the General Secretary, asking that the list of representatives of the Branch in the Council for 1875-6 should be forwarded to him before June 10th, the subject was considered at a meeting of your Council on June 3rd, when the following resolution was passed; viz.:

"Resolved that the secretary be requested to send up the names of H. W. Randolph, Esq., and Dr. George Cordwent, and that this action of the Council be submitted to the next general meeting of the Branch for confirmation."

"6. The treasurer's accounts will be presented in their usual form, and it will be satisfactory to see that he holds a balance of £6 5s. in favour of the Branch.

"7. The number of members in the Branch is now fifty-two. Three new names have been added to the list during the past year; but, on the other hand, the loss of several who have either left the neighbourhood or withdrawn from other causes is to be regretted.

"8. Ten years ago, it was matter of congratulation that the number of members in the Branch had reached to thirty. While there is thus cause for rejoicing in the favourable view of the present strength of the Branch as contrasted with what it was in 1865, members should not fail to recollect that there are still a large number of their brethren who reside within the district who do not belong to the Association.

"The Council urges upon every member of the Branch to bear this in mind, and take action upon it during the ensuing year. If this be done at the next annual meeting, there ought to be found a good accession of strength to the Association, and more especially to its West Somerset Branch.

After discussion, it was resolved that the report of Council, together with the treasurer's accounts and balance-sheet, be received and adopted.

Representatives of the Branch in the General Council of the Association.—It was resolved that the President, George Cordwent, M.D., and H. W. Randolph, Esq., be the representatives of the Branch in the General Council for the ensuing year.

Honorary Secretary and Treasurer.—W. M. Kelly, M.D., was elected honorary secretary and treasurer.

Place of Meeting for 1876, and President-elect.—It was resolved that the annual meeting in 1876 be held at Bridgwater, and that Frederick Farmer, Esq., be President-elect.

Intermediate Meetings.—It was resolved that intermediate meetings should be held as usual during the ensuing year, about Michaelmas and Lady Day, at the discretion of the Council; and that such meetings take place at the Railway Hotel, Taunton.

Members of Council of the Branch.—It was resolved that the following, with the President, Past-President, President-elect, and Honorary Secretary be the Council of the Branch for the ensuing year:—H.

Alford, Esq.; W. Liddon, M.B.; John Meredith, M.D.; J. Frankerd, Esq.; F. J. C. Parsons, Esq.; and W. L. Winterbotham, M.B.

Petition re Habitual Drunkards.—The petition, as recommended in the report of Council for adoption, was read by the secretary. It followed the form which had been issued by the Birmingham and Midland Counties Branch. It was resolved that the form now submitted be approved and adopted; that Mr. Randolph be requested to take charge of it and obtain the signature of members, and in due course, at his own discretion, have it presented to Parliament.

Cases and Papers.—The following were read.

A Case of Supposed Poisoning by Heroin. By THOMAS CLARK, L.R.C.P.Ed., Dunster.—The poison was supposed to have been eaten by a cow, and two children were affected with the symptoms of narcotic poisoning after taking the cow's milk.

A Medico-legal Case. By J. MEREDITH, M.D.—The question was as to the cause of death in an infant aged 11 weeks, who, being under the effects of vaccination which had been performed eight days previously, was taken into the open air on a particularly cold day in December, and died suddenly while being held at the mother's breast. At the coroner's inquest, a verdict was returned that death had been caused by the intensity of the cold; but, after hearing details of the case as related by Dr. Meredith, the more general opinion of the meeting was, that the probable cause of death was suffocation.

A Case of Psoas Abscess. By J. MEREDITH, M.D.—The interesting details of this case were given with great minuteness. The leading points were: 1. Acute inflammatory symptoms; 2. A hard swelling in the right groin; 3. Matter pointing in the lumbar region; 4. Expectoration of matter from right lung and subsidence of the lumbar swelling; 5. The abscess extending below Poupart's ligament, and opened antiseptically at the outer margin of Scarpa's triangle; 6. Complete recovery.

Discussion followed the reading of all the above cases, and votes of thanks were passed to their authors.

Vital Conservancy in Disease.—The President, Dr. Cordwint, read a paper on Vital Conservancy in Disease. A vote of thanks to him for it was passed by acclamation.

Dinner.—An excellent dinner was served at a quarter past 5 o'clock, after which the usual toasts were given and responded to.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 28TH, 1875.

SIR WILLIAM JENNER, Bart., M.D., D.C.L., F.R.S., President, in the Chair.

Hypertrophy of the Lower Parts of the Face. Mr. BARWELL exhibited the patient, whose case he had narrated at the meeting of the Society on March 12th last. (The case was reported in the BRITISH MEDICAL JOURNAL of March 20th, p. 394.) On March 15th, Mr. Barwell placed a ligature around both facial arteries just below the wind on to the surface of the lower jaw; not only simply ligaturing the vessel, but dividing it and tying it above and below the point of division. The operation was followed by a severe attack of erysipelas, from which, however, the patient made a good recovery. The proceeding was attended for a time by a diminution in the hypertrophy; during the last month, however, which the man had passed in the country, the swelling had again increased, and his state was now much the same as before the operation. It was noted that there was much greater pulsation on the right side than on the left, the collateral circulation being more freely established, but this did not appear to have had any influence on the growth. The patient refused any further operative interference at present.

In reply to Mr. Hulke, Mr. BARWELL stated that both facial arteries were ligatured simultaneously.—The PRESIDENT considered that a slight diminution in the size of the lips had taken place; but, as there was distinct pulsation on the right side, it was clear that the hypertrophied tissues still received a considerable supply of blood.—Mr. BARWELL stated that the lips had increased slightly since the patient quitted the hospital. Within a week after the operation, slight pulsation was felt on the right side. The facial artery was certainly tied, and there was no second facial artery; but it was impossible to deal operatively with the collateral circulation. If any further treatment were to be adopted, he thought a small portion of mucous membrane might be excised; but the patient would not now consent to any such procedure.

Psoas Fistula in Ano: one treated by the Knife, the other by Elastic Ligature.—Mr. MAUNDER read notes of this case. The patient, a female, aged 24, had suffered from fistula in ano for some time; one

fistula on the right side having made its appearance two years ago; another on the left side twelve months previously to her coming under observation. These two fistulae were equidistant from the anus, and extended to about the same depth where they communicated with the bowel. The one on the right side was divided by the knife, and the elastic ligature was applied to the one on the left. The knife-wound was dressed with a strip of oiled lint, and no application was made to the other. For two or three days after the operation, the patient complained of severe pain, and this was especially referred to the left side. On the sixth day, the ends of the ligature were found lying in a deep groove, which they appeared to have cut in the tissues; and, on the ninth day, the ligature came away. On the twelfth day, the wound made by the knife was almost on a level with the surrounding parts, while that which was the result of the ligature was a deep groove, having very prominent callous edges like the margins of a chronic ulcer of the leg. On the twenty-second day, the knife-wound was completely cicatrised, but that made by the ligature was only partially healed, and still grooved. Five weeks after the operation, it was found that the groove left by the ligature was converted into a sinus, the edges having united; it was, therefore, again united, and complete union took place in about a fortnight, five weeks after the wound made by the knife had closed. Mr. MAUNDER remarked that, as a rule, it would be wrong to endeavour to establish a principle of practice from the experience of a single case, but the test of the efficiency of a method of treatment was absolutely trustworthy when two different operations were performed simultaneously upon the same patient, who was the subject of a similar complaint in corresponding localities. Under these circumstances, the history of the above case would induce him to declare in favour of the knife as a means of causing less pain and quicker restoration to health. The elastic ligature might be reserved for those who would on no terms submit to a cutting operation, as well as for those of hæmorrhagic diathesis.

Mr. HEATH thought there were cases of fistula seated high up, where, to obviate hæmorrhage, it would be more prudent to use the elastic ligature or similar means. The knife, however, was preferable in the vast majority of cases. He would never employ the elastic ligature for the removal of tumours, the experience of the first case in which the treatment was carried out in this country (that of Sir H. Thompson) being by no means encouraging.—Mr. HUTCHINSON understood Mr. MAUNDER to admit that there were exceptional cases where the ligature might be employed, but none where it could compete with the knife. He had seen but little of its use, but could confirm Mr. MAUNDER's statement as to the slowness of healing that followed its use.—Mr. HULKE had not used the ligature himself, but had seen it employed in three cases; and the extreme painfulness and slow progress made in each case had convinced him of the inferiority of the method.—Mr. THOMAS SMITH said that he had tried the elastic ligature on two occasions, the result being, that he would never resort to it again, unless prevented for very good reasons from using the knife.

Arterio-venous Aneurism in the Thigh caused by a Pistol-shot.—Mr. HULKE read notes of this case. The patient, a coach-builder, aged 44, was admitted into the Middlesex Hospital, complaining of great pain and weakness in the right lower extremity. The whole limb was swollen, its cutaneous veins were dilated, the leg was eczematous, and there was a small, very painful, superficial ulcer on the shin. He stated that, three years before, when in Missouri, a smooth-bore pistol exploded as he was putting it into his right trousers' pocket; he fell; and, from the sharp pain he felt in the knee, he thought that the ball had lodged in it. However, in a few moments, he was able to get up and stand. On stripping off his trousers, he found an entrance-wound below the right hip, but none of exit; and, an hour after the accident, he discovered the bullet under the skin, at the inner side of the thigh, whence a doctor cut it out. Its spherical shape was unaltered. The loss of blood from both wounds did not exceed a wineglassful; and more, he said, came from the cut made for the extraction of the bullet, than from the entrance-wound. In a couple of days, both wounds had closed. He went out the next morning after the accident; and, except on the first day, he did not strictly keep his bed, but, for about one month, he hobbled out with a stick or crutch, and then resumed his work. Two nights after the accident, when the wound had already closed, he was kept awake by pain in the thigh, and he then became aware of an unusual throbbing in it. This, his doctor said, was of no moment; he was to lie still till it stopped, which, however, had not yet happened. The limb grew weak and painful; and, at the end of a year, it often gave way under him in walking, making him stumble. His statement was borne out by the presence of a small scar (that of the entrance-wound) five inches vertically below the crista ili, and four and a half inches from the anterior superior iliac spine, level with the upper border of the great trochanter, and of a rather smaller linear scar, where

the ball was cut out, on the inner side of the thigh, seven and a half inches below the spine of the pubes. A line joining these two scars cut the axis of the thigh obliquely, and it crossed the course of the large femoral vessels at a point where the femoral vein usually passed from the inner side to behind the superficial femoral artery. From this spot upwards, the femoral artery and vein were greatly dilated; the vein was much more swollen than the artery, and it was most so under cover of the sartorius muscle, where the course of the bullet crossed it. At this spot, there was a very considerable sinuous bulging of the skin, which closely simulated an aneurismal pouch. The vein, in its whole extent, pulsated synchronously with the femoral artery, and, throughout its entire course, a loud rough murmur was audible. It was a continuous, rough, blowing sound, with a rhythmical swell, synchronous with the pulse in the artery. A strong purring vibration was felt along the course of the vein. The dilatation murmur and the palpable vibration were observable from the ham upwards to above the groin, as far as the external iliac vessels were accessible. Below the level of the lower sac, their intensity quickly diminished. All the cutaneous veins were unnaturally conspicuous. The pulse at the ankle was weaker than on the other side. Pressure on the femoral artery in the groin was immediately followed by a diminution of both vein and artery, and by the instantaneous cessation of the pulsation, murmur, and thrill. These symptoms left no room to doubt that a communication existed between the superficial femoral artery and its attendant vein, and their greatest intensity at a spot nearly opposite the lower of the two scars, indicated this to be the situation of the inoculation. For several weeks, careful pressure was made by using a Cartes's compressor at the groin, alternately with a Skey's tourniquet put on a few inches below. For several days, also, direct compression upon the spot of inoculation was combined. These measures altogether failed to produce any permanent effect; and, notwithstanding every care in applying it, the pressure induced a slight attack of eczema in the groin, which overran the scrotum and penis, and provoked a slight lymphadenitis. The patient had now become weary of this treatment; but as his general health was deteriorated, he was sent into the country. He was not seen again for three months, when his leg was found to be more swollen, but there was no appreciable difference observable in the state of the femoral vessels. He remained in hospital six weeks, and again direct pressure, alone, and combined with pressure on the cardiac side of the inoculation, was tried, with perfectly negative results. He was then supplied with an elastic stocking reaching from foot to groin, and the uniform and efficient pressure of this was followed by the best results, enabling him to follow his occupation with but little inconvenience. There was no alteration in the condition of the aneurismal varix, but the circulation in the leg and the nutrition of the tissues had become manifestly better. Sphygmographic tracings, which were exhibited, showed the vibratile jarring character of the pulsation in the varix.

Mr. HEATH was not surprised to hear that pressure had not been beneficial. He related particulars of the case of a lady who, after striking her leg, had subsequently an apparent arterio-venous aneurism, formed by a communication occurring between the anterior tibial artery and an accompanying vein. In that case, pressure was tried without effect; and authors generally seemed to have had the same experience. An elastic stocking was then ordered. The patient had some trouble during a subsequent pregnancy, but was now well.—The PRESIDENT inquired if the colour of the limb were altered.—Mr. HULKE replied that the skin was a little bluish when the bandage was off. One interesting circumstance connected with these cases was, that not merely the vein but the artery also dilated. Roux published several cases of arterio-venous aneurism following venesection, in some of which the symptoms of aneurism did not appear for several years; in one case, six years. In all these cases, the artery was enlarged up to the trunk; and the radial and ulnar arteries were also largely dilated. He thought the phenomenon was due to the fact that the arterial met the venous current, and consequently could not advance so readily as in the normal condition.—Dr. POWELL thought the arterial enlargement due to the fact that the vessel had been wounded and inflamed, and then had gradually given way.—Mr. HULKE remarked, however, that the whole length of the artery was enlarged, not only the part injured.—Mr. PICK said that these cases usually occurred from accident, sometimes from ulceration. He alluded to the case of a girl, aged 13, in whom the veins of one leg were enormously dilated. Soon after birth, the veins of one limb were seen to be much larger than those of the other; and, at 13 years of age, one leg was nearly twice as large as the other. The veins were then so dilated, that they were thought to be about to burst. The worst were treated by being obliterated by needles passed beneath them. Afterwards, an elastic stocking was fitted, with which she went to the country.

A Doubtful Case of Cutaneous Disease.—Dr. DICKINSON made some observations upon the case exhibited by Dr. R. J. Lee at the Society on November 27th, 1874 (*vide* BRITISH MEDICAL JOURNAL of December 10th, 1874, page 792). Dr. Tilbury Fox, Dr. Duckworth, and himself had been appointed as a committee to inquire into the case. The disease was a skin-eruption, which, commencing at the heel, in three weeks travelled "like a comet" up the limb, and once or twice encircled the trunk; as the head of the line, which was dotted and red, advanced, the tail of the line gradually faded. Chloroform had been given to the child, and a small portion of skin excised: this was still to be examined microscopically. The operation had stopped the progress of the disease.—Dr. SOUTHEY asked if the disease were the result of fraud, or was it due to a parasite?—Dr. DICKINSON said the affection was undoubtedly due to disease, and not to art. The committee were inclined to think it parasitic. The line had advanced at its end regularly; the committee had cut out that end of the streak, and believed they had excised the head of a parasite, which had still to be minutely examined.

Acute Pemphigus.—Dr. SOUTHEY gave particulars of a case of this disease. The patient, aged 19, a well nourished young woman, was admitted into St. Bartholomew's Hospital with the history that she was a general servant, but that latterly she had led a somewhat irregular life. She had always enjoyed good health. On October 28th, she first presented herself at the hospital with a sore on the side of the hand, which had commenced as a blister. She stated that the sore was at first about the size of a threepenny-piece. On November 15th, she first felt very poorly; she was feverish and could not eat; had a sore throat, and an eruption all over her face and body. The rash came out with much irritation and tingling. It appeared first as small round raised spots, which varied in size from a pea to that of a cob-nut. On November 19th, when first seen by Dr. Southey, her body was covered by blebs or bullæ of various sizes, some of them surrounded by a halo of redness. On the face were several large ones, especially at the inner angles of both eyes, at the corners of the mouth, and on the chin. Others were seen on the dorsal and palmar surfaces of both hands and between the fingers. The arms and legs were especially affected at the flexures of the joints. On the back, chest, and abdomen, the blebs were large and oval, and in some parts confluent, measuring quite an inch across. Some looked quite transparent, others presented more opaque contents, while those which were pressed upon, or had been rubbed, contained a yellowish fluid. The fluid collected from a few in a test-tube was alkaline, and albuminous enough to coagulate entirely by heat. The mucous membrane of the mouth was sore and aphthous; the tongue was protruded with difficulty, and was covered with a yellowish white fur. Her throat was sore, so that she swallowed with difficulty; and there was a superficial aphthous sore situated about the middle of the hard palate, and extending to the *velum palati*. The heart and lungs were normal; the abdomen was empty and retracted, not painful on pressure. Pulse 117, soft, feeble, regular; respirations 24, regular; temperature 101.7 deg. Her skin was moist and perspiring. She was ordered effervescent saline draughts, with small doses of opium; milk and beef-tea, with stimulants. A solution of nitrate of silver (ten grains to the ounce) was injected into some of the larger bullæ, and the parts everywhere were swathed in cotton-wool, soaked in carbolic oil. Fresh bullæ came out every day; and the back, buttocks, and thighs presented superficial sores, which were excessively painful, and bled when the dressings were changed. On November 29th, she was placed in a warm bath at a temperature of 100 deg. Fahr., in which she remained five hours, the greater part of the time being spent in sleep. She took more food that day than on previous days; and, to the surprise of her nurses, after having been lifted into the bath in an almost inanimate condition, she managed to get out of it with only slight assistance. The following day she was kept in the bath twelve hours, and the next day ten hours. On the fourth day she was kept in the water six and a half hours. In consequence, however, of the water being allowed to get too cold while she slept, she became confused, slightly delirious, exhausted, and shivering when put to bed. Reaction, however, set in, and the following day she was found to be very prostrate, with a pulse of 120, very feeble, and temperature 100.2 deg. Fahr. She was breathing quickly, and complained that her throat was worse, and she was not so well. A sample of urine was obtained; it was high coloured; specific gravity 1045; it contained no albumen, but turned quite black and effervesced violently upon the addition of nitric acid. On December 4th, the carbolic acid dressing was discontinued, and Caron oil substituted. From this date the improvement became very manifest. Although restless, feverish, and difficult to manage, she gained strength day by day, and no fresh bullæ made their appearance. In a few weeks she was able to leave the hospital for Walton.

Mr. HULKE remarked that the nervous prostration in this case had

been supposed to be due to the carbolic acid; perhaps the colour of the urine was traceable to the same cause. In surgical cases, where carbolic acid was much used, the urine was often quite purple.—Dr. SOUTHEY remarked that, in such cases, the smell of carbolic acid remained in the urine. Indican, which was passed in large quantity in cases of great prostration, appeared to be abundantly present in the urine in this case.—Dr. GREENHOW said that the dark colouring of the urine, when due to carbolic acid, appeared spontaneously; whereas only by the addition of the strong acids was the dark colour of indican brought out. In almost every case of recovery from the collapse stage of cholera which he had seen, indican was present.—Mr. HUTCHINSON asked if Dr. Southey could state more carefully the quantity of serum in any of the bullæ; and was there any considerable amount of inflammatory material at the base of the bullæ? He had never seen iodide of potassium hydroa developed to a stage that could be mistaken for acute pemphigus. The bullæ of hydroa looked as if they would rival in size the bullæ of pemphigus, but they never did do so. Again, in iodide hydroa, the bullæ had great inflammatory infiltration at their base, and were depressed at the centre. Then, too, the iodide in Dr. Southey's case was given only one day. Mr. Hutchinson mentioned a case of acute pemphigus. The patient was a man, aged 26, and Mr. Hutchinson had seen him at the beginning of his illness. He then had a curious group of vesicles over each eyebrow, with a good deal of erythema around. Bullæ then appeared upon the trunk, increased in size, and became as large as half-eggs. There was ulceration over the buttocks; and, in other particulars, the case resembled Dr. Southey's. He (Mr. H.) at first refused to acknowledge it was pemphigus; but, seeing that the patient emaciated rapidly, became very prostrate, and seemed about to die, arsenic was then given. No other bullæ appeared, and the patient at once rapidly improved, although no other alteration in the treatment was made. When the man was nearly well, the remedy being discontinued, a few fresh bullæ appeared. Arsenic was again given; the bullæ healed, and the patient became quite well. In another man, a very serious case of pemphigus, arsenic did not succeed, and the man died. This was the only case in which Mr. Hutchinson had found the remedy fail to cure the disease, and he regretted that in that instance he had not pushed it further. Within twenty-four hours after arsenic was given, the fresh eruption of bullæ usually ceased. The astonishing point in Dr. Southey's case was, that the patient recovered without specific treatment, for such he considered arsenic to be in pemphigus. He had never seen a case cured without definite specific treatment.—The PRESIDENT mentioned a case of chronic pemphigus, which resisted all treatment in the Children's Hospital. The child then went to the country, fortunately had measles, and rapidly recovered from pemphigus.—Dr. SOUTHEY said that some of the bullæ contained one drachm of liquid, and were as large in diameter as a shilling. They had no red rim around, nor induration, nor did deep ulceration ensue, except at the buttocks and other parts subjected to pressure, and in the face, where the girl picked out the bullæ. The body, after the attack, was left covered with pigmented stains; but scars remained only where pressure had produced them. No iodide of potassium was given after the first day in the hospital. He believed, if she had not been kept in the bath, she would have died. Morphia-injections gave no relief; but, when she was placed in the water, and pressure taken off her, then she rested in comfort. The bath was discontinued with the healing of the worst sores at the back of the body, because of the difficulty experienced in maintaining the water at a constant temperature.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

MAY 11TH, 1875.

JOSEPH COATS, M.D., Vice-President, in the Chair.

Diseased Ankle successfully treated by Carbolic Acid Injections, &c.—Dr. STRETHILL WRIGHT presented a patient, to show the result of treatment in a case of long-standing disease of the ankle. The young woman had received an injury six years ago from a kick about three inches above the joint; this resulted in swelling and lameness, so that in three years she entered the Royal Infirmary, and was under treatment there for six months, but with little benefit. In June 1873, she had again to enter the infirmary, and remained for five months; amputation was then advised, but she declined. She entered the Barony Hospital in September 1874, with the ankle much swollen and very painful, especially at nights; five sinuses existed, and these communicated with one another and with bare bone, but the joint was not opened. At first, the treatment consisted in laying the sinuses open and dressing antiseptically; but no improvement occurred till the middle of December, when a new procedure was adopted. The swollen

and inflamed tissues were then injected with a solution of carbolic acid (1 to 40) by means of a syringe having a sharp point, about the thickness of a knitting-needle; the tissues were pierced and the injections made in various directions, but the joint itself was not pierced. A poultice of carbolised linseed-meal, covered with carbolised gauze, was applied, and the dressings were made under the carbolic spray. The process was repeated, at first daily, and afterwards at intervals of several days, and was continued for four months, and the limb was kept at rest in a splint for two months. This dressing was suspended six weeks ago, owing to an erysipelatous inflammation, and simple water-dressing was used, as the sore was now quite superficial. The pain subsided soon after the injecting treatment was begun. When she was shown to the Society, there was only a small superficial sore, the foot was quite movable, and the joint appeared natural. Dr. S. Wright referred to another case of diseased joint (the wrist), somewhat similar, but of shorter duration, and without sinuses, which had recovered under the same treatment pursued at the same time. He raised the question as to what this beneficial action could be due, especially in the second case, as the mischief could not have been due to any injurious influences from without. He was inclined to think also that the injections had been repeated oftener than was necessary.

Two Cases of Sympathetic Ophthalmia.—Dr. THOMAS REID showed two patients illustrating two very different forms of this disease. The first, a young man aged 20 years, was admitted to the Eye Infirmary on February 15th, 1875, with a wound in the left cornea, passing from the junction of the cornea with the sclerotic, at its lower and inner part, upwards and inwards for about two lines; the wound was occupied by prolapsed iris; this was snipped off, and atropine solution applied. Slight inflammatory symptoms persisted for about three weeks, and gradually passed off, leaving, however, a certain irritability. The patient being anxious to return to his work, he went home, but returned in a fortnight with sclerotic injection of both eyes, the lower margin of the right cornea hazy, the pupil normal in size, but with complete posterior synechia: this did not yield to atropine solutions of full strength, but the left pupil dilated readily. Calomel and opium were ordered, and atropine; but, as the symptoms were not passing off, he was admitted again into hospital in a week, and iodide of potassium was given in addition. Symptoms of well marked serous iritis now were present, both corneæ being studded with minute brownish dots. The inflammation gradually subsided, and the right pupil began now to yield. When he was shown to the Society, both pupils were fully dilated; the opacity and dotting of the cornea had cleared off as well as the inflammatory symptoms; the eyes, however, remained very sensitive to any irritation. The vision had not been perceptibly affected in either eye throughout the whole course of the disease. The medicines had now been stopped and tonics substituted. The second case, a boy aged 14, was admitted to the Eye Infirmary on December 9th, 1874, with a severe injury, from a fragment of iron, of the right cornea, extending from its centre vertically upwards for about two lines into the sclerotic, the eyeball being partially collapsed. He was at once put to bed, and extract of belladonna and a bandage applied; the inflammation, which was not great at first, gradually declined, and he was allowed to go home in three or four weeks, with instructions to avoid using his eyes, and to carry on the treatment. In a fortnight, he returned with symptoms of superficial inflammation (hyperæmia) of both eyes; the vision of the left eye being good, there being no ciliary pain on pressure on the injured eye, the pupil of the left being good and acting readily to light. It was then hoped that the symptoms were superficial, and might pass off; but it was explained to the parents that enucleation might be necessary. The boy was put to bed, and iodide of potassium was given in small doses. The eyes remained in much the same condition, one day better and another worse, the pupil on the left side acting freely; but, as the patient began to complain of occasional dimness of vision, enucleation was at once performed on February 17th, 1875. The operation was easily done, but was followed by considerable hæmorrhage and violent deep-seated pain in the cavity of the orbit. Next day, the pain had abated and the hæmorrhage ceased. The pupil, which was formerly rather dilated, became contracted, in spite of solution of atropine (four grains to one ounce), and at the ciliary attachment of the iris a deep livid ring appeared. Small doses of calomel and opium were given; but, on the third day after the operation, the vision declined, so that he was barely able to distinguish fingers. The iodide was increased, but the disease advanced; the pupil became more contracted, the iris became œdematous, and was traversed by a considerable number of highly congested blood-vessels; this gave the iris a pinkish appearance, and it bulged forwards without iridocentesis. Vision was now extinct. The stump of the enucleated eye remained irritable. The eyeball, after being in chronic acid for a month, was laid open by a horizontal section from before backwards; the retina, as is

usual in such cases, was found completely separated from the choroid, with the exception of one point to the outside of the macula and near the entrance of the ciliary nerves and vessels; the separated retina was pressed forward, lying in folds against the zonule of Zinn and the partially dissolved lens, which remained *in situ*. Two cord-like prolongations were sent backwards, one to the entrance of the optic nerve, and the other to the point of adhesion to the choroid already noticed. The choroid on each side of this point of adhesion was considerably hypertrophied; the sclerotic at this point likewise projected inwards, with a corresponding depression on the outer surface. In the depression on the surface, a number of hypertrophied blood-vessels were observed. The radial fibres of the ciliary body were detached from the sclerotic towards the equator of the lens, as is usual in inflammation of the ciliary body. The anterior chamber was occupied by hypertrophied iris. The adhesion of the retina to the choroid, and the condition of the sclerotic, seemed to indicate that an injury might have been inflicted in this region by the fragment of iron; and, as it might have penetrated the ball, although there was no distinct cicatrix, a search was made in the stump six weeks after operation. It was found that the ocular conjunctiva had not cicatrised, and a fungous granulation occupied the centre; this was removed and a probe passed in various directions, but no foreign body was found. The wound now healed up. [On a more careful examination of the enucleated eye subsequently, a thin fragment of iron, half an inch in length and about three-sixteenths in breadth, was found imbedded deeply in the lower hemisphere close behind the lens, one of its extremities pressing on the inferior part of the ciliary processes. From this point backwards the retina adhered to the choroid, giving the section the appearance already referred to. This adhesion of the retina to the choroid did not extend to the upper hemisphere of the eyeball. The position of the foreign body within the eyeball accounts for the adhesion of the retina and the hypertrophy of the choroid, either by the extension of the inflammation backwards from the ciliary processes, or by direct injury to the parts at the time the accident happened, by the fall of the foreign body through the upper aspect of the ball to its lower.] Dr. Reid remarked that, in the first case, although the sympathetic affection involved the iris, yet, the vision being good, and the disease being much less dangerous than other forms of sympathetic inflammation, it was resolved to give the patient a chance of recovery without operation; but, although up to the present the disease had been amenable to treatment, and all trace of inflammation had nearly gone, the case still required to be watched lest a recurrence should take place. In the second case, the vision being but slightly impaired, and there being no evidence of iritis, the usual beneficial results from enucleation were anticipated; but a very manifest aggravation of the symptoms occurred after the operation. The facts seemed to point to some diseased condition of the ciliary vessels, and probably also of the nerves, at their entrance in the stump, as the parts within the injured eye itself seemed quiescent. He thought that sympathetic disease might thus be due to disease of the ciliary blood-vessels and to irritation of these nerves, in other parts of their course than their terminal distribution in the ciliary body itself. The lesson to be drawn from this unfortunate case was that, in all cases of injury to the eye, causing, from their nature, complete destruction of vision, enucleation at once should be insisted on.

Diabetic Cataract.—Dr. THOMAS REID also showed a patient with diabetic cataract, double and fully formed. The man was 22 years old; dimness of vision had appeared only about the beginning of April, and in three days became as bad as on admission. His health seemed to have been impaired for a year, and he had had diabetic symptoms for about that time. He had been put under treatment by regulated diet, and Walker's diabetic biscuits and rusks had been used with some advantage. Dr. Reid said that this form of cataract was frequently found in the milder forms of diabetes in young persons, as well as in the more severe. In the former cases an operation was justifiable, if the general health were moderately good; and he hoped to be able to operate in this case.

Paralysis of Accommodation of Eye in Diphtheria.—Dr. BARR and Dr. HECTOR C. CAMERON presented a boy who had been under their care. He was 11 years old, and had been seized with diphtheria on February 13th. He recovered satisfactorily; but in six weeks it was found that his vision was affected for near objects, but not for distant ones, and, on examination, this was clearly due to a paralysis of the accommodation. There were no other paralytic symptoms, except a slight degree of paralysis of the muscles of deglutition, with regurgitation of fluids swallowed, etc. His mother stated that, during an attack of whooping-cough, he had had an internal strabismus.—Dr. RENFREW referred to the case of a clergyman now under his care, whose family had been nearly all affected with bronchitis and measles, complicated,

in some at least, with perfectly distinct diphtheritic exudations and typhoid symptoms. He himself was laid down on May 3rd with sore-throat and hoarseness, and on the 4th he felt his sight weak, and by the 7th his sight was such that he could not see near objects; on the 8th, he consulted Dr. Reid, who made out paralysis of the accommodation, and recommended the use of convex glasses for a time. He was able to preach on the 9th without spectacles, and is now very much better. There were no other paralytic symptoms.—Dr. REID said that the case of the clergyman was one of much interest, owing to the early date at which this affection of the vision had appeared, and to the rapidity with which changes occurred in the power of accommodation. With regard to the boy, he inquired if he were hypermetropic, as he had found this diphtheritic affection chiefly occurring in those who were so; and the history of squint, during the illness from whooping-cough, pointed in the same direction. The clergyman referred to was not hypermetropic.

Old Ununited Fracture of Skull.—Dr. FORTIS showed a part of a skull in which an old ununited fracture existed; this passed from above the left external auditory meatus, transversely backwards across the squamous suture, to about an inch from the lambdoidal suture. It was united over nearly all its extent, leaving a mere groove to mark its seat; but, near the commencement, there was an oval gap left by the erosion of the margins, which were quite sharp; the gap was filled by fibrous tissue. Between the skull and dura mater, at and near the fracture, there lay a pale fawn-coloured tough laminated layer, seemingly an old clot. This had eroded the bone over it slightly.

Instrument to facilitate cutting Sections of Tissues hardened by Freezing.—Mr. W. J. FLEMING exhibited an instrument which he had devised, consisting of a Stirling's section-cutter surrounded by a chamber through which a current of weak spirit was caused to flow, the spirit having been previously reduced to a very low temperature by passing through a worm immersed in a freezing mixture. The advantages he alleged it to possess were its portability, and the facility with which it could be manipulated, while the frozen tissue thus remained in its position, and numerous sections could be made without its being touched in any way by the hands. He thought freezing was so valuable a method of hardening, that it only required an easily worked arrangement to bring it into more general use.

Obstruction of the Intestine.—Dr. JOSEPH COATS showed a specimen of obstruction of the intestine. He pointed out that a diverticulum which proceeded from the ileum, three or four feet above the valve, had become adherent by its apex to the mesentery of the ascending colon. Beneath the bridge thus formed, several loops of small intestine had passed in rather a complicated way, and one small portion which passed twice under the bridge showed the dark red colour and thickened appearance of complete strangulation. He remarked that the diverticulum was three or four inches in length, and had a somewhat blunt extremity, but that from this extremity there proceeded a fibrous band an inch or more in length, which formed the medium of attachment of the diverticulum. The preparation was removed from a boy about 9 years old, who had died with the usual symptoms of internal obstruction of the intestine.

Fruit-stone passed per Urethram.—Dr. HECTOR C. CAMERON showed a damson-stone passed from the bladder by a male patient, 43 years of age. His first symptoms were frequency of micturition, and a little pain in the perinæum; these began about twelve months ago. About November last, he had, for two or three days, violent pains just below the umbilicus, with vomiting and one or two rigors. On the cessation of this attack, he began to pass gas *per urethram*, and his urine became very turbid, but not distinctly feculent in odour. In a week, he was able again to follow his business, and continued to do so till about two months and a half ago, gaining flesh and feeling well, but all along passing gas *per urethram*, and often a little blood at the conclusion of micturition; he now began to pass fluid feces also *per urethram*, somewhat resembling meconium in appearance. At this point of the case, Dr. Cameron had seen the patient with Dr. Suttie, who had supplied the foregoing particulars. On sounding the bladder, nothing was elicited; but, on giving a sudden sharp stroke above the pubes, succussion-sound was very distinctly made out in the bladder, the percussion-note being at the same time tympanic. The rectum was natural in all respects, and, although filled with rather hard feces, thin feces were coming from the urethra. It was evident that the connection of the urinary organs was not with the rectum. A fortnight after this examination, he passed *per urethram* the fruit-stone shown to the Society; it had a slight crystalline deposit on its surface. With the view of allowing the opening in the bowel to heal up, the patient had been fed entirely by enemata, and feces had since ceased to come from the urethra; and, for several days together, flatus had also been sometimes absent.

Specimens and Instruments.—Dr. FOUILL presented a dissection of the cerebral arteries in a case of atheroma with cerebral hæmorrhage. —Mr. W. J. FLEMING presented a cheap hot and gas stage which he had devised for the benefit of students, the principle being the same as Stricker's, but the cost about five shillings.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

VACCINATION.—Mr. Edward Crickmay, vaccinator of the Dennington District of the Hvoine Union, has been awarded by the Local Government Board a further sum of £7 10s. for efficient vaccination. —Dr. John W. Watkins, Medical Officer of the No. 4 District of the Warrington Union, has been awarded the sum of £31 17s. for efficient public vaccination. This is the third time he has received an award.

THE FACTORY ACTS.—The following certifying surgeons have been appointed:—Edward Garraway, M.R.C.S. Eng., for Faversham, *vice* T. C. Spyers, M.D., deceased; Benjamin Barkus, M.D., for Gateshead, *vice* A. Kolf, M.R.C.S. Eng., deceased; Joshua Wm. Morison, L.R.C.P. Ed., for Pembroke, *vice* D. A. Reid, M.D., resigned.

THE LONDON SICK POOR.

At the annual meeting of the Metropolitan Asylums Board, Mr. J. A. Shaw Stewart, for the Stockwell Asylums Committee, reported that there was no reason to fear any extraordinary pressure, in consequence of fever, upon the accommodation of the asylum. Attention had been called to cases among the upper and middle classes, and alarm had been felt; but, with regard to the poor, in the fortnight not a single case of either typhus or enteric fever had been admitted. During the fortnight, 71 cases had been admitted to the fever asylum; there had been 5 deaths and 39 discharges, leaving 71 cases, against 85 a fortnight ago. Of the 71, 69 were scarlet fever cases, and 1 was an enteric fever case. In the small-pox side, 5 cases of the disease had been admitted from the whole of the unions of London; 6 had been discharged, leaving 7 at present to represent all the cases in London under the Poor-law authorities. Mr. Barringer stated that at Homerton 54 cases of fever had been admitted during the fortnight; there had been 5 deaths and 4 discharges, leaving 133 under treatment, against 127 a fortnight since. With regard to the imbeciles, Mr. Wyatt reported that there were 1,804 at Leavesden, and 4 deaths only had occurred. Mr. Ward, for the Caterham Committee, reported that there had been 10 admissions and 8 deaths during the fortnight, leaving 1,820 patients. Mr. Galsworthy, in reference to the visit of the managers to the asylum, stated that it was found to be in an excellent condition in every respect; and that great credit was due to Dr. Cortis and the Committee, to whom a vote of thanks was passed. Mr. E. H. Currie stated that, at the new Clapton Asylum for imbecile children and others, there were now 262 patients. All the reports were adopted, and, after further business, the Board adjourned.

EXAMINATION OF LUNATICS.

DR. COULTS (Banchory).—There is no rule as regards payment for certifying pauper lunatics in Scotland. Thus in New Deer, Aberdeenshire, the medical officer receives no fee for such certificates, whilst in Old Deer the parochial board pay their medical officer £2 for every lunatic sent to an asylum. Under these circumstances, we cannot state whether our correspondent is entitled to charge a fee for such certificates, unless we had before us a copy of the agreement he has entered into. If nothing has been stated respecting certifying gratuitously, in equity he would be entitled to a fee of £1; but whether the parochial board would pay, except upon compulsion, is a totally different matter, and it is for our correspondent to decide whether it is worth his while to enforce payment. In one respect our correspondent is entitled to consideration. We find by the last census that the population of the parish, of which he is joint medical officer, amounted to 5,927; and the total sum paid for medical relief, out of which medicines have to be found for the year 1873-74, reached the munificent sum of £45 13s.—verily a great deal of work for very little money.

DR. BILLING (Hailsham) asks the following questions. 1. Has any other medical man the right to enter my workhouse and examine my patients without my consent, or in consultation with me? 2. Have the magistrates the legal power to order the master of the workhouse to send for any other medical man?

* * * In order to answer our correspondent's two questions, it is necessary to reply to the second one first. In the case of a presumed lunatic pauper, the magistrates, whether stipendiary or merely justices of the peace, have the legal power of selecting the medical gentleman, who shall (on intimation given to them through the relieving officer by the workhouse or district medical officer) visit and certify as to the mental condition of such pauper; and, firstly, such medical gentleman has a right to enter such workhouse and examine the patient without the consent of the medical officer—indeed, under such circumstances the medical officer is

ignored altogether. But whilst there is no doubt that the magistrates have this power, it is generally arranged that as the medical officer has all the trouble of the case, that the duty should devolve on him of not only giving intimation, but of attending before the justices and getting the fee. We will advise the medical officer to address a temperate letter to the Board of Guardians stating his case; and as there will be no addition to the expense, it is not improbable that such an arrangement may be come to as will admit of the workhouse medical officer certifying in all cases that may come under his charge.

BIRTHS AND DEATHS REGISTRATION ACT.

MEDICAL OFFICER.—Section 28 of the Births and Deaths Registration Act (1874), provides that "every registrar, when and as required by a sanitary authority as defined by the Public Health Act (1872), shall transmit by post or otherwise a return, certified under the hand of such registrar to be a true return, of such of the particulars registered by him concerning any death as may be specified in the requisition of the sanitary authority". The section also provides that the registrar "shall be entitled to a fee of twopenny for every death entered in such return, which fee shall be paid by the authority requiring the return". The Act makes no provision for the furnishing of returns of births, or for payment for the same. Any returns of births, therefore, required by a medical officer of health must be obtained by mutual arrangement between the sanitary authority and the local registrar. Should such an arrangement be objected to either by the sanitary authority or the auditor, we can see at once why a medical officer should not pay for the returns of the births himself, if he deem the returns to be useful to him, and he be willing so to do.

PAROCHIAL CHARGES.

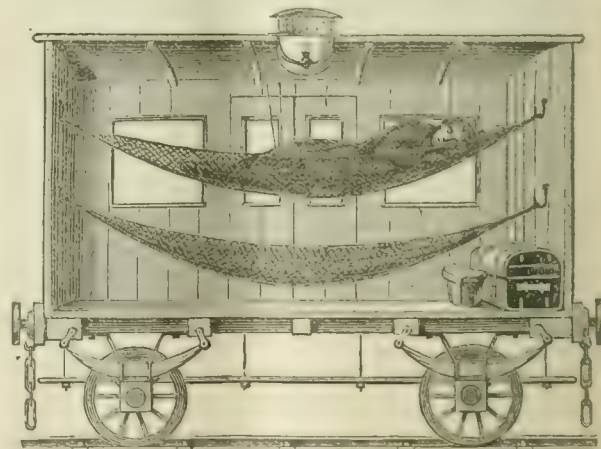
We consider that the assistant overseer in the Tendring Union acted in strict accordance with his duty, in giving an order for attendance on a parturient woman, under the circumstances detailed in the paper sent us; and, consequently, he having discharged his duty properly, and representing the guardians, the union should have paid the fee to the medical officer. We should murmur, and they ought now so to do, that gentleman having been supported by the opinion of the county court judge. Should, by any mishap, the auditor in such case disallow such payment, the Local Government Board would remit the same. We would recommend Mr. Squire to again apply to the Board of Guardians for payment, and, should they refuse, as is most probable, to entertain the application, to submit the facts of the case for the consideration of the Local Government Board.

REPORTS AND ANALYSES

AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

TOURISTS' HAMMOCKS.

At this time of the year, when tourists are on the move, it may not be out of place to illustrate the method introduced by Mr. Richard Davy for slinging Seydel's hammocks in vans. The upper hammock slung



in the railway-van is for young and active persons, as an educated agility is necessary for entering one of these hammocks suspended four feet from the ground. The elastic cord on each side of the upper hammock moderates lateral swing when the carriage is running fast. The lower hammock is for the aged and infirm. This mode of travelling continues to give great satisfaction to invalids; and we recommend any tourist to provide himself with one of these portable accessories.

It is intended in future to publish the number of vacancies in the Army Medical Department to be competed for at each examination.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, August 12th, 1875.

Price, Arthur, Surrey Villas, Thornton Heath, Croydon
Stephens, Charles, Upper Parliament Street, Liverpool

The following gentlemen also on the same day passed their primary professional examination.

Bain, David Stuart Erskine, Charing Cross Hospital
Todd, John, University College

UNIVERSITY OF EDINBURGH.—The ceremony of capping took place on August 1st. Professor Balfour, Dean of the Faculty of Medicine, introduced to the Chancellor the following candidates for degrees.

Doctors of Medicine.—* indicates that the candidates received gold medals for their dissertations, and * that the dissertations were commended. [John R. Black, Scotland, M.B. and C.M., 1872; Thomas Watson Buchanan, England, M.B. and C.M., 1872; Kenneth Mackenzie Downie, Scotland, M.B. and C.M., 1872; David Richard Edwards, Wales, M.B. and C.M., 1871; Richard Edward England, England, M.B. and C.M., 1871; Edward Fint, England, M.B. and C.M., 1871; John Brodie Henderson, Scotland, M.B. and C.M., 1871; *Francis Imlich, England, M.B., 1872; Samuel M'Alay Inkster, Shetland, M.B. and C.M., 1873; Thomas Scoresby Jackson, England, M.B. and C.M., 1870; Henry Ambrose Lediard, England, M.B., 1870; *William Livesey, England, M.B. and C.M., 1871; *Herbert Collington Major, Jersey, M.B. and C.M., 1871; Frederick Percott Fisher Ramsom, England, M.B. and C.M., 1873; *William Stirling, Scotland, Baxter School in Natural Science, 1870, Falconer Fellow of 1871, M.B. and C.M. with first-class honours, and D.S.S. and Ettles Prizeeman, 1872; John Larny Walker, England, M.B. and C.M., 1873; *James Mann Williamson, England, M.B. and C.M., 1872.

Bachelors of Medicine and Masters in Surgery.—* indicates that the candidate has passed the examinations with first-class honours; * indicates that the candidate has passed the examination with second-class honours. [Alexander Alexander, Scotland; Ernest Aubin, Jersey; Edmund St. George Baldwin, Canada; John Barlow, England; Alfred George Barrs, England; John Jas. Graham Brown, Scotland; Samuel Brown, Scotland; Thos. Sinclair Browne, Barbadoes; *William Watson Cheyne, Scotland; Edwin Millidge Chisholm, Scotland; Joseph Waterfield Chown, England; Thomas M' Rae Clark, Demerara; John Henry Clarke, England; Joseph Montagu Cotterill, England; James Crabb (M.A. Aberdeen), Scotland; Frederic Hamilton Crowdy, Newfoundland; Charles James Davey, England; William Thomas Evans, England; John Ferens-Oliver, England; William Garton, England; Walter Gillies, England; Charles Glasier, England; Manuel Martinho Gonsalves, Demerara; John Rogerson Hamilton, Scotland; James Milner Helme, England; R. Brown Hogg, Scotland; James Holmes, Berwick; David Morton Jack, Scotland; Bertram Janisch, St. Helena; John Frederick Johnson, Ireland; John James Johnstone, Scotland; Abraham Emrys Jones, Wales; *Edward Owen Jones, Wales; *George Kirkwood, Scotland; Henry William Laing, Scotland; William Lamb, India; Charles Smith Lunan, Scotland; *Neil Macleod, England; Norman M'Leish (M.A. Edin.), Scotland; John Marchbank, Scotland; Alexander Dalton Murray, Scotland; Frank Nankivell, England; Henry Robert Oswald, India; Archibald William Renny, Peru; Richard Isaac Richardson, Scotland; Charles Smart Roy, Scotland; Charles Snodgrass Ryan, Australia; Charles Edward Sanderson, India; John Sherburn, England; Magnus Retzius Simpson, Scotland; George Daniel Smith, England; John Smith, England; Otto Wien Smith, Scotland; Thomas Fair Heithington Spence (M.A. Edin.) Scotland; George Skelton Stephenson, England; William Stewart, Scotland; Herbert Stanley Stone (B.A. New Brunswick), New Brunswick; Mark Johnston Symons Scotland; Alfred Crooks in Tunstall, England; *Adam Robert Turnbull, Scotland; George Richardson Underwood, Scotland; Arthur John Vause, England; William John Vereker-Bindon, Cape of Good Hope; *Arnold Hirst Watkins, England; Alfred Hardy Watson, England; Thomas Henry Watson, England; George Thomas Brown Watters, Scotland; Richard Wearing, England; James Hamilton Wilson, England.

Bachelors of Medicine. James Aitchison, England; Ernest Gilbert Carey, India; William Carey, India; Joshua John Cox, Ireland; George Crichton (M.A. St. Andrews), Scotland; James Crompton Kames, England; Thomas Fraser, Scotland; John George Garson, Orkney; Thomas Harker, England; George Herbert Jameson, England; James M'Naught, England; James Rutherford Morrison, England; Walter Cameron Morris, Barbadoes; Thos. Duddington Wilson (M.A. Edin.), Scotland.

The Ettles Prize for 1875, to the best graduate of the year, who has gone through all the examinations with the highest honours, was awarded to Adam Robert Turnbull, M.B., C.M., M.D. The Goodsir Memorial Prize, established in memory of the services to science in the University of the late Professor Goodsir, to be awarded triennially to the writer of the best essay on some branch of anatomy, human or comparative, normal or pathological, or for an essay on experimental physiology, was awarded this year for the first time, the successful competitor being Dr. James Foulis, and his thesis being "The Structural Development of the Ovary, and the Pathological Changes which take place in it." The Hope Chemistry Prize of £100 was awarded to Agornath Chattopadhyay, B.S., of Bengal.

MEDICAL VACANCIES.

The following vacancies are announced:—

APPLECROSS, Parish of—Medical Officer. Salary, £154 per annum, with house. Applications on or before the 24th instant.
BOURNEMOUTH GENERAL DISPENSARY—Resident Medical Officer and Secretary. Salary, £120 per annum, with furnished apartments, coals, gas, and attendance.

CARNARVON UNION—Medical Officer for the Llandwrog District. Salary, £60 per annum.

DAVENTRY UNION—Medical Officer for the Workhouse and the First District.

DORE UNION—Medical Officer for the Kitchurch District and the Workhouse.

DUDLEY DISPENSARY—Resident Medical Officer at Michaelmas.

EASTRY UNION—Medical Officer for the Eythorne District.

HAY UNION—Medical Officer for the Herefordshire District.

INVERNESS DISTRICT ASYLUM—Assistant Medical Officer. Salary, £70 per annum, with bed, board, and washing. Applications on or before the 11th instant.

KEYNSHAM UNION—Medical Officer for the Keynsham District.

LEEK UNION—Medical Officer for the Norton District.

LOUGHBOROUGH DISPENSARY and INFIRMARY—Resident House-Surgeon. Salary, 100 guineas per annum, with furnished rooms, fire, lighting, and attendance. Applications on or before the 24th instant.

LYMINGTON UNION—Medical Officer for the Hordle, Lymington, and Milford Parishes.

NORWICH DISPENSARY—Salary, £120 per annum, with unfurnished residence and apartments.

PEMBROKE UNION—Medical Officer for the First District.

PLOMESGATE UNION—Medical Officer for the Aldburgh District.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road—House-Physician. An allowance of £100 per annum is made in lieu of board and residence. Applications on or before the 21st instant.

ROYAL SOUTH HANTS INFIRMARY—House-Surgeon. Salary, £80 per annum, with board, lodging, and washing. Applications on or before September 6th.

ROYSTON UNION—Medical Officer for No. 5 District. Applications on or before September 6th.

STAINES UNION—Medical Officer for the Shepperton District.

UCKFIELD UNION—Medical Officer for the Maresfield District.

WARWICK COUNTY LUNATIC ASYLUM—Second Assistant Medical Officer. Salary, £200 per annum, with board, lodging, and washing.

WESTMINSTER GENERAL DISPENSARY—Honorary Surgeon. Applications on or before the 23rd instant.

WEST SUSSEX, EAST HANTS, and CHICHESTER GENERAL INFIRMARY and DISPENSARY—Assistant House-Surgeon. Salary, £20 per annum, with board, lodging, and washing. Applications on or before the 28th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

DUKE, David, M.R.C.S. Eng., appointed Surgeon to the Royal South London Dispensary, *vice* J. J. C. Constable, M.D., resigned.

DUNCANSON, J. J. Kirk, M.D., appointed Surgeon to the Dispensary for Diseases of the Ear, Edinburgh.

GODLEE, Rickman J., M.B., appointed Demonstrator of Anatomy at the Charing Cross Hospital Medical School.

JOLLY, Robert, M.D., appointed Joint Professor of Anatomy at Queen's College, Birmingham.

MURRAY, William, M.B., appointed Medical Officer to the Pembroke Dispensary and Infirmary, *vice* D. A. Reid, M.D., resigned.

WILLIAMS, Neville, B.A., M.R.C.S. Eng., appointed House Surgeon to the Carnarvonshire and Anglesea Infirmary, *vice* R. Davies, Esq., deceased.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTHS.

THORNHILL.—At Bulman Village, Newcastle-on-Tyne, on August 15th, the wife of John Thornhill, Esq., Surgeon, of a daughter.

WARD.—On August 15th, at Saltburn, Twickenham Common, the wife of Martinale Ward, M.D., of a daughter.

CAMPBELL.—On August 13th, at 16, Wellesley Terrace, Liverpool, the wife of W. Macfie Campbell, M.D., of a daughter.

MARRIAGE.

PRINGLE—SMITH.—On August 17th, at Nolton Chapel-of-Ease, Bridgend, by the Rev. F. W. Edmondson, M.A., Rector of the Parish, Henry Turnbull Pringle, M.D., Medical Superintendent of the Glamorgan County Asylum, to Jessie Isabella, only daughter of the late Thomas George Smith of Bridgend, Glamorganshire.

DEATHS.

***WARD, John, Esq.**, Surgeon, at Penistone, aged 60, on August 10th.—Friends are requested to accept this intimation.

FINNEY, Charles White, L.S.A., at Ockbrook, aged 61, on August 8th.

INGLIS.—On August 11th, at Worcester, Florence, wife of Alexander Inglis, M.D.

DR. THOMAS CHAMBERS, Senior Physician to the Chelsea Hospital for Women, was on August 3rd elected a Fellow of the Royal College of Physicians of Edinburgh.

BEQUESTS.—By the will of the late Mr. James Douglas Stoddart Douglas of Chilton Park, Kent, the West Kent Hospital and the Ophthalmic Hospital at Maidstone each receives a legacy of £200.—Mr. John Hodgkin of Lewes has left to the Lewes Infirmary £50, and to the Hospital for Sick Children, Great Ormond Street, and the Convalescent Branch £25 each.

The Kent County Ophthalmic Hospital, Maidstone, has been presented with ten framed engravings by Messrs. Henry Graves and Co. of Pall Mall, and Mr. Thomas Hyde Hills of Oxford Street: seven of the engravings are from pictures by the late Sir Edwin Landseer.

OPERATION DAYS AT THE HOSPITALS.

MONDAY Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

TUESDAY Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY .. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.

THURSDAY St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.

FRIDAY..... Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.

SATURDAY St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

FRIDAY.—Quekett Microscopical Club (University College), 8 P.M. Mr. W. Cole, "Remarks on a Parasite of the Humble Bee (*Sphaerularia bombi*)".

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor: those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

ERRATA.—In the article on "The Royal Hospital, Plymouth", at page 206 of last week's JOURNAL, the first sentence on column 2 should be as follows: "The average height of the windows from the floor is not more than four feet; ten out of a total of thirty-four being only three feet nine inches above the level of the ward-floors." In the same column, lines 9 and 11, for "ward" read "wall".

THE ADMISSION OF LADY MEMBERS TO THE ASSOCIATION.

SIR.—I am anxious to direct the attention of members of the Association to one or two points which deserve their careful consideration. Firstly, the great majority of the members of the Metropolitan Counties Branch were ignorant that females had been admitted as members of the Branch until the fact was revealed at the general meeting on Tuesday last. Secondly, the rules under which the entrance was effected were framed originally at a period when such a candidature can hardly have appeared a probable contingency. Thirdly, as this Association is the only really representative body of medical practitioners in the kingdom, the admission of females into it constitutes a recognition of their status by the profession at large.—Yours very truly,
J. A. GOODCHILD.
Ealing, August 9th, 1875.

THE LATE DR. A. D. KERR.

SIR.—In your impression of to-day, referring to the death of Dr. A. D. Kerr, at Millport, you say that Dr. Kerr had been in practice for some years in Greenock. He was only in practice in Greenock for one month.—I am, sir, yours faithfully,
JOHN S. WILSON, M.R.C.S.Eng.
Greenock, August 14th, 1875.

A MEMBER OF THE VETERINARY COLLEGE.—For a long time it was supposed that the skeleton of the famous racehorse Eclipse was in the Museum of the College of Surgeons. This turns out to be a fallacy, and the supposed Eclipse has given place to Orlando, who was born in May 1841, and died in December 1868, when he was presented to the College by Her Majesty the Queen.

CAPSICUM IN DELIRIUM TREMENS.

SIR.—Will some one of your correspondents kindly inform me the proper doses and mode of using the capsicum treatment in cases of habitual drunkenness?—Yours truly,
G. PERCIVAL HADLEY, M.D.

A DEMONSTRATOR.—The examinations for the present session have been brought to a close at the College of Surgeons. The Registration always takes place in October.

VEGETABLE DECOMPOSITION.

SIR.—I would feel most gratefully obliged if any of your numerous readers would kindly inform me, through your columns, of the names of the authors or works who have treated of the effects of vegetable decomposition upon health in a formal manner, as I am greatly interested in discovering such immediately.—Your obedient servant,
MEDICUS.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

CURIOUS ACTION OF GLYCERINE LIQ. BORAX.

SIR.—I had occasion to make an astringent lotion for a case of acne a short time ago which consisted of borax, bicarbonate of soda, chlorate of potash, glycerine, and water. After the ingredients were put in, and the bottle filled with water, I added half an ounce of glycerine, and corked the bottle. To my surprise, in a few seconds violent action began to take place, and I was obliged to remove the cork, for fear of an explosion. I could not understand what had taken place, and could only think that there was some acidity in the glycerine; but such was not the case; it was perfectly neutral to test-paper; and the other chemicals, I believe, were perfectly pure.

I then repeated the experiment in the following way, and a very interesting one it was, perfectly inexplicable to me, and of which I can gather no information from any work. I put into a test-tube about equal parts of powdered borax and bicarbonate of soda, with a little water; I then added some glycerine, which, of course, sunk through the solution of soda, and rested over the borax; chemical action immediately began, the glycerine gradually became dissipated, and the borax was dissolved. I have repeated the experiment several times, and have obtained the same result with the carbonate, although not to the same amount. The change is evidently at the expense of the glycerine; for, if only a few drops be added, the action soon stops, to be renewed with great intensity if a large quantity be then added.

I am not sufficient chemist to unravel the decomposition, and I thought by bringing it under your JOURNAL I might obtain the true explanation of the phenomenon.—I am, etc.,
FREDERICK LONG, L.R.C.P.Lond.
Wells-next-the-Sea, August 13th, 1875.

ERRATUM.—In the list of Fellows of the Royal College of Physicians of London, at p. 217 of last week's JOURNAL, the name "Burder, Charles Foster", should be "Burder, George Foster".

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Bristol Daily Post; The Daily Bristol Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Glasgow Herald; The Sunderland Daily Echo; The Carnarvon and Denbigh Herald; The Manchester Guardian; The European Review; The Hackney and Kingsland Gazette; The Worcestershire Chronicle; The Birmingham Daily Post; The Brighton Daily News; The Sussex Daily News; The Glasgow Herald; The Cork Examiner; The Scotsman; The Cork Daily Herald; The Southampton Times and Hampshire Express; The Hampshire Advertiser; The Birmingham Morning News; The Chester Courant; The Metropolitan; The Live-Stock Journal; The Shield; The Grocer; The Shipping and Mercantile Gazette; The Advertiser; The Islington Gazette; The Penrith Observer; The Hastings and St. Leonard's Gazette; The Ilkley Free Press; The Leicester Daily Post; etc.

COMMUNICATIONS, LETTERS, ETC., HAVE BEEN RECEIVED FROM:—

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BOOKS, ETC., RECEIVED.

Physiological and Therapeutic Tables. By A. Henry, M.D. London: R. Hardwicke, 1875.
On Concussion of the Spine, Nervous Shock, and other obscure Injuries of the Nervous System, in their Clinical and Medico-legal Aspects. By J. E. Erichsen. London: Longmans and Co. 1875.

REMARKS

ON

THE NECESSITY OF LEGISLATION FOR
THE CONTROL AND TREATMENT
OF INSANE DRINKERS.*

By A. PEDDIE, M.D., F.R.C.P.E., F.R.S.E., etc., Edinburgh.

IN addressing this Association on the necessity of legislation for the control and treatment of insane drinkers, I would commence by observing that this is no new question in Scotland. Before January 1858, when I contributed a paper on it to the Medico-Chirurgical Society of this city, it had been forced on the attention of many medical men and others by constantly recurring difficulties in the disposal of these unfortunate sufferers; and it had special prominence in evidence given in 1855 before the Scottish Lunacy Commission, and in the report of the Commissioners in 1857. At the meeting referred to, the question was most favourably discussed; and, when the paper was published, the subject was well ventilated, and viewed as a most important one, in almost all the newspapers and journals of the period. This agitation was followed, in March of the same year, by a most admirable lecture "On the Medico-Legal Relations of the Habit of Intemperance", delivered at a *conversazione* of the Royal College of Surgeons by our distinguished President Sir Robert Christison; and it was kept alive for several years by various able contributions in medical and literary journals. There thus arose in the public mind a feeling, and I think I may say an unanimous desire amongst medical men, that something ought to be done by legislation to meet the question at issue. On this side of the Border, therefore, we have noticed with best wishes the efforts carried forward on the other side during several years, mainly through the instrumentality and indefatigable exertions of the late Mr. Donald Dalrymple, M.P. And here I cannot allow the occasion to pass without expressing in a single sentence, from much private correspondence with Mr. Dalrymple, as well as from a knowledge of his public career and conduct, the high estimate I formed of his moral worth, intellectual endowments, and remarkable determination and strength of purpose, without regard to personal expense and labour, which he displayed in the face of many trying discouragements while seeking the settlement of this question.

Mr. Dalrymple's second Bill, founded on a large mass of evidence laid before the Select Committee of the House of Commons in 1872, and on the strong report of that committee, of which you, Mr. Chairman, were a member, lost its place in Parliament, in consequence of the change of ministry; and Mr. Dalrymple's death, which shortly afterwards occurred, seemed to threaten a serious delay of effort in the same direction. The subject, however, has lately been revived and warmly agitated by several of your Branch Associations, and by a most influential deputation who lately waited on the Home Secretary, with a view to the introduction of a measure in next session of Parliament on the basis of Mr. Dalrymple's Bill; and this, I trust, together with the earnest consideration of the subject at this meeting of the Association, will give a great impulse to the movement.

I cannot believe that a settlement of the question can now be long delayed, when an Association so large and powerful as the British Medical takes it up, and gives on it a decided utterance.

That some legislative enactment is required to meet the case of a large proportion of insane drinkers, psychologically termed dipsomaniacs or inomaniacs—or, popularly, habitual drunkards—will be doubted, I imagine, by few, if any, assembled on this occasion. And I may further assume that little need be here said in considering who are to be viewed as insane drinkers. They may be briefly described as those—1. Who inherit the propensity to intemperance; 2. Who evince it as the principal manifestation of some form of cerebral disease; 3. Who are affected with it as a result of an injury of the head, or severe fevers, or other wasting bodily ailment, mental shock, heavy grief, reverse of fortune, and, indeed, from causes similar to those antecedent

some other insanities; 4. Those who acquire it through a course of vicious indulgence in stimulants.

In whichever way produced, or from whatever combination of causes, the distinguishing feature of this malady in its confirmed state is total loss of self-respect and self-control under an overwhelming craving for alcoholic drinks, although with little or no palatal relish for the same, which must be gratified at any cost, regardless of honour or truth, and, in fact, unaffected by appeals to reason or self-interest, the tears of affection, or suggestions of duty either to God or man.

I must also assume that it is not necessary at this meeting to point out particularly in what respects dipsomania differs from the *mania à potu*, or, as also called, the delirium ebriosum, or acute mania from alcoholic excess; or how it is distinguished from delirium tremens, the toxic mania of alcoholic accumulation, or from the hydra-headed forms of the vice of drunkenness. Of the latter, we have abundant examples everywhere around us, in which we have the most marked types of constant tipping without entire unfitness for the business of life in persons drinking from facility of disposition, from conviviality, and from the love of drink or the love of intoxication, but who have more or less power to abstain when they choose to do so.

That the phase of intemperance which so utterly annihilates self-respect and the power of self-regulation is indicative of affection of the brain-plasm primarily or from exoteric influence through alcoholic action—in other words, an abnormal cerebral condition, occasioning unsoundness of mind—cannot be reasonably questioned; and, as in origin it thus resembles other insanities, it presents also similarities and variety in its course, manifestations, and terminations. Thus, in this malady, the irresistible craving may spring up suddenly, often in successive attacks of singular periodicity, or from the mere taste of anything alcoholic quickly bringing the system under the full sway of alcoholic poisoning; or it may pass through a slow, stealthy, insidious course ere the action, if not the nutrition, of cerebral matter becomes changed.

It is developed in all classes and conditions of society; in the men of refinement and high mental culture as well as in the coarse-minded and ignorant; in the lady of rank and in the tradesman's wife; in all periods of life, in old age, in the adult, and even in early youth; in different constitutions and temperaments, manifesting various eccentricities of deportment and habits, wastefulness, destructiveness, perverted moral feelings and impulses, revenge, theft, violence, and invariably mendacity. It is occasionally cut short for a time by delirium tremens or acute mania, or goes on to drivelling dementia, chronic alcoholism, or some other form of insanity, if life be not brought to a close by accident or some superinduced disease.

Besides, while this alcoholic diathesis, as it may be called, is transmitted from generation to generation, idiocy, epilepsy, paralysis, and other forms of cerebro-spinal disease, are the frequent legacy of drunken parents to their children.

It is a remarkable fact, too, that, if there be any peculiar proclivity, any black spot in a man's moral nature, it is brought out under the weakening and perverting influence of alcohol. Hence, among the criminal class of dipsomaniacs, we have a variety of results, and often a most remarkable uniformity in crime committed by the same individual under successive states of inebriety. Thus one individual will invariably be guilty of assault, another of wanton destructiveness, such as smashing windows, another of theft, and not only so, but of stealing very frequently the same sort of articles. Did the limit allowed for this paper permit, it would be easy for me to treat of in greater detail, and to illustrate and verify with cases, the various points now indicated.

The mass of cases arising out of intemperance—purely the vice—carry with them their own pains, penalties, and checks, and must be judged of by the peculiarities of each individual case, and left to varied physical, moral, and religious teachings. But there is a link which connects, and a boundary-line which separates intemperance the disease from intemperance the vice. Here it is that legislative interference of any kind becomes, and very properly so, most delicate; and it is here that at first sight most formidable obstacles are supposed to exist against our present proposal. For the very worst cases of dipsomania, in which there is a manifest concrete of the malady, of irresistible desire for stimulants, with some other form of mental disease independent of alcoholism, the present law of lunacy clearly provides. The acute mania of drink is also, we would say, a fit disease for asylum treatment, if there be not convenience in private or in the strong room of a hospital; to which cases of delirium tremens also may be taken, when safe and judicious management cannot be carried out in private. But cases of well marked dipsomania, which are so serious to the unfortunate individuals themselves, and so perplexing and injurious to friends and society, are without help or hope, either in private or from the law of the land; there is nothing in the future but certain degradation

* Read before the Public Medicine Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875. [For discussion, see p. 267.]

and ruin to the individuals themselves, often to those closely connected with them, and injury to the community.

No doubt, the voluntary clause of the last Lunacy Amendment Act, 1866, was thought likely to meet, to some extent, the case of the dipsomaniac; but, while there has been latterly a gradual annual increase of voluntary admissions of the general insane, there has not been such of insane drinkers; and there are strong objections to the admission of such into lunatic asylums. It is not at all desirable that such should mingle with other lunatics in public or private asylums, or that a malady requiring special treatment should be brought under lunacy law arrangements. It is most undesirable also that asylums should be embarrassed and annoyed by the care of dipsomaniacs; for it is a necessity that an inebriate retreat should be a strictly temperance institution, which a general asylum cannot be, and consequently in such insane drinkers find opportunities, through other inmates, to obtain the supplies they crave; and so, by schemings and untruthfulness, produce endless misery and inconvenience in these establishments. That the habitual drunkard of this class, therefore, absolutely requires special care, is clear; but, as in cases of legislation a definition must generally precede the proposed legislative provisions, he may be briefly defined as a person of unsound mind whom the habit of intemperance is such to render, notwithstanding the plainest considerations of interest and duty, unable to control himself, and incapable of managing his own affairs, or such as to render him in any way dangerous to himself or others.

If the above be a true description of the condition of the person indicated, surely it is the manifest duty of a good and wise Government to exercise its paternal functions in providing for the control of his person and the interim management of his affairs, with the view of promoting the well-being of the unfortunate individual, instead of permitting him to go to wreck and ruin. Indeed, the neglect of law to provide such a check and remedy seems inconsistent and unjust, when we consider that, while it permits the insensate drunkard to endanger his life, to waste his property, and deprive his family of that which they are entitled to expect from his hands during life, or to fall to them at his death, it holds him responsible for any act he may commit. No doubt the law assumes that he drinks voluntarily with his eyes open to the consequences, and that his practices are, therefore, an aggravation of his guilt; but such is not the case; for he drinks, as has been shown, involuntarily by a power from within impelling him forwards with irresistible force, without any power of reflection as to ultimate consequences.

From the nature of the malady, it is evident that, unless there be separation from the persons through whom, and places where, the morbid craving can be gratified, and well regulated restraint placed on the habits, little can be expected in the way of treatment. Such separation is necessary in most cases of insanity; but still more is it required in the case of insane drinkers, who, although unfit for attention to the proper duties of life, are full of devices (often most ingenious and clever) to obtain their desire (with them the one object of their life); and so cunning and deceitful are they in scheming for it, that they outwit the most vigilant attendants (women being in this respect even more talented than men); so that at best any good arising from ordinary restraint is extremely temporary. In certain early cases, and in short fits of periodical drinking, it may be at long intervals of time, perhaps it might be advantageous were it declared lawful to take the control of the person in his own dwelling. But in general real benefit can only be obtained from a sufficiently prolonged detention in a home or sanatorium, or by whatever name it may be called, where all arrangements are adapted, not merely for firm and kindly supervision, but for overcoming restlessness and discontent. This will be best accomplished, in the first instance, by pleasing the palate in the way of good culinary arrangements, so as to counteract the craving for stimulants; by attention to other bodily comforts, and by providing occupations and amusements during all weathers and seasons within doors and in the open air. In due time, by these means and a judicious exercise of the system of trials of freedom on probation, and every other possible agency, physical, mental, moral, and spiritual, an endeavour would be made to restore to a healthy condition the disordered brain and shattered nervous system; to create new desires and nobler aims; to inspire self-esteem, and develop and strengthen the power of self-control, so as to fit for a return to society and the duties of life.

In order to call into existence houses or institutions such as would be suitable for the upper and middle classes of society, a law to empower restraint and detention is manifestly essential. A few such institutions on a small scale have existed in Scotland, but have laboured under most discouraging difficulties from want of authority to receive and retain a sufficient number of inmates, and for a sufficient length of time, to become remunerative. This has stood in the way of liberal

investment for suitable premises, ground furnishings, staff of service, etc. Thus the important essentials for efficient treatment have been necessarily defective; and the result is, that the care of a very small fraction only of insane drinkers has been undertaken, and cure somewhat rare. The inmates with partially restored sanity from enforced deprivation of stimulants become restless; and, knowing that they cannot be detained, legally demand liberty, and take leave, or else work on the minds of friends or guardians by entreaties or threats, and get it. If, however, the state will sanction, under proper checks, both voluntary admissions and compulsory commitments in cases of genuine dipsomania, permitting prolonged detentions until real benefit is derived, a sufficient number of homes or retreats, or by whatever name they may be called, for the cure of persons in the upper and middle classes, would certainly spring up, both through private enterprise and the efforts of companies or associations formed for the purpose, somewhat similar, indeed, to many existing and thriving lunatic retreats and asylums, affording accommodation and means of treatment very different in efficiency from those inebriate institutions which have in times past struggled under cramping difficulties. Now, into such houses as these, many unfortunate persons would enter voluntarily, as they do in some of the American inebriate institutions, knowing that, if they did not thus surrender themselves for treatment, they would be compulsorily committed; and then, when they are under control, the law, as I have already hinted, could prolong it for such time as might be deemed necessary to accomplish the humane ends in view.

There are two other grades of society, however, for which some provision would be necessary for control and reformation, namely, the working classes, with a certain portion of the poor, who, or their friends, were unable to pay much, if anything, for board; and for criminal drunkards. The former would be boarded—classified, of course—in Sanatoria; and the latter in Reformatories, classified too.

In regard to the Sanatoria, I do not think it would be asking too much of a wise Government to assist in establishing tentatively three or four such in central districts of the country, by grants of a few thousand pounds to each. I believe that these institutions would be additionally supported, and, perhaps, in time become self-supporting, through payments made for board paid by the better portion of the working classes or their friends; by work done in the institution; by legacies and donations; and, perhaps, by sums paid from parochial boards for the care of pauper inebriates. Knowing the downward course of habitual drunkards in this class of society, and how families are dragged into squalid poverty, and demoralised; and how neighbourhoods and the general interests of society suffer through crime and local taxation, it would, I am confident, be a good investment of Government and parish money, yielding indirectly, if not directly, a tenfold return.

The same may be said, also, as to reformatories, into which criminal drunkards only should, I think, be sent—those who have sunk to the lowest depths in the social scale, and are dangerous to society. Many of them are truly dangerous characters, and almost constantly resident in police cells and prisons for crimes committed under the influence of drink or to obtain drink. Of course, the upholding of such institutions, removed from ordinary prisons, must fall on prison boards and local taxation; but here, too, as might be expected, a return could be obtained in moral and social good and pecuniary compensation. Direct commitments to such reformatories by the magistracy might in many cases be most advantageously made without passing the individual through a prison; while in other cases he would be transferred thither from a prison by a warrant, for which the desired legislation would provide. Here, the punitive element could not be altogether separated from the reformatory; but other important agencies could thus be brought successfully to bear on this wretched class of persons. To this end, no better counteractive to idleness and drinking habits could be employed, nothing better fitted to generate self-esteem and strengthen in them the power of self-control, than the cultivation of industrial habits, especially with the stimulus of obtaining some immediate as well as ultimate benefit for good conduct and for work done. However, for the full elucidation of these plans, I beg to refer you to a paper of "Suggestions for Legislation (in Scotland) for Habitual Drunkards", handed by me to the Select Committee of the House of Commons in 1872, as explanatory of evidence given before them, and by whom it has been published in the appendix of their report. This document also points out how the management of persons' affairs could be attended to while in retirement from the active duties of life.

In the foregoing remarks, I have viewed this question chiefly from the platform of the physician; but I have claimed for it, also, that of the lawyer, the political economist, and the moralist; but I would consider it also from the standpoint of religion. The views taken of it hitherto, in some quarters, have apparently been through the dark atmosphere of sin: looking at the habitual drunkard as culpable for not

governing his will and restraining his passions by the precepts of the Gospel; and looking on its agitators, perhaps, as actuated by materialistic leanings, and losing sight of moral influences and the discipline of the church, which last, however, cuts the inebriate off from its pale, and too often casts him adrift to his fate. If these conjectures are so, surely this must be attributable to want of discrimination respecting the true position of dipsomaniacs, contrasted with other drunkards, on whose conduct in their state of liberty, or, rather, license, religious precept, or the example of the wise and good, cannot have the slightest influence. It has been said, without any exaggeration, that were immediate eternal punishment and a glass of intoxicating liquor put in a dipsomaniac's choice, he could not resist choosing the latter. As, therefore, spiritual benefits usually flow and operate through human agencies and instrumentalities, we believe that facility for legal control will be the likeliest medium for the transmission of a precious changing influence. Only by enforced abstinence from the accursed thing, as well as by other means, already detailed, brought to bear for months, or, perhaps, even years, on the unhappy subject of this propensity, can we hope to see him return to society, as it were, "clothed and in right mind".

But some others of the general public who look down on a wretched habitual drunkard with mixed feelings of pity and disgust, on account of the shame and disgrace of his position, may speak of his fate in terms like these, "Poor fellow, he killed himself with drink!" or of another, with a shrug of the shoulders, "He is fast going to the bad through drinking habits". They will then say doubtfully, in regard to the question of legislation, "Do you ever cure a dipsomaniac? From evidence given (Mr. Mould's) before the Select Committee of the House of Commons, it appears that cases of perfect cure are certainly rare compared with the number of persons said to have been treated; but it must be kept in mind that we have as yet no law enabling us to bring a person early enough, and keep him long enough, under treatment. There has not hitherto been a chance of accomplishing more than mere temporary benefit among the few cases in which there has been any attempt at treatment. Let us, however, obtain sufficient but carefully guarded permissive powers, and I believe that the result would be very different. But here we are immediately met with another question: How can you carry out such powers to any extent? Can you ever hope to send any considerable portion of the habitual drunkards in the kingdom into inebriate institutions? In such a remark, there is an evident confounding of dipsomania with other forms of drunkenness. As distinguished in the foregoing remarks, the number must be very considerable; but what a blessing it would be to have even a few hundreds of the worst cases placed in several tentative institutions, safely controlled and treated, with the hope of a moderate percentage in reformation and cure; nay, while they are merely protected from themselves, protection will be afforded to their families and society; and if so for these, why need we despair of having a larger percentage of cures in cases of sufficiently decided, but of a more recent and promising, character, treated in institutions into which many may be induced to enter voluntarily to avoid being sent compulsorily? The number of reported cures, even in lunatic asylums and retreats in England, seem to be greater than our experience in Scotland; and the reported results in the American and Canadian inebriate institutions, fostered by State arrangements, are still more encouraging. I am convinced, indeed, that if a proper system of treatment, applicable to the different orders of society, were established, we might have as fair a percentage as is accomplished in acute and chronic cases relatively among the general insane, if not a higher one.

But here, objectors to the proposed legislation, as a last resource, betake themselves to the old argument: Is not this a free country; and has a man not a right to do with his own, or with himself, as he chooses, taking the consequences of his conduct? No; the State regards the suicide either as a criminal or as insane; and the dipsomaniac, as we have shown, having lost the power of his reason in governing his will, must therefore be regarded as under a mental malady, and treated as such. But, besides, it is not the rightful privilege of any man to waste the means of those dependent on him; perhaps to ruin, as well as disgrace, his family and friends, or place them in personal danger, or offend a neighbourhood, or invade the liberties and privileges of good citizenship. To quote from what I have said elsewhere: "The liberty of the subject is a precious trust, but the well-being of society is still more sacred. The absence of law to meet the case of the insane drinker is in reality a license for evil, since no precaution is taken to prevent most grievous infringements of the liberties of others. It certainly is an overstrained delicacy in legislation which shirks interference with a class of cases which lead to so much private misery and public expenditure, as the records of our courts of law and the church, and our prisons, poor-houses, and lunatic asylums, amply prove."

It seems to us, therefore, that it is the bounden duty of a wise Government to help those who cannot help themselves, and to protect those who are sufferers from such misery and mischief; and, as it legislates in other insanities, it is unquestionably within its province to legislate in this; and, moreover, since it legislates regarding restrictions in the use of intoxicants, it cannot be without its province to deal with the abuse of them. We trust that ere long our Government will, in these respects, take a leaf out of the statute-books of Sweden, of the United States, and of our own colonies in Canada, Australia, and New Zealand.

ON THE CONTROL AND RESTRAINT OF HABITUAL DRUNKARDS.*

By G. F. BODINGTON, M.D., Kingswinford.

I HAVE little doubt, from recent observation, that the balance of opinion amongst medical men in general is now largely in favour of legislative measures for the control and restraint of habitual drunkards. Several circumstances may be cited to prove this. Not many weeks since, a deputation went to the Home Secretary, to present to him a memorial strongly urging the Government to proceed to legislation on the subject in the next session of Parliament. This memorial bore the signatures of a number of the most eminent physicians and surgeons both in this and the southern metropolis, as well as in other parts of the kingdom. The prayer of this memorial was warmly advocated in Mr. Cross's presence by Sir Thomas Watson and others. The leading organs of the medical press are in favour of legislation, and the rank and file of the profession throughout the country hold, there is good reason to believe, the same view. I can vouch for this, at least, in Birmingham and the surrounding district. The Birmingham and Midland Counties Branch lately appointed a committee to promote legislation for the control and restraint of habitual drunkards; and the experience I gained as honorary secretary of this committee enables me to say, that in and around Birmingham the profession is nearly or quite unanimous in favour of restrictive measures. A petition to Parliament has been drawn up, and the Committee has, so far as I know, met with no refusals when canvassing for signatures. On the contrary, the members of the Branch are eager to sign. The same feeling, there can be little doubt, pervades the other Branches of the Association. Some of them, as is well known, are actively exerting themselves in the matter. In short, there is, as the phrase goes, a "movement" in the Association in favour of legislation on the subject in question. Outside the Association also there seems to be a very general opinion in the profession, so far as I can learn, that a remedy is requisite for this crying evil, which medical men only can fully appreciate, but which they are powerless to remove. From these circumstances, it is fair to conclude that the profession at large is, for practical purposes, of one mind upon this topic, and requires, I take it, no more convincing. If the passing of a Drunkards' Act depended on their vote, it would be passed forthwith. There is, therefore, not much need of further argument addressed to members of our own profession.

When, however, we discuss the matter with the general public, we find the aspect of the case, as seen from a lay point of view, changed; and it is signally changed as seen from the lawyers' point of view. Society, especially the legal section of it, says: "What, shut up men of sound mind who have committed no crime? You can't do it; it will interfere with the liberty of the subject." The lawyers tell us there is no precedent for such a step, that no such power is known to the law as the power sought to be obtained in this instance, and that to grant such a power would be a violation of fundamental constitutional principles. The only exception, they say, is found in the Lunacy laws, the exception which proves the rule: no man can have, or ought to have, his liberty curtailed, unless he be charged with crime or be mad, and the proposals that have been made in Mr. Dalrymple's Bill and elsewhere are most dangerous and unallowable innovations.

This is not a fanciful picture; the objection is current to my knowledge. You know, sir, that

"God sends country lawyers an' other wise fellers
To start the world's team wen it gits in a slough".

I am able to say, from personal communication as well as from second-hand information, that the objections now sketched out constitute, with the "country lawyers and other wise fellers", a very serious difficulty and obstacle, which the advocates of restraint must be ready to face and to combat. The answer to it is not hard, if the spectre of legal

* Read before the Public Medicine Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875. [For discussion, see p. 267.]

tradition can be laid. I would ask all, who object on such grounds as I have named, the question, Who are to be deprived of their liberties and privileges, are invaded the most, in the case in question, the liberties and privileges and rights of the wretched drunkard, or those of his miserable victims, his suffering and oppressed family? If the scales be held evenly, which way will the balance turn? The answer can hardly be doubtful.

I suppose it is the lot of every asylum proprietor to be asked frequently to receive men or women, heads of families, who, not being insane, are yet incapable of self-control or of managing their affairs, and who by their drunken habits bring disaster and ruin upon those whom they ought to support and protect. As you all know, such cases cannot be received into asylums. I have a vivid recollection of the utter disappointment and even despair that I have sometimes witnessed when friends or relations have learnt, to their astonishment, the impossibility of placing even the most desperate cases under control, and that no remedy exists against an evil that saps the foundations of the peace, prosperity, and indeed very existence, of families and homes.

It is not my object now to picture the enormity of this evil, with which this auditory is perfectly familiar—quite as familiar as, or, perhaps, more so than, myself. My present aim is to point out that we shall not procure legislation without much difficulty and opposition in Parliament, possibly also amongst the constituencies. We cannot afford to ignore this opposition, and we must be prepared with such a bulk and weight of evidence as will carry conviction not only to our own minds, but to the minds of opponents. That work has yet to be done. The public at large is not aware of the depth and extent of the evil. Could they fully realise, as we do, in all its horrors, the misery which habitual drunkards inflict on their families, a wave of indignation would rise, and they would save us all further trouble by insisting with one voice upon instant remedial measures.

Protection to the oppressed and the suffering is the principle to be invoked. Mr. Mill, in his work on *Liberty*, has the following passage: "As soon as any part of a person's conduct affects prejudicially the interests of others, society has jurisdiction over it, and the question whether the general welfare will, or will not, be promoted by interfering with it, becomes open to discussion." That passage, I think, may be taken as our text in the argumentative campaign that will have to be fought. It must be shown, as it can be shown, and not shown merely, but thrown into the most vivid relief, that "the general welfare" under the present want of system suffers seriously, nay vitally; and that the seclusion of a definite number of drunkards—if it be a hardship at all—is, at least, a fleabite in comparison with the tyrannies, the cruelties, and the oppression which those drunkards practise upon their families, and the wrongs they inflict on society at large.

If it be urged that it is unjust to deprive a person of liberty, to inflict upon him the severe punishment of prolonged imprisonment for no crime, for an offence which is at the worst a vice, and which, on the showing of the advocates of seclusion, is often a disease, the answer is that the law does already concede the principle involved, for it punishes with fine or temporary imprisonment temporary offenders; why, then, should it shrink from dealing with chronic offenders? If the law sees no wrong in immuring a man who is "drunk and disorderly" for one night, why should it hesitate to immure men who are "drunk and disorderly" all their time?

Further, it may be answered, that the interests of society imperiously demand that whatever inconvenience or unhappiness may fall upon the individual in this instance, it must be endured for the sake of the general good. It will be found, however, I fully believe, that, in the long run, a greater aggregate amount of happiness and comfort by far will be secured to the drunkard himself by shutting him up, than by leaving him to pursue without control his wretched career of debauchery, degradation, disease, and death. It is, in short, a mercy and charity to a confirmed drunkard to cut him off by any means whatever from the source of his supplies.

A point arises in connection with this subject which will have to be well remembered. There is much confusion in the public mind as to the terms used, and these will have to be clearly elucidated and defined. The following extracts from an article in the *Birmingham Daily Post*, of July 3rd, 1875, illustrate the difficulty. The writer says: ". . . Everyone will assent to the proposition that habitual drinking is a very serious evil. Dr. Dalrymple, however, proposed to regard it as a form of insanity, and to treat those who indulged in it precisely as if they were lunatics, and that appears to be the course recommended by the gentlemen who have now taken the question in hand. Their proceedings, therefore, demand attentive consideration, for it would be no light matter for the public to undertake the care and custody of the innumerable people who are given to hard drinking. There appears, however, to be a distinction, fanciful or real, drawn between persons who merely practise drinking as a vice and those who are incited to it

by some irresistible impulse. The latter are termed dipsomaniacs, a term implying that they are mad on the subject of drink. The deputation did not seem to observe the distinction, for the memorial spoke of dipsomaniacs as if the word signified habitual drunkard, but some of the members evidently held that there was a difference. . . . The advocates of seclusion have certain adverse arguments to answer before the premises on which they rest their case can be altogether admitted. Theirs may, perhaps, be the correct position; but, before inducing the Government to act on their advice, they will have to give clear proof that there is a distinguishable condition of dipsomania; that it is not capable of being confused with ordinary drunkenness; that it prevails among such a moderate number of persons as institutions of reasonable extent might accommodate; that it is capable of being actually cured by forcible restraint; and that the cure can be effected within a specified period."

That is an example of the kind of argument that will have to be met. The confusion between drunkenness as a disease and drunkenness as a vice must be cleared up. For my part, I look upon all *habitual* drunkenness as a disease, and I would boldly call it all dipsomania. It is in its character as a disease that we, as physicians, are entitled to deal with it. I would sink the notion of its being a mere vicious propensity. When fully developed, there are not two kinds of habitual drunkenness. The cases are, one and all, cases of dipsomania, of irresistible, uncontrollable, morbid impulse to drink stimulants. No doubt, this disease may originate in various ways; it may originate, as we are informed, from vice; it may take its start from bad example, from bad habits in early life, or it may spring from hereditary causes, attacking, as it sometimes does, young men or mere boys. The causes, indeed, are very numerous; but, whatever the causation, whether it be an hereditary malady, or acquired, it is, when developed, one and the same disease, dipsomania as it has been called, running in parallel lines in many respects with insanity, and demanding similar treatment.

A definition of this disease, however, will be demanded of us for practical legal purposes. I do not know that a more sufficient one can be required than the one given in Mr. Dalrymple's Bill. The vexed question of vice or disease is there very properly left out, and an habitual drunkard is defined thus: "A person shall be deemed an habitual drunkard who, in consequence of the habitual intemperate drinking of intoxicating liquor, is dangerous to himself or to others, or incapable of managing his affairs." There is also a supplementary definition, but this is the main thing, and seems to me to answer the purpose. It meets the difficulty that Mr. Cross suggested to the deputation that went to him, with regard to the great numbers that would probably have to be taken in charge. If we put before the public or the legislature such a description or definition, and propose to deal only with persons so defined, we shall, I believe, in due time make good our case. Above all, we shall make way by showing, as I think can be shown, that it is cheaper—for your true Briton loves a cheap bargain—cheaper, I say, to separate the drunkard from society, utilising, it may be, his labour, than to allow him to go about, lord of his free will, but a waster of his own and others' substance, an unproductive creature, a spendthrift, a drone in the busy human hive.

The lay mind wants something tangible, something, as they style it, practical, and will but tardily take in the idea, that dipsomania is a disease demanding that the victims of it should be shut out from society and bereft of liberty, for months or even years, while in a condition of body and mind which, to uninstructed common sense, seems sound and sane.

Such ideas they will look upon as "viewy", fanciful, and theoretical; the "fads of physicians" they will call them. Hence, it is necessary to use such arguments as I have used in this paper, and to put them prominently in the foreground, arguments based on the grounds of expediency, general utility, the protection of person and property, and the safety of society. The more we push forward arguments of this kind, the more way we shall make with Parliament and the public, and advance the cause we have in hand.

MR. ALBAN H. G. DORAN, F.R.C.S., has been elected surgeon to the Westminster General Dispensary, in the vacancy occasioned by the resignation of Mr. William Rose.

ASSOCIATION EXCURSIONISTS.—After the recent meeting in Edinburgh, a large number of the members and their friends took part in an excursion under the guidance of Mr. Thomas Cook, and visited Oban, the pass of Killiekrankie, the Caledonian Canal, Staffa and Fingal's Cave, Iona, Glencoe, Loch Lomond, Loch Katrine, the Trossachs, Stirling Castle, etc. At the conclusion of the tour, a vote of thanks to Messrs. Cook, for the ability and attention shown to the party during the excursion, was unanimously carried.

FOR-Y-THIRD ANNUAL MEETING
OF THE
BRITISH MEDICAL ASSOCIATION.

Held in EDINBURGH, August 3rd, 4th, 5th, and 6th, 1875.

PROCEEDINGS OF SECTIONS.

SUBJOINED are abstracts of most of the papers presented to the several Sections of the Association at the Annual Meeting. The papers themselves, as opportunities occur, will be published in full in the JOURNAL.

SECTION B.—SURGERY.

Wednesday, August 4th.

THE Chair was taken by the President, JOSEPH LISTER, Esq., F.R.S. *Demonstration on the Treatment of Club Foot.* By W. J. LITTLE, M.D., London.—Dr. Little first alluded to Stromeyer's great discovery of subcutaneous tenotomy, published in 1831. In 1836, he himself, by the study of specimens in the museums at Berlin, came to the conclusion that contraction of the tendo Achillis was not the only cause of distortion; but that the anterior and posterior tibials were also effective. Accordingly he had, as early as 1837, divided the tendons of these muscles in cases where it seemed necessary. After showing how the average age at which patients were operated on had gradually decreased from eighteen years to a few weeks or even days, Dr. Little went on to consider the causes of imperfect cures or relapses of the deformity after an apparent cure. These he considered to be the following. 1. Omission of operation at an early period. The earlier the period of operation, the more perfect would be the cure. Operation might be practised the day after birth. 2. The undue importance attached to the division of the tendo Achillis alone. 3. The treatment by instruments where the patient's foot was kept too long in a fixed position. By this, the healthy use of the joint was lost. 4. The entrusting of the after-treatment too much to attendants, instead of to the surgeon himself. The excellence of the results would be in proportion to the amount of personal attention paid by the surgeon. Not a single day should pass without his reapplying the apparatus. 5. The insufficient estimate of the difficulties sometimes met with by the operator, and his consequent neglect to inform the parents of the true nature of the case. He was in the habit of informing parents that the after-treatment of the case would be required to be attended to by them until their child had arrived at an age when it was responsible for itself. 6. Improper use of apparatus in those cases where the cure had not been completed before the patient was able to walk. In relapsed cases, he deprecated redivision of the tendon, or resection of the muscle itself. The heroic proposal to divide all the tissues *en masse* between the skin and tarsal arch was unnecessary and useless. Even although there was no risk of bleeding, and though the divided nerves united again, still there would probably be pain and risk. He had endeavoured from an early period to simplify the mechanical appliances employed, whether or not any cutting operation in each particular case be needed. During the last ten years, he had gradually advanced to the present state of his experience that every case of congenital varus in an infant under nine or ten months of age requires absolutely no other mechanical appliances than a roller bandage and one or more padded metallic splints successfully adapted to the limb, in proportion as its form and position improve, and that more elaborate apparatus based upon Scarpa's or Stromeyer's modified Scarpa's shoe, or upon steel and India-rubber springs, with leg-irons, is only required when either ill-fortune, inattention, or neglect has prevented the treatment from being carried out early or in a thorough manner. He laid down the following rules. Whether or not any division of tendons be deemed necessary, commence the treatment at the earliest period the health of the infant, the state of the mother, and other circumstances, permit, even within twenty-four hours or the first week of birth. If in doubt as to need of operation, "take farther advice", or try gentle mechanical treatment only, by means of his splints, for a few weeks. Whether or not any operation be performed, remove and reapply the splint at least once in each twenty-four hours, and whenever it appears to be seriously displaced. Practise and teach the nurse to effect, daily or oftener, gentle manipulations, pressings and stretchings of the distorted parts towards the desired form and position, and guard against the ankle losing any portion of its natural movement; overcome thoroughly the inversion of the foot and the contraction of the sole before attempting to bring down the heel, especially if resort be

had to operation. However favourably the case may progress, do not permit the part to assume for a moment any portion of the former evil position, from which the treatment may have gradually rescued it, or allow the child on any pretence to be placed on the foot before full natural eversion and bending can be readily effected by the attendant and anatomically or spontaneously by the child. A well treated successful case of severe congenital varus can apply the sole and heel properly to the ground with the toes turned out, and walk at the age of twelve to sixteen months as well as a sound child. In conclusion, Dr. Little showed how he considered a cure of club-foot could be effected before the child was twelve months old, so that not only should the foot be perfect in shape, but also in function. This consisted in the application of a well-padded straight splint, at first exactly moulded to the deformity. Gradually, each day, the angle was to be changed, until the foot, from the position of *varus*, assumed that of *valgus*. It should be kept at this for a few days. While this process was going on, the movement of the foot at the ankle should be performed each day. If necessary, the tendo Achillis might be divided, and a splint with a screw used. By this means, the surgeon could, in twelve months, obtain a perfect cure, and thus avoid all unnecessary expense to the parents, or annoyance to the patient. The author exhibited a series of his splints for the cure of congenital club-foot in infants, and of other apparatus, for incompletely cured, relapsed, and neglected cases, employed from the time of Scarpa to the present day.

President's Address.—The PRESIDENT delivered an address.

Notice on a Peculiar Variety of Hydrocele of the Cord. By FURNEAUX JORDAN, F.R.C.S. Eng., Birmingham.—A young gentleman, aged 23, presented himself with an enlargement in the scrotum, a little larger than a walnut, spherical, and well defined, situated midway between the external ring and the testis. The cord was distinctly felt above the swelling, but slightly thickened. The enlargement was translucent, was very movable, was a little larger in the evening, and a little less in the morning. There was an impulse on coughing, at which time a fine rustling stream of fluid could be felt passing through a second tube from the abdomen to the enlargement. When firm and persistent pressure was made, a stream of similar character could be felt passing from the swelling to the abdomen. There was at no time any sign of protruding bowel. Mr. Jordan believed that, in its anatomical characters, and in its mode of formation, the enlargement was similar to the "encysted hydrocele of the cord", except that a fine tubular communication with the abdomen still remained unobliterated. The treatment recommended was a light truss, to cut off the communication with the abdomen.—Mr. RIVINGTON (London) took exception to the nomenclature of the case. It was not an encysted hydrocele of the cord, because it seemed to communicate with the peritoneal sac. It looked like one of the varieties of congenital hydrocele of the cord.—Mr. O. PEMBERTON (Birmingham) thought it was simply a portion of peritoneum containing peritoneal fluid, to which the term hydrocele did not apply. Puncture would have led to a communication with the peritoneal sac.—The PRESIDENT thought that it might be diffused hydrocele of the cord where there was fluid in its cellular tissue, communicating with the cellular tissue of the iliac fossa. It thus could be induced with difficulty; and, when the patient stood up, a rushing sound was heard from the fluid making its way back. He thought that it was a misnomer to call it congenital hydrocele, as the tube opened into the peritoneum.—Dr. PIRRIE (Aberdeen) thought that the case was analogous to one he had met with. In it, there was nothing in the scrotum; but two little tumours could be felt in the cord. They did not communicate with one another; nor did the upper one open into the peritoneum. He therefore believed them to be two hydroceles of the cord, due to the irregular contraction of the tubular prolongations. He thus held that there was an accumulation of fluid before closure. They differed from Mr. Jordan's case in having no communication with the peritoneum.—Mr. F. JORDAN was afraid he had been less distinct in his paper than desirable. In the programme it was described as hydrocele of the cord.—Mr. RIVINGTON objected to the term "encysted".

Excision of the Thyroid Gland. By P. HERON WATSON, M.D., Edinburgh.—Dr. Watson noticed the opinions of surgical authorities on the subject, and described five cases in which he had operated, one of them being fatal. He recommended attention to the following particulars. 1. The external incision should extend from the larynx to the sternum, if the tumour be large and spread widely in a lateral direction. 2. The vessels—arteries and veins—should be secured as they are divided. 3. The fascia should be opened as widely as the skin; and, if the tumour be large, the soft parts may be divided transversely as far as the sternomastoid muscles. 4. The delicate investing fascial sheath of the thyroid body should be left undivided until the vessels included in it have been tied. 5. After the mediate ligature of the thyroïdal vessels in the cel-

lula sheath, the capsule of the thyroid gland should be opened by stretching through it in the middle line, and the attachments of the goitre carefully divided by blunt-pointed scissors curved on the flat. There should be no tearing away of the gland. 6. If bleeding occur after the separation of the tumour, from any of its vascular attachments, the vessels, if they are to be secured, should be tied *en masse* along with the cellular sheath.—Mr. LENNOX BROWNE (London) felt that the operation for goitre was one of which he could not approve, simply because it was unnecessary. In none of the cases did there seem to be dysphagia or difficulty in breathing. The first case was typical, viz., a young lady with a goitre about the size of a China orange. When an incision was made from the larynx to the sternum, the cicatrix caused a worse deformity than the goitre itself. But there were other means of removing the gland equally certain, and leaving no mark. There were four varieties of goitre, viz., simple, fibroid, cystic, and fibro-cystic. In the simple, counterirritation by the red iodide of mercury was sufficient. In the fibroid, injection of iodine into the substance of the gland produced most wonderful results, without any resulting deformity. In the cystic, he used to inject iodine. He now, however, tapped, injected with perchloride of iron, and plugged the cannula. In about forty or fifty cases, there had been only one death. In the fibro-cystic form, setons were of great value; or Maisonneuve's darts of chloride of zinc might be used. He therefore believed that the operation was unnecessary; and, although it was brilliant enough, it was better to try milder measures, remembering the aphorism of Hippocrates, viz., "to cure the patient with as little harm as possible".—The PRESIDENT said that he had only seen Dr. Watson's unsuccessful case. The principle, however, seemed a sound one. An improvement he had made was to subdivide the part ligatured, and ligature each half. The larger the tumour was, the greater the risk. If it were large and overlapped the carotid sheath, it was important to tie the tissues with the vessels at such distance that, when the fascial sheath was divided, there should be no risk of hæmorrhage from the ligature slipping. He therefore passed an aneurism-needle from the middle to the side, and divided the ligature. He next passed a needle along one of the threads, and, pushing it through the tissues, cut the thread. He then withdrew the needle, and tied the ligatures. The gland could then be dissected out without bleeding. In the first case, the gland enveloped the trachea, and overlapped the carotid sheath. The second was extremely vascular, was principally on one side, and largely overlapped the carotid vessels. One vein, during the operation, was so large as to look like the internal jugular. The operations were performed antiseptically. There was no suppuration in one case, and only a little tension in the other. Hemp was used for the thyroid vessels, as the catgut was hardly strong enough. Dr. Thomas Keith, however, had shown him some, kept for five years, which was exceedingly strong, and, by twisting it in strands, it could be used for any purpose. In both the cases operated on there was severe dyspnoea.—Dr. WATSON said that, perhaps, he did not go into symptoms sufficiently, so as to settle, to the satisfaction of some, the propriety of operating. In all his cases, there were difficulty in deglutition, stridor of breathing, and affection of the general health. The operations were certainly not undertaken as a *dernier ressort*, just as it was not the custom in tracheotomy to operate at as late a period as possible. In goitre, if they waited until the patient was suffocating, there would be a risk, not only of disfigurement, but of death. The disfigurement was large when the incision was made; but, even after twenty-four hours, there was great contraction. In one case, an incision of seven inches contracted to an inch and a half. In regard to Maisonneuve's *flèches*, he had heard of a case where the incision for their introduction was followed by severe bleeding. This was arrested by lint strips. After the separation of each slough, bleeding also took place; so that the patient was in great danger, and ultimately recovered, with various cicatrices, to which no linear one could be compared. He had employed injection with iodine in many cases without admirable results. In cystic goitre, whether unilocular or multilocular, he would not operate until he had tried tapping. In all his cases he had done so. In his first, he had tapped and injected; but other cysts appeared. He therefore deemed it inexpedient to wait and operate as a *dernier ressort*. In the cases operated on, both his colleagues and himself were satisfied as to the necessity of operation.

A Case in which Adams's Operation for Subcutaneous Division of the Neck of the Thigh-bone was performed on Both Sides in the same Patient for Straight Ankylosis. By EDWARD LUND, F.R.C.S. Eng., Manchester.—In the case related by Mr. Lund, both hip-joints were ankylosed in the straight position, so that the patient could not sit down. Subcutaneous division of the neck of the thigh-bone was first performed on the left side, and twelve weeks afterwards on the right side. The result of the operation was, that the patient acquired excellent power

of motion in both hips; he could support the weight of his body on either leg; and he had greatly improved in all respects.—Mr. WILLIAM ADAMS (London) felt sure that no one could congratulate Mr. Lund more than himself in having been so fortunate as to obtain useful mobility at both points. He had aimed at such results, but without getting them. In his own cases, there had been extreme deformity, where motion could not be obtained even when the patient was under chloroform. In about twelve or fifteen cases now operated on, there had been only one failure, and it was in St. Thomas's Hospital, where the patient was a strumous child, with little ankylosis. As a rule, the cases to be operated on were, beginning with the best, rheumatic, pyæmic, traumatic, and scrofulous. The last should be excluded. If the cases were carefully selected, the results would be good. Mr. Bryant had operated on two cases, with successful results.

Two Cases of Aneurism, one of the Carotid and one of the Femoral Artery, treated by the Wire Compress. By J. DIX, M.R.C.S. Eng., Hull.—The wire compress here spoken of was introduced to the profession by Mr. Dix ten years ago, as a substitute for the ligature. The full details of the method, with illustrative cases, were published in the *Edinburgh Monthly Journal* for September 1864. At that time, he had only used it for wounded blood-vessels; but he also spoke of its applicability to arteries in their continuity, and explained the process for aneurism. He now related two cases in which it was so used on the carotid and on the femoral artery. Both were successful. In the latter, the incision, five inches long and an inch and a half deep, healed by first intention. The operation is as follows. The artery is cut down on, and the wire is drawn under the artery by the aneurism-needle in the usual way. Each end of the wire is then attached to a needle, and so brought out through the tissues by the side of, but clear of the wound, so that the ends are about half an inch from each other. A piece of cork is placed between the points of exit of the wire, and pressed firmly down in the course of the artery; and over this the wire is tightly twisted till the circulation is stopped. In each of the cases related, a feeble current of blood was admitted into the sac for three days, and only on the fourth day was it entirely cut off. In twenty-four hours afterwards, consolidation of the aneurism had taken place. The wire is removable at any time, and in these cases was removed on the sixth and seventh days. This the author considered one of the greatest advantages of his method, as it allows the gradual establishment of the collateral circulation, and greatly diminishes the risk of gangrene, if not removing it altogether. It does not cut the inner coats of the artery, nor cause ulceration of its outer coat; its blood-channel is intact, and hæmorrhage cannot possibly occur. Bleeding (the greatest danger from ligature) is entirely abolished; and gangrene, the next most fatal risk, is much diminished. The wire compress has other advantages over the ligature. Thus it is not a foreign body in the wound, and therefore does not excite suppuration and impede breathing. It is applicable to all arteries alike.—Dr. PIRRIE (Aberdeen) said that a great deal had been brought forward on aneurism. Since 1854, he had used no other method of arresting hæmorrhage in any operation, unless in those on the tongue, upper jaw, and deep tumours of neck. His belief in it was unshaken; and acupuncture, defined as "metallic compression, removable at pleasure", he believed to be one of the greatest improvements in modern surgery. In regard to its use in aneurism, there was no time to discuss it, although he would have been most happy to do so.

On the Modern Treatment of the Advanced Stages of Constitutional Syphilis. By WILLIAM ACTON, M.R.C.S. Eng., London.—The author spoke of the ravages produced in syphilitic patients in the time when it was the custom to administer mercury in excess, and to the reaction against this practice in the form of the so-called expectant treatment. He then gave an exposition of Ricord's views on the treatment of syphilis; and enunciated the following laws as those which should guide the practitioner in the management of the disease:—1. That mercury is most successful in the treatment of secondary symptoms; 2. That iodide of potassium is to be principally depended on in tertiary symptoms; 3. That a mixed treatment is applicable in cases of advanced constitutional syphilis. In conclusion, he made some remarks on the necessity of preventing syphilis, and described the result of observations which he had made on prostitution in Edinburgh, where he found the evil to prevail to an excessive extent.

Tracheotomy in Croup and Diphtheria. By GEORGE BUCHANAN, M.A., M.D., Glasgow.—This paper contained an argument for operating on the suffocative stage and type of the above diseases founded on Dr. Buchanan's own experience, which was summarised as follows: total cases of tracheotomy in croup and diphtheria 46, cured 17, died 29; croup 16 cases, cured 6, died 10; diphtheria 30 cases, cured 11, died 19.

The Treatment of Patent Urachus. By J. J. CHARLES, M.D., Belfast.

Case of Perforation of the Abdomen per Vaginam; with Remarks. By ALEXANDER E. MCRAE, M.D., Penicuik.

A Case of Partial Rupture of the Popliteal Artery, and Complete Rupture of the Popliteal Vein, for which Primary Amputation of the Thigh was performed. By W. RIVINGTON, F.R.C.S.Eng., London.—The patient was a healthy young man, aged 19, who was riding on the front seat of an omnibus, when a runaway horse and cart dashed at the omnibus, and a corner of the cover of the cart struck him on the left knee, driving it forcibly backwards. On his admission into the London Hospital soon after the accident, there was much contusion of the knee, but no signs of fracture or dislocation. The swelling of the part increased, and the patient complained of loss of sensation in the leg; the temperature of the limb also fell. Pulsation could be barely felt in the posterior tibial artery. On auscultation, a low clicking sound was heard in the course of the popliteal artery; and the diagnosis formed was probable rupture of the artery. This diagnosis was concurred in the next day by Mr. Hutchinson; and amputation was performed by a modification of Teale's operation. The patient ultimately did well. On examination, there was found to be extensive effusion of blood in the areolar tissue of the limb. The posterior ligament of the knee-joint was slightly torn; and the plantaris muscle was torn from its attachment to the femur. The popliteal vein was completely severed; and the inner and middle coats of the artery were separated from the external. The ligamentous and cartilaginous structures of the joint were injured; and the external condyle of the femur was nearly separated by a fissure, while a small triangular piece of bone lay loose and projected into the joint. The upper part of the tibia was also fissured. The history of the case was followed by some practical comments.

Demonstration on Stricture of the Urethra. By F. N. OTIS, M.D., New York.—Dr. Otis said that a stricture of the urethra might be caused by any inflammation which spread below the mucous membrane so as to cause a deposit of tissue in the submucous coat, and consequent obstruction of the calibre of the canal. This obstruction might vary from a slight constriction to complete obliteration. By some, it was considered that where a No. 8 or 9 instrument of the English scale passed, there could be no stricture. This he considered entirely wrong. By means of his urethrometer, he was enabled to ascertain the calibre of the urethra. In a series of about five hundred cases, he had established the fact that there was a constant relation between the circumference of the flaccid organ and that of the urethra itself. He went on to show how the slightest constriction of the urethra produced friction; and that this, leading to irritation, caused, when it became chronic, gleet. Gleet he considered as the indication of a stricture. There might be, of course, stricture without gleet. His plan was to dilate the urethra, after ascertaining its calibre and the position of the stricture. The dilatation was to be carried at least two degrees beyond the ascertained normal calibre of the canal. By means of a fine knife two millimètres in breadth, the stricture was then divided internally. By this means, it could also be ascertained accurately whether there were more than one stricture, so that they could be dealt with in the same manner.

Demonstration of Conjunctival Transplantation from the Rabbit to the Human Subject. By J. R. WOLFE, M.D., Glasgow.—Dr. Wolfe first described the nature of the affection in which this transplantation was necessary; viz., in adhesions between the apposed surfaces of the conjunctiva due to injury. Previous attempts to remedy this had been mechanical, and therefore useless. In 1872, he devised this method of transplantation; and it was now practised by Becker, Von Graefe, and others. Details as to how it was done were, therefore, needed. Two patients whom he had under treatment were shown. 1. F. B., aged 9, had his right eye burned with lime in January last, the cornea being rendered almost entirely opaque, with the exception of the small upper and outer segment. The pupil was thus completely covered with the adherent lower eyelid. Dr. Wolfe first turned the transparent portion of the cornea to account by making an artificial pupil upwards and outwards. Eight days ago, he operated for the cure of the symblepharon. Some of the ligatures were still in the new conjunctiva from the rabbit. 2. Peter C., aged 20, a quarryman, was operated on on January 23rd, 1873. The patient had his face and both eyes injured from a gunpowder explosion. His left eye was completely blinded by a symblepharon. Dr. Wolfe made an iridectomy upwards, and then remedied the symblepharon from the conjunctiva of the rabbit. A fortnight ago, he presented himself again for the treatment of his everted eyelid of the right eye, when Dr. Wolfe found that a small bridge had formed in the new conjunctiva, which he separated, and supplied a new conjunctival flap.

Thursday, August 5th.

On Ligature of the Common Femoral Artery; and especially on Ligature by an Antiseptic Material. By OLIVER PEMBERTON, F.R.C.S. Ed., Birmingham.—Mr. Pemberton began by referring to a case described by him in his Address on Surgery at the meeting of the Association in 1873, in which, as he then supposed, he tied the common femoral artery for an aneurism in Scarpa's space. The operation was successful as regarded the main issue; but, the patient having since died from another cause, Mr. Pemberton had found that the circumflex ilii, the epigastric, and the profunda femoris arteries, were given off together above Poupart's ligament; and that he had tied the superficial femoral artery. The portion of vessel (five-eighths of an inch) between the point of ligature and the origin of the above-named branches was firmly plugged. He then went on to argue that it was the surgeon's duty in such cases to tie the common femoral artery in preference to the common iliac; because it produced less danger to the patient, and because there was yet an artery left to tie in case of failure. He did not regard the risk of secondary hæmorrhage, insisted on by Mr. Erichsen, an objection to the ligature of the common femoral; and he believed that this risk might be diminished or even removed by the use of an antiseptic catgut ligature, applied in such a way as to close the artery without cutting it through. He believed that the objection as to the point of origin of the profunda was of no real importance if the vessel were not cut through.—Mr. LUND (Manchester) wished to know when the hempen ligature came away, and whether it was drawn through, showing that there had been division of the artery. In the other case, did the ligature undergo solution, or remain as a fibrous band?—Mr. PEMBERTON said that the hempen ligature came away thirty days after operation. As the loop of whipcord was intact, it must undoubtedly have cut its way through the tissues of the vessel.—Mr. DIX (Hull) said that it was remarkable, he thought, that the artery he mentioned in his paper read on the previous day as not being ligatured for fear of secondary hæmorrhage, was the common femoral. The point on which he wished most particularly to dwell was the comparison of the catgut ligature with his own method by means of the wire compress. The advantages of the catgut ligature were, he thought: 1, that it was not a foreign body; 2, that it did not damage the internal coats; 3, that it did not require to be detached by ulceration as in the case of the silk ligature. It, however, might give way too soon; and in one case the clot had been carried to the brain on the second day. But by his method the wire could not yield too soon, nor become detached. Above all, the circulation was not cut off too quickly. The circulation was at first feeble, allowing deposition of lymph. Then, when the wire was tightened, the clot was completely consolidated. The wire could then be taken away without fear of secondary hæmorrhage.—Mr. RIVINGTON (London) asked how Mr. Dix was sure that the wire did not cut through the vessel.—Mr. DIX said that, in the case of carotid aneurism, there was pulsation when the wire was removed.—Mr. FURNEAUX JORDAN (Birmingham) congratulated Mr. Pemberton on his paper. At St. Bartholomew's Hospital, he had seen Sir James Paget apply a ligature to the common femoral in a stump where there was bleeding due to sloughing.—Dr. PIRRIE (Aberdeen) thought that their present experience did not warrant them in giving a definite opinion on the merits of acupressure and the catgut ligature. Everyone knew that from limited statistics any conclusions could be drawn. It was their present duty to collect facts. There was a remarkable unanimity among the members of the profession in regard to ligature of the common femoral being undesirable; while that of the external iliac was highly successful.—Mr. LISTER (Edinburgh) did not suppose that Mr. Pemberton meant that a hempen ligature would be without risk when applied on an arterial trunk near a large branch. The origin of the branches of the common femoral varied extremely; and it made all the difference, whether the ligature was applied close to a large branch or a quarter of an inch above it. As to the catgut ligature not cutting through the internal and middle coats, he always applied it so as to do so. At his antiseptic demonstration, he had pointed out how the ligature was not properly prepared, as his own directions were wrong. He had prepared it rightly himself; but it was by accident. The catgut ligature, when rightly prepared, could be used without risk. He had tied the femoral artery four times, and the carotid once with it, successfully; and his colleague Mr. Annandale had had the same experience with regard to the femoral, the carotid, and the external iliac. In none of these cases had there been any giving way.—Mr. PEMBERTON, in reply, said that in his first case there was an abiding coagulum; and in the second, where he had tied the artery one inch below Poupart's ligament, there was no severance of the tube of the artery. Ligature of the external iliac was successful; but Mr. Lister should not forget cases where the aneurism recurred. It

certainly was not good to have recurrence, or to tie the artery again above the former ligature.

On a New Operation for the Obliteration of a Depressed Cicatrix after Gunshot Abscesses or Excision of Bone. By WILLIAM ADAMS, F.R.C.S. Eng., London.—The operation consists of the following steps: 1. Subcutaneously dividing all the deep adhesions of the cicatrix by a tenotomy-knife introduced a little beyond the margin of the cicatrix, and carried down to its base: 2. Carefully and thoroughly everting the depressed cicatrix, turning it, as it were, inside out, so that the cicatricial tissue remains prominently raised: 3. Passing two hare-lip pins or finer needles through the base, at right angles to each other, so as to maintain the cicatrix in its everted and raised form for three days: 4. Removing the needles on the third day, and allowing the cicatricial tissue, now somewhat swollen, succulent, and infiltrated, gradually to fall down to the proper level of the surrounding skin. Three cases, in which this operation had been performed by Mr. Adams, at periods varying from eleven, nine, and three years from the present date were adduced in illustration. In the last two cases described, one resulting from glandular abscesses in the neck, and the other from necrosis of the inferior maxillary bone, all traces of the depression were removed, and the cicatricial tissue alone could be seen; but it was perfectly on a level with the surrounding skin. In texture and in appearance this cicatricial tissue had so much improved, having lost its shiny, membranous and vascular character, and become thickened and of an opaque white colour, that it closely resembled the surrounding skin. In the first case, which had resulted from a bullet-wound, and a portion of the malar bone had been carried away, although the depression could not be entirely obliterated, very great improvement had resulted from the operation. The permanency of the operation was placed beyond all doubt by the two last cases described, one nine, and the other nearly three years since the operation; and the completeness of the obliteration of the depression; and the improvement of the cicatricial tissue surpassed Mr. Adams' most sanguine expectations.—Mr. LUND (Manchester) had a case some time ago in a young gentleman who lost a portion of the bone below the orbit, a depressed cicatrix being left. He had operated without Mr. Adams' improvements; and, when he saw the case last, the cicatrix had fallen back to its old state. The patient wished to be again operated on; and, although he was unwilling then to do so, yet he might with Mr. Adams' needles give him a further chance. He would like to know what dressing Mr. Adams used. He thought that, in such cases, the cavity might be nicely filled up with blood-clot, the uses of which they had seen in Mr. Lister's demonstration. It would be important to prevent suppuration in the line of the needles.—Mr. ADAMS did not use any dressing except collodion in one instance. In only one case had he any bleeding. The needles were removed on the third day, with a little suppuration in one case, but none in the others. The only difficulty he had was in avoiding veins.—Dr. HARDIE (Manchester) had found a difficulty in operating on depressed cicatrix by one puncture. At Mr. Adams's suggestion, he had so treated a case of depressed cicatrix over the malar bone large enough to admit the little finger. It had been unsuccessful; and he had, therefore, dissected the cicatrix out, and by wire sutures brought the edges together. A small linear cicatrix only remained after three years; and there was no recurrence as in Mr. Lund's case.—Mr. ANNANDALE (Edinburgh) had listened with great pleasure to the paper. Mr. Adams had been very successful in his two cases. From his own experience, he should have hesitated to interfere with the cicatrices so freely, from fear of sloughing. It was interesting and curious that, in Mr. Adams's cases, there were no such bad results. On the whole, he preferred Mr. Hardie's method, if it did not remove too much.—Mr. LISTER thought that the plan was undoubtedly ingenious; and there could be no harm done if, in the dissection, no veins were wounded. The operation was subcutaneous, and the pins pressed on sound tissue. Experience would show if the cure were permanent. He himself would prefer to dissect out the skin, and, using button-sutures, get primary union with a linear cicatrix.—Mr. ADAMS had cut out the cicatrix in one of his cases. There was necessarily, however, a scar.—Mr. LISTER did not quite understand how there was no scar in Mr. Adams's cases. He thought there must be an improved scar.—Mr. ADAMS explained that the scar became thicker and less conspicuous, because more like the surrounding textures.

A New Rhinoplastic Operation. By J. HARDIE, M.D., Manchester.—Dr. Hardie read a paper on a case of loss of nose, for which he had devised a new operation. The patient was a girl aged sixteen, who had lost her nose in early childhood, from disease. The whole of the organ had been destroyed, with the exception of small portions of both alæ and of the columna, and the margin of the resulting cavity was covered by thin white cicatricial tissue. The principal difficulty to be overcome was

that of securing sufficient prominence to the new substitute. It was evident that if the latter consisted of soft parts alone, it would in a short time become nothing more than a mere covering over the cavity: it was therefore necessary to provide a bony support for the superstructure of soft parts. It was thought that this end might have been attained by partially detaching the nasal process of each superior maxilla, and connecting them in the middle line. On further reflection, however, this method was discarded, as it appeared unlikely that a sufficiently long piece of bone could be obtained to serve instead of both bones and cartilages. It was then determined to endeavour to utilise a portion of one of the patient's fingers for the end in view. Accordingly, an incision was made along the middle of the palmar surface of the last phalanx of the left forefinger, with a transverse incision at its base. Two flaps of skin were then raised, one at each side of the finger. These were then stitched to the previously denuded margins of the cavity, and the arm was carefully supported by means of long strips of adhesive plaster passed round the neck and under the elbow. Union took place on one side by adhesion, on the other by granulation. The arm was retained in its position for the period of three months, in order to secure a complete vascular supply from the face to the finger. Division of the finger was accomplished gradually, with the same end in view; and when the bone was divided with the bone-pliers, effecting complete separation, both ends of it bled. The patient did not suffer from the prolonged constraint. The transplanted phalanx retained its vitality unimpaired. Further operative details were subsequently had recourse to to unite the alæ and columna with the free end of the finger, and to remove the nail. When these steps were completed, the transplanted finger itself presented a very fair substitute for the nose; but in the course of a few weeks it had receded to some extent into the cavity, so that it would still be necessary to carry out the original intention of covering it with a portion of skin. It was thought, however, that, in suitable cases, the finger itself might be used to form an adventitious nose without further covering. In the event of the operation being again undertaken, it was recommended to use a longer portion than one phalanx, to adopt means for narrowing the orifice of the cavity, and to be careful that the finger did not become twisted from a perpendicular line during the process of union.

On the Treatment of Strumous Enlargements of the Glands by Hypodermic Injections. By MORELL MACKENZIE, M.D., London.—The author commenced by stating that his paper had reference principally to disease of the cervical glands, for it was in that situation that it was most important to get rid of the enlargement without disfigurement. Practitioners had always found great difficulties in dealing with these cases, as treatment often exaggerated the deformity. The author stated that, as the results of his experiments with many different solutions, he had found the dilute acetic acid the most valuable remedy. As a rule, he injected once a week; but, where several glands were affected, the injections could be made more frequently. It was desirable, if possible, to cure by absorption; but sometimes suppuration could not be prevented. In these cases, the pus should be drawn off by a fine aspirator. Suppuration was apt to be followed by thickening of the walls or outer portion of the glands. In these cases, the oleate of mercury (ten per cent.) was most valuable. The author then proceeded to quote in detail some of the thirty-six cases which he had treated with acetic acid. He concluded by stating that he did not believe that the cure of these cases rendered the patient more liable to phthisis. He had seen many cases of phthisis develop where glandular enlargements had existed untreated; but he knew of none where pulmonary disease had followed the cure of such cases. On the other hand, he thought that phthisis was more likely to follow the spontaneous breaking down of glandular tissue.

Two Cases of Punctured Fracture of the Frontal Bone treated by Trephining; and resulting, one in total, the other in partial, Loss of Vision. By KELBURNE KING, M.D., F.R.C.S., Hull.—In the first case, the accident arose from the kick of a horse in the left side of the forehead. A punctured fracture of the bone was the result. For some time, no serious symptoms arose. But, a month after the accident, Dr. King trephined the bone, on account of head-symptoms, and removed three portions of the internal plate of the skull which projected through the membranes into the substance of the brain. Abscess and hernia cerebri followed; but eventually the patient recovered, with, however, loss of vision from atrophy of both optic nerves. The second case was that of a sailor, who fell into the hold of a ship, and received, among other injuries, a punctured fracture of the left side of the forehead. Three weeks after the accident, Dr. King trephined the patient. Notwithstanding this, a most serious train of symptoms set in, including paralysis of all the limbs, except the left arm; hyperæsthesia of the legs; blindness, deafness, loss of speech, and delirium. This patient eventually recovered, with blindness of the right eye, caused by atrophy of

the optic nerve.—Mr. NAPPER (Cranleigh) said that, as the result of experience of two cases, he believed that trephining, though easy at the time, yet presented after-difficulties. In one case, supuration occurred under the dura mater, and the patient died. In a similar case, he would not hesitate to make free incisions.—Mr. W. ADAMS (London) felt doubtful as to whether the fractures should have been termed punctured. They were rather depressed and comminuted. Punctured fractures were produced by a spike, pitchfork, bayonet, etc., but not by the kick of a horse.—Mr. LISTER (Edinburgh) remarked on the interest of the cases. The double vision with one eye was very remarkable. The practical lesson was to show the importance of Syme's rule of trephining in such cases, without waiting for symptoms. As to the terminology, if a fracture were caused by great violence, and the external hole were small, it could be termed punctured. It was unnecessary, however, to stick too closely to terms.—Dr. KING said there would be some hesitation in trephining a lad who rode two miles for advice after the accident. As the result of his experience, however, he thought it would be good to trephine in all cases of punctured fracture. In regard to whether it should be termed a punctured or depressed fracture, it was really a matter of fact; and he should therefore have brought the specimens with him. All the mischief was caused by the splintering of the inner table, and he thought punctured fracture a good name.

Conservative Aural Surgery. By JAMES P. CASSELLS, M.D., Glasgow.—Defining aural surgery as surgical common sense rightly applied, Dr. Cassells insisted that, inasmuch as all intelligent surgery was conservative in its aims, aural surgery was so likewise, because aural surgery was simply general surgery, *plus* special knowledge. But this claim did not rest on inference alone; for it was capable of proof that aural surgery possessed this principle, and that it did not exist as a scientific pursuit if it lacked it. While he admitted that the principle did not always arrest the passing attention in general surgery, it was otherwise in the surgical treatment of the diseases of the organs of special sense, because normal function in them depended upon the complete integrity of their tissues. Apart from this, however, there were special reasons why aural surgery was pre-eminently conservative; these were: 1. Diseases of the ear did not tend of themselves to natural cure, but to become progressively worse, and more serious in their consequences; 2. Of these diseases, only those were preventable and curable that admitted of surgical treatment. These conclusions were the outcome of his own experience and observation. Regarding the congestive diseases of the ear as those in which surgical treatment was demanded, he considered them the only ones in which the conservative principle was applicable, and that early incision of congested tissue was the foundation of conservative aural surgery. Accepting exanthematous catarrh of the tympanum and its appendages as typical of these congestive affections of the organ, he sketched its natural history, and pointed out the two stages in its progress in which aural surgery, as a preventive and preservative method of treatment, was specially indicated; urging its adoption upon the attention of those present, on the grounds that this disease, in its initial stage, was capable of being arrested, and that, in its later stages, its ravages were limitable by the proceeding which he recommended to their notice. While he directed attention specially to this disease as the one in which aural surgery, as a conservative measure, was applicable, he desired to say that its application was not confined to it, but was called for in all the congestive affections of the external ear as well, out of which many serious complications arose. He then referred to paracentesis of the membrana tympani as the operation representative of conservative aural surgery, because this principle was first noticed in connection with the treatment of the disease, the history of which he had sketched, by the operation which he had just named, and which he now recommended to the profession, with certain modifications based upon and suggested by a more perfect pathological and clinical knowledge. He then glanced at the history of the operation, which was, indeed, the history of the origin of the principle of conservatism in this department of medical science; and concluded by saying that the aims of aural surgery, whether exhibited in simple incision of congested tissue, or in the more pretentious operation of paracentesis of the membrana tympani, were to prevent and to preserve, and that it was misapplied if employed for any other object.—Mr. LUND (Manchester) asked the form and direction of the incision in the membrana tympani, and the kind of knife used.—Mr. RIVINGTON (London) said that Dr. Cassells' proposal was no novelty, as it was merely an extension of the plan of cutting through the membrana tympani when fluid was effused into the tympanic cavity. It rested with the general practitioner to carry out the suggestion, as the aural surgeon only saw the case when the mischief was irreparable. They should, therefore, examine the state of their patients' ears during the stages of scarlatina. Specialists were now endeavouring to press their specialism on the general practitioner; and this would certainly

be a benefit to the public.—Mr. LENNOX BROWNE (London) agreed with Mr. Rivington as to his views on specialists. The latter did not see cases until the mischief was done. They were, therefore, grateful to Dr. Cassells for directing attention to a means of preventing those sequelæ of which otorrhœa was the most favourable, and was even expected. He agreed with him as to incision where there was pus; but he doubted if the general practitioner would incise before fluid collected. The incision by the knife had the advantage over the perforation by ulceration of healing rapidly.—Dr. CASSELLS, in reply, related the case of the child of a medical man brought to him after reading one of his papers. The hearing in one ear was gone; but, by this operation, that of the other was saved. He did not lay claim to originality, as the operation had been introduced by Saunders, the father of English aural surgery. He himself had pointed out the definite stages at which the operation should be done. In scarlatina, the incision should always be made before the fluid accumulated, so as to get resolution. When in general practice, he had always acted on this rule. As to the operation, he did not, from want of time, give precise details. They could be found in the *Glasgow Medical Journal* for 1872. The incision should be made from top to bottom, in the middle of the posterior half of the membrana tympani, behind and parallel to the handle of the malleus, as fluid collected behind in the mastoid cells.

Provincial Surgery in Scotland, illustrated by cases treated in the Alloa Hospital. By PETER BROTHERSTON, F.R.C.S.Ed., Alloa.—The hospital has been in existence for the last six years, and is situated on rising ground, a little to the north of the town of Alloa. The population of the town is about ten thousand, and that of the county fourteen thousand; and the building has been found completely adequate to the wants of the locality. The surgical hospital consists of two wards, with six beds each; and a small room for seclusion, with two beds, an operating room, kitchen, nurses' apartments, etc. There has been no difficulty in procuring funds for its maintenance; and the erection of similar institutions was urged wherever needed, from consideration of the favourable results that have been here obtained. During the six years of its existence, there have been treated in it nine fractures of the radius and ulna; four fractures of the neck of the humerus; two fractures of the humerus; ten fractures of both bones of the leg, fourteen fractures of the thigh, and one compound fracture of the thigh, all of which recovered. Of ten amputations of the thigh, eight recovered. Of four excisions of the knee, only one did well. Of four amputations of the leg, two amputations of the arm, three amputations of the forearm, twenty-four amputations below the carpus, four excisions of the mammae, one case of lithotomy, one case of extirpation of the testicle, all of which recovered, as well as the ordinary amount of smaller cases, I need not specify. The average annual expenditure has been about £250; and the whole original cost of the institution was £1,270, including furniture, etc. There was built in connection with the surgical hospital a house for the treatment of infectious diseases; and it is, in all its arrangements, entirely separate. It consists of two wards, containing in all fourteen beds. This separate building is partly maintained by the Burgh and Parochial Board, each contributing £10; and it has been found of the greatest service, on several occasions, when Alloa was threatened with an invasion of small-pox and typhus fever.—Dr. G. H. B. MACLEOD (Glasgow) remarked on the interest of the paper as showing the immense benefits of such provincial hospitals. As the surgeon, however, of an infirmary once fed from Alloa, but now hardly getting a single case from it, he hardly saw the advantages as strongly as Mr. Brotherstone did.

New Operation for Ununited Fractures. By MATTHEW HILL, F.R.C.S., and M.R.C.P.Ed., Bootle, Liverpool.—The operation devised by Mr. Hill for the cure of ununited fractures consists, like Dieffenbach's, in driving ivory pegs into the fragment, but is different in all other respects. The old operation entails a large wound in the soft parts and exposure of the bone, in short, renders the fracture "compound"; in the new operation this is avoided, the pegging being done subcutaneously. The necessary tools are an Archimedean-screw drill-stock with two or three drills, and ivory stilettes about four or five inches long. The drill and stilettes are similarly graduated in half inches, and the ivory is, moreover, grooved like a director in order to facilitate its introduction alongside the drill, and afterwards to allow the escape of inflammatory fluids, which might otherwise be pent up in the bony fragments. The *modus operandi* consists in entering the drill through a puncture made by a tenotome; the boring of the bone is next proceeded with, the graduations enabling the operator to calculate his depth to a nicety. The ivory stilette is now filed transversely half way through, at a distance from the point corresponding to the depth of the hole in the bone; it is next slid down beside the drill, which is then withdrawn, the stilette slipped into its place, lightly hammered, and with a sharp twist broken off at the notch, flush with the surface of

the bone. The remainder of the ivory is now withdrawn, and the puncture sealed with a strip of plaster. It is obvious that as many pegs may be introduced in this manner as is thought desirable; in the author's case three were introduced without causing any subsequent mischief or the formation of abscess. The punctures healed kindly and by the "first intention".—Dr. G. H. B. MACLEOD (Glasgow) said that the operation was undoubtedly something new, and he only regretted they did not know the end of the case. For his own part, he had seen such admirable results from the antiseptic treatment of open wounds, that he preferred to cut down on such cases antiseptically. Mr. Hill's method, however, was most ingenious.—Mr. J. D. MORRISON (Edinburgh) drew attention to his modification of the Archimedeal screw, by which only one hand was needed, and greater delicacy of touch secured.—Mr. LUND (Manchester) had tried the method of drilling bones, but had become disheartened. He used a five-sided broach. Mr. Morrison's ingenious instrument would be a great help.—Mr. ANNANDALE (Edinburgh) had found the common bradawl or pricker of the joiner to work as well as any apparatus. It was cheap, in addition, only costing about threepence.—Mr. HILL, in reply, said that the drill-stock was a minor point. The important fact in the operation was its being done subcutaneously.

On Section of the Cornea in certain Cases of the Eye of Inflammatory Origin. By J. VOSE SOLOMON, F.R.C.S.E., Birmingham.—The late Mr. Guthrie recommended that large collections of pus in the anterior chamber should be treated by a free vertical incision through the cornea. Mr. Solomon tried this plan in a case in 1852; but the result was unsatisfactory, probably because the operation was too long deferred. In 1873 and 1874, he successfully treated by free incision several cases of extensive hypopyon, abscess, and diffuse purulent infiltration of the cornea. The general results of his treatment were, immediate relief from pain; preservation of the curve of the cornea, and consequently lessened astigmatism; the prevention of synechia anterior and staphyloma; and limitation of the resulting leucoma. The cicatrix formed merely a thin white line. Several illustrative cases were described.

On the Treatment of some Diseases affecting simultaneously the Voice, Speech, and Hearing. By LENNOX BROWNE, F.R.C.S. Ed., London.

Subcutaneous Operation for the Relief of Fibrous Ankylosis of the Knee-joint. By C. F. MAUNDER, F.R.C.S. Eng., London.—The patient was a man, aged 33, who was admitted into the London Hospital, on May 12th, 1875. About three years ago, the right patella was broken into three pieces. The knee had been stiff ever since, and he had injured it on two other occasions. Amputation had been suggested. He walked like a man with a wooden leg, swinging the right limb in a half circle. The joint was the seat of firm fibrous ankylosis; the fragments of the patella, and the tibia and femur, being immovable one upon the other. On May 19th, the patient being under the influence of chloroform, Mr. Maunder forcibly flexed the leg, the adhesions breaking audibly. There was considerable swelling and ecchymosis afterwards; but no good resulted. On June 2nd, the fragments of the patella and their fibrous bond of union were severed from the fibrous tissue occupying the joint. A strong tenotomy-knife was entered on the inner side just above the patella; and, the desired section being made, the wound was closed in the usual way, as in tenotomy; and then the leg was forcibly and freely flexed. On the fourth day, passive movement was commenced, and the patient was encouraged to practise flexion and extension of the leg. On July 27th, he was able to perform both these movements, and walked with a scarcely perceptible halt.

On Egyptian Ophthalmia and Cataract Complications: with Cases.

By J. R. WOLFE, M.D., Glasgow.—For the last six years, Dr. Wolfe had adopted a new method of treating that intractable disease. The results were highly satisfactory, and he related the following cases: 1. Granulation with pannus of four years' standing; complete cure; central opacity of cornea remedied by formation of new pupil: 2. Granulation with double cataract, of nine years' duration; cured, and double extraction successfully performed: 3. Granular lids with pannus, complicated with traumatic cataract; pannus cured, and cataract successfully extracted. The method of treatment which he adopted consisted of: 1. Scarification of the whole conjunctival *cul-de-sac* once or twice a week; 2. Daily application of the syrup of tannin (two drachms to one ounce).

Friday, August 6th.

Professor PIRRIE, and afterwards Mr. ANNANDALE, occupied the Chair.

Remarks on the Varieties of Wry-neck, and its Treatment. By W. J. LITTLE, M.D.—The author described three groups of cases met with in practice: 1. Those caused by rheumatic and strumous disease of

the bones, ligaments, and glands of the cervical region, and by cicatrices of burns and wounds; 2. Those having a congenital origin, which exhibit more or less rigid contraction and structural shortening of one portion or the whole of the sterno-cleido-mastoid muscle, and which present considerable analogy with congenital club-foot; 3. Spasmodic wry-neck, induced in middle life from derangement of the cerebro-spinal nerve-centres. The treatment of cases due to past or present vertebral disease, and of burn and cicatrix cases, demands more or less elaborate mechanical aid; whilst those arising from congenital contraction often require subcutaneous division of one or both portions of the sterno-cleido-mastoid, and the subsequent use of a common roller and plaster bandage with a leather-padded collar only, made higher on the contracted side. Photographs illustrating each of these forms of wry-neck before and after treatment were exhibited.—Mr. FOLKER (Hanley) asked how the incision was made.—Dr. LITTLE replied that he divided the tendon about one inch above the clavicle, where there was the deepest arch below it. Care should be taken that the assistant did not pull too hard.—Mr. GRAHAM asked if, in spasmodic cases, there was any return after operation. In one case he had operated on, there was no return twelve months afterwards.—Dr. LITTLE had had a case of recurrence two months after operation. In these cases, according to Langenbeck and Stromeyer, the knife acted as a narcotic. He did not mean to question the accuracy of Mr. Graham's observation, but yet congenital wry-neck often appeared like the spasmodic form. In the unmistakably spasmodic cases, division did little good.—Dr. PIRRIE (Aberdeen) had listened with great pleasure to Dr. Little's paper.

Notes on the Medical Management of Intractable Cataract. By C. B.

TAYLOR, M.D., Nottingham.—Since patients suffering from cataract were operated upon by extraction, no method, when successful, had yielded more brilliant results than Daviel's process of removing the lens by making a flap of one-half of the cornea. The fatality, however, attending this operation, even in the most competent hands, had led to its abandonment, and the substitution of various alternative measures. One of the first of these was advocated by Mooren, who proposed to avoid prolapse of the iris by excising a portion of this membrane some weeks prior to the removal of the lens. This rendered the extraction much safer, but it involved two operations, and the risks attendant upon the large flap remained; hence Schulte began to extract through a small linear incision, lifting out the lens with a spoon; this was abandoned for the more scientific methods introduced by Von Gräfe and the author simultaneously [See original paper by the author in *Ophthalmic Review*, 1865.] These methods reduced the immediate loss from upwards of ten per cent. to about three per cent., and diminished the partial failures one-half. The pupil, however, was sacrificed, and in order to combine the advantages of a perfect pupil with the safeguard of an iridectomy, the author excised only a small portion of the periphery of the iris, leaving the pupil untouched. This operation yielded excellent results in the author's hands in upwards of thirty cases, and had been highly commended from results in his own practice by Mr. Brudenell Carter. The process, however, was delicate and tedious. To avoid the flap, retain the advantages of a linear incision, and still save the pupil, Dr. Kuchler of Darmstadt extracted through a wound made directly across the centre of the cornea. Mr. Bader of Guy's Hospital also practised a similar incision, only a little below the pupil; and Mr. Liebreich made one a little lower still. Dr. Vincente Chiralt, Lebrun, and Warlomont had adopted, in succession, exactly the same form of incision as Mr. Liebreich, but placed it above the pupil. The author had nevertheless obtained excellent results in some cases with both the lower and upper forms of incision; and his experience had been, that the nearer the wound approached the corneo-sclerotic junction, the less risk there was of any of the evil results enumerated above. After many trials, and a careful study of numerous cases, both in this country and on the continent, he concluded that the safest form of incision was a transverse one at about the upper third of the cornea. At first, a portion of iris was excised as a part of the operation; but, subsequently, the author proposed to dispense with the iridectomy in certain cases; and afterwards, in consequence of the greater facility and consequent diminished risk attending the various steps of the operation, a section at the lower third of the cornea was adopted. In this way a shallow slit-like flap was formed, comprising only one-third of the cornea, and lying in the corneo-sclerotic junction. This permitted the ready exit of the lens through the natural pupil, and left no trace afterwards; being close to vascular tissue, it healed rapidly; any prolapse of the iris was readily replaced at the time, and if the pupil were maintained in a contracted state by the instillation of Calabar bean, the prolapse did not return. The wound healed in twenty-four hours, after which atropine might be used if desirable. The operation was singularly safe, and successful as to the appearance of the patient and the power of vision.

The Treatment of Spina Bifida. By J. MORTON, M.D., Glasgow.—Dr. Morton's paper on spina bifida referred to the hopelessness with which such cases were regarded previously to 1871, and stated that many still regarded them as necessarily fatal. In the autumn of that year, a case presented itself in the wards of the Glasgow Royal Infirmary, which induced him to consider whether he could not abandon the do-nothing system, and it was treated successfully by injecting the iodo-glycerine solution. Since that time, six other cases had been so treated with a like result by Dr. Morton and others. All the lumbar and dorsal cases treated by Dr. Morton himself had been fortunate. In only three other cases had the iodo-glycerine injection been used, and these succumbed, not from any direct effects of the operation; one was otherwise hopelessly deformed and paralytic, and probably not a fit case for any interference; another died from debility; the third, under Dr. Morton's own care, died from convulsions due to the draining away of the cerebro-spinal fluid, which might readily have been prevented had the child been resident in the hospital. So far as was known, these were all the cases in which this mode of treatment had been employed. Collodion, either common or flexible, was used to close the apertures necessarily made, and had always answered the purpose. Hitherto seventy per cent. of the cases had been cured, taking even the worst view of the cases; but, discounting the paralysed and deformed ones, there might be about eighty per cent. The mode of managing them was described.—Mr. MEADE (Bradford) asked if the early cases had been kept in view, so as to see that there was no paralysis or other after-effects.—Dr. MORTON said that he had done so, and found no bad effects following. It was curious, that in none of the cases given was there any paralysis.—Mr. GRAHAM said that the general experience was, that one out of three cases operated on died. The results under Dr. Morton's treatment were most gratifying, and he hoped that the good effects would continue.—Mr. ANNANDALE (Edinburgh) congratulated Dr. Morton on his success. From a large experience of his own and others' cases, especially those of the late Professor Syme, he had come to the conclusion that interference generally caused death. Indeed, latterly, Mr. Syme did not operate. In some cases, he had seen spontaneous cures; but the success of Dr. Morton's plan was most gratifying.—Dr. PIRRIE (Aberdeen) felt indebted to Dr. Morton for his valuable paper. He had listened to it with great interest. Hitherto his opinions had been similar to those of Mr. Annandale. Dr. Morton's plan, however, opened up quite a new field. In regard to pathological specimens of spina bifida, he might mention that, in the Association Museum, a very fine specimen of its occurrence in the lumbar region was shown by him. In it a vesicular process of the sacral nerves could be seen passing through the fissure, to become adherent to the posterior wall.

A Case of Strumous or Tubercular Disease of the Breast simulating Scirrhus. By R. H. MEADE, F.R.C.S. Eng., Bradford.

Further Observations on the Electrolytic Dispersion of Tumours. By JULIUS ALTHAUS, M.D., London.—He stated that it was now pretty well ascertained what electrolysis could do, and what it could not do; and that its sphere of usefulness was not likely to be much curtailed or enlarged by future researches. Regarding the mode of application, he remarked that the voltaic current was conveyed to the tumours by means of gold needles, which acted either in fixed rows or singly, in any direction that might be required, by means of the series-fines conductor; and that either the influence of the negative pole alone, or that of both poles simultaneously, was utilised. Electrolysis was very useful in certain forms of nævus; and the author pointed out its advantages over excision, the injection of perchloride of iron, nitric acid, the subcutaneous ligature, and the galvanic cautery. Cystic bronchocele yielded readily to it, and solid bronchocele more slowly. A remarkable case of the latter affection was related, in which the patient's life was in imminent danger from pressure of a rapidly growing tumour on the pneumogastric nerve. Sir William Fergusson had refused to operate, but the patient got ultimately quite well under the author's care. Sebaceous tumours yielded readily to electrolysis, which was likewise useful in recurrent fibroid and secondary cancer. It was not possible by this means to eradicate the cancerous diathesis, or to prevent the tendency to death; but it was most effectual for the relief of the pain; promoted sleep and appetite, and soothed and strengthened the system generally. Dr. Althaus related a case of secondary cancer of the breast, in which the suffering had been intense; but where the last few weeks of life were rendered perfectly comfortable by the use of electrolysis, the patient ultimately sinking from congestion of the lungs, brought on by exposure. The author wound up by requesting his hearers to use electrolysis more largely in suitable cases than had hitherto been done, and showed the instruments which he generally employed for his operations.—Dr. JOHN DUNCAN (Edinburgh) said that Dr. Althaus had the largest experience of anyone as to this mode of treat-

ment, which, he believed, would come still more into use. He himself had considerable experience of its use in the treatment of aneurism and nævus. In certain cases of aneurism, it was admirable. In aortic aneurism, however, it was disappointing, as, although it gave relief, yet it did not cure. It was certainly best in cirrroid aneurism, or aneurism by anastomosis. He had referred to the treatment of nævus by this plan; but for the plethora of papers in this Section, he would have made a written communication on this subject. The method was perfectly safe and certain. It had the disadvantages of leaving a scar when performed too quickly, and of being tedious when done too slowly. Its use should be limited to cases where it was important to have no scar, such as the face and other exposed parts. Where a scar did not matter, something more rapid should be used. In the treatment of other tumours by it, he had little experience. He found it extremely tedious when done slowly; and, when done quickly, there was risk of sloughing. This was nothing mysterious. When done slowly, there was destruction of texture and then absorption. But, when it was too quickly performed, the destroyed texture came away as sloughs. He had used with advantage a needle in which the part in contact with the skin was insulated, and only that below the skin free from such a protection. In this way, there was no risk of slough or scar. He could confirm what Dr. Althaus had said as to its giving relief from pain in certain cases, especially in vascular cancer. In a case of pulsating sarcoma of the neck (primary), which he had seen through the kindness of Dr. George Balfour, there was great pain; so that the patient could not sleep for more than ten minutes. After the operation, however, he got rest for four nights. This fact he could not explain; but, from his experience of this and another case, he thought that the irritation of the electrolysis increased growth; and, therefore, the surgeon had to choose between causing increased rapidity of growth and giving relief to the patient.—Dr. J. C. HUME could confirm what Dr. Duncan had said as to the use of an insulated needle. His experience was limited to two or three cases of nævus in the face. In the first, the nævus occupied the extremity and length of the nose. Unfortunately, the child died from bronchitis. In the second case, the nævus extended over the whole of one cheek. Although the treatment was protracted, yet the cure was satisfactory. At present, he had another case under treatment, where the bridge of the nose, one cheek, and both eyelids were affected. In none of these cases was there any scar left.—Mr. LENNOX BROWNE (London) was so well acquainted with Dr. Althaus's treatment, that he could bear testimony to its effects on nævi and the softer forms of enlargement of the thyroid body. Its advantages in treating the latter form of disease, viz., preventing hæmorrhage and leaving no scar, he had omitted to mention, when speaking on this subject at a former meeting of the Section.—Dr. BUCHANAN (Glasgow) did not feel qualified to give a general opinion as to this method. But, in regard to nævi, he believed that, in the vast majority of cases, excision was the safest, easiest, and best plan. There were few instances in which it was not applicable.—Dr. ALTHAUS said that reply was hardly necessary, as most of the speakers had agreed with him. He was especially pleased with Dr. Duncan's remarks. In regard to electrolysis causing increased rapidity of growth, they should remember that Dr. Duncan's case was a primary cancer; whereas it was in secondary cancer that it was most applicable.

Tertiary Sore-Throat. By C. R. DRYSDALE, M.D., London.—Tertiary sore-throat was readily divisible into two forms: 1, the ulcerative; 2, the gummy. The ulcerative form of tertiary sore-throat was seen chiefly on the tonsils, or posterior wall of the pharynx, and was comparatively rare. It might occasion discomfort in swallowing, and pain in the ear. It might be extensive enough to remove the whole of one tonsil. The gummy tumour of the soft and hard palate was the commonest, perhaps, of all the symptoms of tertiary syphilis. Gummy tumour of the velum commenced by the deposition of small masses of gummy material in the substance of the soft palate, which at an early stage made the soft palate feel to the touch as if it contained small bodies, such as cherry-stones or split-peas, in its substance. In a short time, the inflammatory stage supervened, and the mucous membrane over the infiltrated part became dusky-red, glistening, or varnished in appearance. To the touch, the parts felt greatly thickened, and were sometimes twice or thrice as thick as in the normal condition. The velum became immovable at the infiltrated part. The disease was often insidious in its approaches. Patients not unfrequently came to the practitioner with perforation of the soft palate, who had never known the danger they were incurring by their neglect of the very slight symptoms in the throat. When inflammation had once set in, the disease went on with great rapidity. The infiltrated part became softened, and a slough came rapidly away, so that perforation or complete division of the soft palate into two lateral flaps might occur in two or three days. It was, on this account, of the greatest importance that

practitioners should be habituated to diagnose at once the characters of the tertiary sore-throat; since any delay in remedies exposed the patient to two grave infirmities. The first of these was the loss of voice, which was in proportion to the extent of perforation of the velum; and the second was the regurgitation of food, and especially drinks, by the nostrils, when the perforation of the velum was not very small. The loss of the voice was sometimes almost total. The regurgitation of liquids was often a serious matter, producing emaciation and death from asthenia. Perforations of the hard palate from gummy deposit were also common, and produced the same effects; and were amenable to the same remedy. In the treatment, caustics should not be used in the inflammations connected with gummy sore-throat. Nor should such tumours be touched with the knife. What was indicated was the administration of the iodide of potassium at once, in large doses of fifteen grains four times daily. Mercury in such cases was powerless, or nearly so; and was only to be tried when the iodide failed, which it did in rare cases.

The Surgical Treatment of Lymphatic Tumours of the Neck. By S. MESSENGER BRADLEY, F.R.C.S., Manchester.—Mr. Bradley limited his paper to the consideration of certain nuchal lymphatic tumours, which he divided into three classes: 1. True hypertrophies, with or without a strumous diathesis, and showing no tendency to break down or undergo pathological change; 2. Strumous hypertrophies, consisting of cellular hyperplasia plus caseous deposit, which, after a time, soften either in patches or entirely, until the gland becomes a mass of soft strumous matter; and 3. Hard non-infectious lymphomata. Mr. Bradley said that, as a rule, these cases were lumped together and treated generally, indiscriminately and unsatisfactorily by the local application of iodine and the internal administration of cod-liver oil, etc. It was his wish to substitute an arm of precision for this hit or miss method; and, from an extensive trial, he was able to say that, by a proper selection of cases, this could be done. For several months he had injected the harder lymphatic tumours with a few drops of tincture of iodine, with the almost invariable result of causing a rapid diminution, going on to complete absorption of the gland. He had even succeeded in producing absorption of some encapsulated tumours situated on the salivary glands by this means, but confined himself at present to recommending this mode of treatment in hypertrophies of the lymphatic glands. As a rule, two or three injections of from five to fifteen minims of the simple (P.B.) tincture of iodine, was sufficient to effect a cure. No other treatment was necessary. This plan had the advantage of being comparatively painless, safe, and speedy. It was not applicable to all lymphatic tumours, and, if used indiscriminately, would fall into disfavour and disuse. To avoid this, he laid down the following rules for the surgical treatment of these nuchal tumours: 1. *Cases to be treated by Injection of Iodine:* a. True hypertrophies of cervical glands without scrofula; b. Strumous hypertrophies of cervical glands before they have broken down; c. Hard (non-infectious) lymphomata; d. All encapsulated tumours, as a tentative operation. 2. *Cases to be treated by Incision:* Lymphatic tumours that have, either with or without previous injection of iodine, broken down into pus. 3. *Cases of Cervical Tumours to be treated by Extirpation with the Knife:* a. Strumous glands which form tumours riddled with soft patches, and resting on a base of suppurating cellular tissue, with a large area of blue skin; b. Encapsulated tumours which have resisted the treatment by injection.

Severe Cerebro-Spinal Symptoms produced by a Fall at Football. By P. M. BRAIDWOOD, M.D., Birkenhead.—The symptoms were produced by fall on his back suffered by a young lad through missing a drop-kick at football. He thought the case worthy of the attention of surgeons, as being a rare instance of severe nervous symptoms being caused by a slight accident.

On Extirpation of the Tongue. By JOHN C. HIRSCHFELD, M.B., Banff.—The author briefly commented on the various operations for the removal of the tongue, and recommended the following plan, as obviating the risk of hæmorrhage, and removing various objections to other proceedings. The patient having been put under the influence of an anæsthetic, the lingual arteries are tied. The vessel is exposed by making an incision an inch and a half or two inches in length above and parallel to the great cornu of the hyoid bone, turning up the sub-maxillary gland, and dividing the fibres of the hyoglossus muscle. The mouth is then opened by depressing the lower jaw; and the tongue is then cut off close to the hyoid bone. If the mouth be small, the aperture may be enlarged by cutting from the angle of the mouth into the cheek. The author believed that epithelial cancer of the tongue had comparatively little tendency to spread.—Dr. JOHN DUNCAN (Edinburgh) said that the principle of preliminary ligature of both lingual arteries was a sound one. But it must be remembered that, in almost any operations near the lingual, it could be easily exposed, and an aneurism-

needle passed or pressure applied by means of the finger. He thought that the risk of hæmorrhage after the *érasaur* or galvano-cautery was magnified. He had not used the latter in removal of the tongue; but had found it of great advantage in removing, without risk of hæmorrhage, syphilitic growths of the genital organs.—Dr. GRAHAM had used the galvano-cautery in extirpation of the tongue without hæmorrhage or any untoward result. His plan was to sever the lateral attachment of the tongue to the mucous membrane by means of scissors. A straight incision was then made from the chin to the hyoid bone. Two needles were next applied, so as to graze the top of the hyoid; and then, by means of a platinum loop, the whole organ could be easily removed.—Mr. ANNANDALE (Edinburgh) understood Dr. Hirschfeld to say that the epithelial form of cancer, which chiefly affected the tongue, had little tendency to spread. He did not think that this was the case. He had operated in many instances, and found that the tendency to spread was very great. It most frequently began in the lateral half of the organ, and then implicated the muscles and mucous membrane. It was, therefore, advantageous to operate completely. This could best be done by dividing the jaw. When the disease was limited, the galvano-cautery could be used; but there was risk of a portion of the disease being left behind. Although the galvano-cautery ensured less risk of hæmorrhage and left a safer wound, yet he preferred first dividing the jaw, so as to expose the tongue in all its connections. The galvano-cautery or *érasaur* could then be used.—Dr. HIRSCHFELD, in reply, said that he believed the preliminary ligature of the linguals to be a great help in preventing all hæmorrhage.

The Nourishment of the Head of the Femur after Intracapsular Fracture. By F. OGSTON, jun., M.D., Aberdeen.—After an introductory description of the state of parts in an old ununited intracapsular fracture, and a short review of the theories which had been brought forward to account for the healthy state in which the head of the femur is frequently found after this injury, a third method was indicated as an efficient one; viz., that the head of the femur is supplied with an abundant supply of blood by the capsule reflected along the neck. This view was supported by quotations, by diagrams, and by reference to injections of this structure, showing that blood-vessels pass through the reflected capsule and pierce the head of the femur, and that this connecting band remains uninterrupted in those cases where the head of the bone is found well nourished, while it is wholly ruptured when the head of the bone is found to be wasted. The statement of Hyrtl, that vessels do not reach the head of the femur by the round ligament, was shown to be incorrect, since in one of the cases quoted the injection entered it by this channel.

On Fibrous Tumours of the Auricle. By J. J. KIRK DUNCANSON, M.D., Edinburgh.—The auricle is subject to a variety of diseases, and growths of various kinds are found affecting different parts of it, arising from the different structures of which it is composed. They may be tumours containing hydatids, masses of fatty matter; or they may be steatomatous, sebaceous, encysted or fibrous tumours. Hypertrophy of the lobule, as well as tubercles of a gouty nature, spread over the auricle, may occur in subjects of a gouty diathesis. Elephantiasis has been known to attack the auricle, and cancer of an epithelial nature affects the auricle independently of any other seat in the body. Fibrous tumours of the auricle occur in the lobule of the ear. They have been most frequently met with in the ears of the negroes of the Brazils, and some African tribes; but they are to be met with in all countries where the practice of piercing the lobule of the ear for the wearing of earrings or other ornaments is customary. Various reasons are given for their occurrence by different authors. According to some, they arise from the act of piercing the lobule of the ear in certain constitutions; others say they are caused by the irritation of the articles worn, such as brass earrings. Shortly after the lobules of the ears have been pierced, or not until some irritation by the articles worn, pain and swelling supervene. These are followed by a more defined swelling in the track of the puncture, and this swelling may become a well marked fibrous tumour. Paget says there may be, perhaps, some doubt whether the growth be a proper tumour, or a cheloid growth of the cicatrix tissue, formed in the track of the wound; but it has the aspect of a distinct fibrous tumour, and the skin appears unaffected; they are recurrent. According to Billroth, these tumours consist chiefly of spindle-shaped cells and connective tissue, and are merely an hypertrophy of the cicatrix, similar to tumours growing from cicatrices on other parts of the body (keloid). St. John Roosa calls them fibro-cartilaginous, and says they are a simple hypertrophy of the normal structures. They occur more frequently in the African than in the Caucasian race.

Anæsthetic Agents.—On the proposal of Mr. ANNANDALE, the Section passed a resolution recommending the appointment of a Committee to inquire into and report on the use of anæsthetics. (See JOURNAL, August 14th, page 214, col. 2.)

SECTION D.—PUBLIC MEDICINE.

THE papers in this Section have been arranged in the following groups, of which one was taken up on each day that the Section met.

- A. Contagion and Infectious Diseases.
- B. Medical Legislation, Meteorology and Disease, Statistics of Disease, etc.
- C. General Sanitary Arrangements; Drainage, Water-supply, Ventilation.

Wednesday, August 4th.

GROUP A.—CONTAGIOUS AND INFECTIVE DISEASES.

The President, the Right Hon. BIRKENHEAD, M.P., took the Chair at 2 P.M.

Contribution to the Life-history of Contagion. By P. M. BRADWOOD, M.D., and F. VACHER, Esq., Birkenhead.—Having carefully reviewed the literature of the subject up to date, including the papers in the recently issued reports of the medical officer of the Privy Council, the authors proceeded to give particulars of their own investigations. The questions, it was the purpose of these researches to elucidate, were thus stated: (a) What is contagium? (b) In what manner is it generated or communicated? (c) What are the conditions on which its life or activity depend? The results of inoculations on eighteen subjects with water containing the soluble constituents of vaccine lymph were recorded. It was explained that diffusion was effected in the manner adopted by Dr. Burdon Sanderson, but the diffusates were more concentrated than those used by previous investigators; and the authors submitted that, by testing the effects of the diffusate first, and in no case vaccinating till a given time after making the abortive insertions, they avoided a possible source of error with which the method of procedure of M. Chauveau and Dr. Sanderson was chargeable. Of seventy-two punctures inoculated with the diffusate, seventy-one failed entirely. As proving that the exception to M. Chauveau and Dr. Sanderson's experiments was valid, the authors tried the effects of vaccinating with lymph pure and diluted simultaneously, and found that the maturing of vesicles at the points treated with pure lymph tended to prevent the formation of vesicles at the points treated with the artificially weakened virus. The conclusion arrived at on this point was, that there is the strongest indirect proof (there can be no direct proof till we can wash off all trace of plasma from the bodies it suspends) that the contagium of the virus with which we are most familiar, consists of particles neither soluble in water nor in watery liquid. The next series of experiments reported were for the purpose of determining some of the conditions affecting the activity of the type—contagium. They consisted of animal vaccinations, retrovaccinations of cows and heifers, inoculations with lymph preserved by different methods for various lengths of time, and vaccinations with mixtures of lymph and various so-called antiseptics or germicides. As regards the results obtained from this last group of experiments, it was stated that combinations of vaccine and carbolic acid solution for sixty-four insertions yielded nine vesicles; that sulphuric acid vaccine failed to produce vesicles; that ozonised and chlorinised vaccine also entirely failed; that vaccine mixed with a saturated neutral solution of quinine retained its activity; that a mixture of lymph and liquor potassæ permanganatis (B. P.) gave doubtful results; that chloralum on being mixed with lymph did not affect its activity. The third series of observations referred to the local manifestations incidental to vaccination. The authors vaccinated a heifer at several points, and day by day removed successive portions of skin where vaccine had been inserted. Sections, vertical and oblique, were then made and tinged with carmine, these being subjected to examinations with high and low powers. The preparations and drawings from them were exhibited.

On the Nature of Contagion. By T. J. MACLAGAN, M.D., Dundee.—The author first referred to what is known regarding contagion, and then proceeded to show that the view which gave the best explanation of co-existent facts is that which regards it as consisting of minute living organisms, probably of albuminous composition, possessing the power of organic development; always reproducing their own kind; capable, under favourable circumstances, of preserving their vitality for a considerable period; but speedily perishing when separated from these conditions and freely exposed to the atmosphere.—The PRESIDENT said that long ago he was a strong advocate of the chemical theory of contagion; and the most beautiful specimen of inductive reasoning we possessed was Baron Liebig's chapter on contagion and miasm. Modern research, however, had given little support to this view. The very specific character of contagion—its power of reproduction—was an argument in favour of the germ-theory. It was as certain that whatever produced scarlet fever would produce scarlet fever, as that a dog would produce a puppy, or a rose-tree would produce a rose-tree.—Dr. CARPENTER (Croydon) pointed out that, in

the dilution of the vaccine lymph with distilled water, the small quantity of alkali in that water might have rendered the vaccine material inactive, and hence followed the want of results which might have followed with the addition of some chemical agent such as carbolic acid. As to contagion, he thought it was to be traced to some organic germ, which might, under certain meteorological or physical conditions, develop into one or other of the diseases to which the human body was liable.—Mr. J. A. WANKLYN (London) pointed out that, though the water used to dilute the lymph referred to in the first paper was not perfectly pure, the experiments were all the more cogent, inasmuch as they proved that contagia were destructible by water. This fact of the germ-forms losing their power was of very great importance; and, if they admitted the accuracy of these experiments, they must admit the possibility of destroying every poison-germ by dilution. As to the nature of contagion, while not defending the chemical theory, he held that, unless they could discriminate germs, the germ-theory had no vitality in it.—Dr. MACNAMARA (Calcutta) was doubtful as to diseases being alone capable of reproducing themselves; for scarlet fever was never found in India, or cholera in Australia, although both countries were in communication with the West and with each other.

Scarlet Fever: How to Prevent its Spread. By J. M. FOX, M.R.C.S.E., Annaside, Cocker-moath.—The paper commenced with a statement that facts in sanitary science are sometimes brought to light with greater distinctness in small towns, where observation may be more complete and conditions are less mixed, than in larger urban areas. An epidemic of scarlet fever during 1874 in Cocker-moath had impressed the writer with the conviction that, in order to prevent the spread of this complaint, it is essential that local sanitary authorities should, under the advice of their medical officer, have the full statutory power: 1. To fine the parents or guardians of children attending any school from an infected house; 2. To close all schools, public and private, during such time as their order may direct; 3. To order the disinfecting and lime-washing of such premises. He also considered that all dame-schools and other schools, public and private, should, in regard to all matters affecting health, stand to the local authority precisely as lodging-houses and slaughter-houses do; and that it should not be lawful for any school, public or private, after the passing of a statute to that effect, to be opened without a certificate signed by the Chairman of the Local Authority, defining the number of children to be accommodated in such school, and otherwise approving its general sanitary arrangements. The paper strongly urged the Association to use its influence, in order to obtain these additions to sanitary law. These recommendations were illustrated by reference to the epidemic of scarlet fever in Cocker-moath alluded to above. The town had a good sanitary character, being well situated and having a good system of sewerage and a faultless water-supply. There were but two deaths in the year from typhoid fever, one from typhus, and nine from diarrhoea, five of which occurred in the workhouse. There were two deaths of adults from diphtheria, one in a house saturated with scarlet fever poison, and the other that of a butcher living near a slaughter-house now closed. All the other slaughter-houses were well kept, being under frequent inspection. Not a single fatal case of scarlet fever, and very few of illness, were found amongst adults; indeed, out of thirty-four deaths, only four occurred under one year of age, the remaining thirty being between the ages of two and seven and a half years. It seemed clear, therefore, that the disease did not follow the track of any known sanitary defects, and that children, not young infants, were the sole objects of its attack. It was admitted that the health of children is a test of general hygienic conditions; but not to that degree that any such conditions are known which mark out children exclusively as their victims. Public conveyances and pawn-shops were kept under rigorous oversight, and were in no case believed to have been the means of propagating the disease. The difficulty of sending young children to a hospital for infectious complaints was felt. The fact that this cannot be done in many cases without sending the mothers also, proves that this is not quite the kind of separation to be sought in dealing with this complaint. Regarding this difficulty, and the age of the sufferer from scarlet fever, what is rather wanted is the prevention of the assemblage of children in all schools, especially public schools and dame-schools. In the new code of regulations published by the Education Department in 1874, there is a clause, page 6, specifying that, "if a school have closed during the year under medical authority, on account of a local epidemic, a proportionate reduction is made from the number of meetings and attendances required", for the purpose of a money capitation grant. If this provision exist, why not the power authoritatively to make use of it? and if there is the power to close public schools, why not private infant schools also, whose sanitary condition is usually much worse?

Is Enteric Fever spontaneously Generated. By CORNELIUS B. FOX, M.D., Chelmsford.—The author remarked that the question of paramount interest and importance to all engaged in the practice of the highest branch of the profession, namely, preventive medicine, has been one which seems to have divided the most distinguished physicians into two parties, one section giving an affirmative, and the other a negative answer. Sir William Jenner, in an excellent address delivered before the Clinical Society on January 12th, 1875, pointed out, whilst discussing the etiology of the fever, that the best mode of settling this much debated query would be to study every isolated case occurring in out-of-the-way country places. Dr. Fox, as medical officer of health over the central, eastern, and southern portions of Essex, had, with this object in view, investigated thoroughly during the past two years every isolated case in his district, many parts of which are only connected with the outer world by the most primitive methods of communication. He recorded a summary of 27 isolated cases in this extensive area, which he has, in a sceptical frame of mind and animated with the sole desire of ascertaining the truth, carefully subjected to an exhaustive scrutiny. Of these 27 cases of enteric fever, three were clearly traceable to pre-existing ones. He divided the remaining 24 into two classes—the “doubtful”, and the “decidedly untraceable”—and placed 16 under the former, and 8 under the latter heading. The “doubtful” class comprised those respecting which there was a shadow of a doubt. Details were given of two of the most interesting of the eight “decidedly untraceable” cases, namely, the outbreaks of Asheldham and Langford. In the first, the apparent cause was excremental pollution of water, and in the other an excremental pollution of air. The Langford outbreak was one of the most striking cases that had yet been made public, showing the strongest probability of the development of the fever from faecal fermentation, all other possibilities of origin having been eliminated. The arguments which had been employed by both the parties of the controversy were examined and discussed, the reply of those believing in the spontaneous origin of the fever to the principal argument of their opponents being considered unsatisfactory. The researches of Chauveau, Burdon Sanderson, Beale, Klein, Bastian, and Hallier, the theory of the omnipresence of typhoid germs, the views as to the dissemination of the disease by other articles of food besides milk, and the suspicion of a connection with the consumption of meat from fevered or diseased animals, were only briefly alluded to; the object of the author being to limit himself strictly to the point raised by his question as presented to the public health physician in his work in rural districts. The experience of Dr. Fox tended to show—1. That enteric fever is sometimes spontaneously developed; 2. That it spreads by contagion in the overcrowded dirty dwellings of the poor, whilst it is rarely communicated from the sick to the healthy in capacious, airy houses where cleanliness in all things is the rule; and 3. That the immunity in the latter case is ascribable to the prevention of air, water, and food pollution by the poison, and to the dilution of the poison, and perhaps its destruction by the natural or artificial disinfectants, if the air be impregnated therewith.

Typhoid Fever in the Isle of Skye. By JAS. BROWN, L.R.C.P., Uig.—The object of the paper was, without entering into any description of the symptoms or treatment of typhoid fever in Skye, to expose at least two evils, which were asserted to be the causes of the frequent outbreaks there. After showing that the outbreaks could not be attributed to bad water, since the water in Skye was excellent, the author asserted the two chief causes to be: 1. The almost universal habit among the crofters of lodging their cattle under the same roof as themselves; 2. The scantiness of sleeping accommodation, large families being crowded into two, and sometimes one, apartment. Besides these evils, there was the practice of keeping piles of manure in front of the cottages, and having peat-fires in the centre of the room, with no means of egress for the smoke save the door and window, and a small hole in the roof. The difficulty of remedy was the tenacity of the islanders to old customs. The remedy suggested was to remove the cattle, and lodge them outside, by which an additional apartment would be at once available for the accommodation of the family. In most of the cases of typhoid fever, a tendency to relapse was observed, which was attributed to the constant presence of the exciting cause—impure atmosphere. The lungs were frequently attacked in these cases of relapse, and great discomfort was, of course, occasioned by the foul atmosphere. Again, owing to scantiness of accommodation (in evidence of which the remarks of Lord Young in the late Snizort case at Inverness were adduced), isolation was impossible; and the fever could not be confined to only one or two members of the family. The paper concluded by declaring the readiness of the proprietors to afford every facility for the erection of separate dwellings for the cattle. The remedy would be inexpensive, owing to the abundance of stone, the only considerable expense being the roofing of the houses.

On a Village Outbreak of Enteric Fever traceable to a Spontaneously Polluted Water-supply. By DAVID PAGE, M.D., Kendal. In December and January 1874-5, a sudden outbreak of enteric fever took place in Staveley, a village of Westmorland, midway betwixt Kendal and Windermere. Twenty-five attacks and four deaths, the cases being well marked, and, with three exceptions, of a severe type, were recorded in connection with the outbreak, which, in its chief extent, fell with remarkable incidence upon those houses dependent for their water-supply upon a rivulet flowing through a portion of the village. Although subject to almost constant pollution from drains and gutters at various points above the houses referred to, the water of this brook had been used with impunity for years. At the beginning of November, an elderly man came from Kirkoswald, in Cumberland, where enteric fever had recently prevailed, ill of the fever, and was laid up in one of a row of seven cottages situated hard by the edge of the brook, some 800 yards higher up its course. He died on January 9th, and, during his illness, there was positive evidence of the discharges having been thrown into the stream. Between November 28th, the date of the next case, and January 21st, out of forty-two families who either habitually or at times drank the water, thirteen, or nearly one-third, were attacked with typhoid fever. Two incidents of peculiar value, from the clue they afforded to the determination of the incubation-period of typhoid fever when spread by means of a specifically contaminated water, happened in the progress of the outbreak. On November 14th, a girl, whose parents resided in one of the houses by the edge of the stream, came home on a short visit from a farm-house in the valley of Longsleddale, seven miles away. She returned to the farm-house on the evening of the following day, and, on December 2nd, was seized with typhoid fever exactly eighteen days afterwards. Her brother at home in Staveley was similarly seized on December 9th. Both were severe attacks. In the other instance, a pump, which had hitherto been kept in working order, in spite of the intense frost of December, was frozen hard on the night of the 29th. The nearest pump was 160 yards distant, and several families resorted to the stream. Out of seven who used the water, four were attacked on January 10th, one on the 11th, and one on the 12th. The pump was thawed on January 1st, so that the use of the water was limited to a couple of days; besides which, in each instance, it was averred that the supply had been taken on one day only from the stream. Calculated from the earlier date or the later, the period of incubation in these six cases would be from ten to fourteen days. The cessation of the outbreak was coincident with the alarm created by these nearly simultaneous attacks, which led to the abandonment of the stream for the time, the last case referable to the use of water from that source occurring on January 21st. In three families only of the thirteen did multiple cases occur; viz., in two, two cases respectively, and three cases in the third. Of the eighteen cases directly traceable to the water-supply, three only were adult males, the rest being women and children. As the male population were chiefly employed in the bobbin-mills in the neighbourhood, their immunity might be in part explicable by their greater absence from home. Regarding the remaining seven cases of the twenty-five, three were solitary cases. One was that of a woman who had occasionally waited upon one of the other sufferers; the other two lived outside the village, under circumstances which excluded any connection with local sanitary defects; but both had been in the habit of frequenting the village, and might in that way have contracted the infection, although it was impossible to trace its origin in this direction. The other four cases occurred in the farm-house in Longsleddale, to which the fever had been brought by the girl whose case was mentioned. The cases were severe; two children and two adults were attacked, two of the cases ending fatally. There were no local circumstances which could in the remotest manner account for the spread of the fever, inasmuch as the water was derived from a spring issuing from the rocky hill-side above the house, and there was strong evidence to show that the manner of infection was by the actual swallowing of solid particles of excreta. In conclusion, the author cited several examples of the occurrence of typhoid fever under conditions which illustrated the difficulties in the way of making sure that the negative evidence upon which the question of the spontaneous origin of the fever necessarily depended was complete evidence, and without prejudice to either side offered a contribution of facts to the etiology of the disease. 1. Water polluted with excremental matters had been used with immunity for years. 2. This water, on the addition of the dejections of a typhoid patient, became the carrier of the contagion. 3. The incubation-period is not necessarily shortened, but may even be of prolonged duration, equally in the spread of typhoid fever by the agency of water as of air.—Dr. BRITTON (Halifax), from numerous cases that had occurred in his neighbourhood, had come to be of opinion that enteric fever might arise spontaneously.—Dr. CARPENTER (Croydon) said they wanted more facts

before they could determine as to the spontaneous or non-spontaneous origin of typhoid fever. Some time ago, he had a large number of cases, the sources of which he was unable to find, and he then came to the conclusion that they had arisen *sub sponte*, although that scarcely represented the state of his mind at the present time. The germs of disease might have lain dormant for many years in the situations where they were placed. He remembered a practitioner in Oban informing him of some such cases occurring in Mull. A proprietor of that island ordered the removal of some old houses which had lain in a state of ruin and uninhabited for many years. Eight men were employed in digging the walls, and every one was attacked with small-pox, the germs of that disease having lain in these houses all those years. Now, if the germs of small-pox had lain dormant for many years, why not those of typhoid fever? As to the incubation of typhoid, he knew that in the Croydon outbreak it varied from five days to over two months. That outbreak in Croydon, during which there were 500 cases, he had traced to the effects of an intermittent supply of water coming after a constant supply. A hydrostatic vacuum was thus caused, and all the noxious gases from the surrounding soil were absorbed by infiltration.—Dr. ROSS (London) ascribed much of the typhoid in large towns to emanations from cow-houses, cesspools, and walls soaked in sewage which had escaped from broken drains or overflow-pipes.—Dr. MARSHALL (Greenock) said that one cause of enteric fever had, he thought, been overlooked. In certain states of health, the enteric system of the patient itself created poisons which might poison the patient. Gases or germs might be germinated in the body in certain states of health from the low state of digestion, and a sudden exposure to cold might set this poison-manufactory agoing.—Mr. STEPHEN ALFORD (London) said that, in the high parts of London, typhoid fever was constantly sent up the drains from the low districts, the flow of water downwards driving the noxious gases upwards. The question of trapping drains thoroughly was a much more important one than the spontaneity or non-spontaneity of enteric fever.—Dr. A. P. STEWART (London) said that it was a curious fact that many of the most destructive epidemics of typhoid that had occurred had not arisen in crowded cities, but in rural districts, where there was pure air and seemingly plenty of pure water. He narrated the case of a friend of his, who went to inspect a boarding-school previously to sending his two daughters thither. Everything he liked well, but the drain, which passed within three feet and a half of the well. When he spoke of this, he was informed that the water of the well had been drunk for years, and that no disease had ever occurred. To satisfy himself, he twice had samples of the water taken and analysed, and it was found to be perfectly pure. He sent his daughters to the school; but, in two or three weeks, typhoid fever broke out, and of four deaths which occurred one was that of his youngest daughter. The water of the well was then found to be putrid from the sewage which had found its way into it.—Mr. BARTLETT (London) mentioned that he had analysed the water in his house nine times before he found a trace of contamination; and this contamination had been caused by what Dr. Carpenter had pointed out: the hydrostatic vacuum, resulting from an intermittent supply, drawing in noxious gases.—The PRESIDENT, in bringing the discussion to a close, referred to the interesting and important nature of the subject. However different opinions might be held as to the spontaneous origin of enteric fever, there was one thing they could all practically do, whether as medical officers of health or in private practice; viz., war against filth in all its forms. By taking as a text, in their broadest sense, the words of the prophet, "Wash and be clean", they could do a great deal to prevent the spread of enteric fever and all other kinds of infectious diseases.

An outbreak of Enteric Fever in the Village of Killamarsh, Derbyshire. By A. MACKINTOSH, M.D., Chesterfield.—Dr. Mackintosh sketched the geographical and geological features, and the sanitary conditions of the locality, and then gave a history of the outbreak. He believed it to have arisen *de novo* through drenching sewage-water and inhaling sewage-emanations. He could not observe evidence of contagion in any case.

On the Propagation of Typhus Abdominalis. By EDWARD WATERS, M.D., Chester.

On the Ages at Death from Small-pox, Measles, and Scarlatina. By J. W. TRIPE, M.D., London.—The calculations were made from 2,516,468 deaths from all causes in England during the five years 1868-72, and embraced 48,435 deaths from small-pox, 47,341 deaths from measles, and 112,412 deaths from scarlatina. The deaths were given for every year of life under 5; then for 5-15 years, 15-25, 25-45, 45-65, and 65 and above. Dr. Tripe showed that, out of each 1,000 deaths from these diseases, 149 occurred from small-pox, 200 from measles, 65 from scarlet fever, during the first year of life; that, in the second year of life, the mortality from small-pox decreased to 53, whilst that from

measles increased to 376, and from scarlet fever to 147, in each 1,000 deaths from these diseases. Up to five years of age, the mortality from small-pox remained about the same in each year of life, whilst that from measles much increased, and that from scarlet fever increased in the third year to 165 per 1,000, and then decreased to 120 in the fifth year. The proportions of deaths from these diseases during the first five years of life were as follows: from small-pox, 350; from measles, 920; and from scarlet fever, 646; whilst from all causes the rate was 407 in each 1,000 deaths. Above five years, there were, therefore, 650 deaths from small-pox, only 80 from measles, and 454 from scarlet fever, per 1,000 at all ages. This remarkable difference was attributable, in Dr. Tripe's opinion, to vaccination affording but an imperfect protection against an attack at later periods of life, as compared with an attack of the disease itself. Dr. Tripe thought, however, that even if an individual should not have had any of these diseases, he became less susceptible to infection as age increased; and that this diminished susceptibility occurred very early in life as regards measles, later on (above 15) as regards scarlet fever, whilst it did not take place for small-pox until about 40 years of age. The extraordinarily small proportion of deaths above 5 years from measles, above 15 from scarlatina, and above 45 from small-pox, formed the data on which this opinion was founded.

On some Points connected with Cottage Hospitals. By JAMES COOPER, F.R.C.S. Ed., Cromer.—The following questions were discussed in this paper. Are cottage hospitals likely to injure the old established hospitals? To what extent should they be self-supporting? In what way should they be provided with medical attendance? Should medical men give their services gratuitously?

Thursday, August 5th.

GROUP B. MEDICAL LEGISLATION; METEOROLOGY AND DISEASE; STATISTICS, ETC.

President's Address.—The President, the Right Hon. LYON PLAYFAIR, M.P., delivered an address, which was published at page 173 of the JOURNAL for August 7th.

On the necessity of Legislation for the Control and Treatment of Insane Drinkers. By A. PEDDIE, M.D., Edinburgh. [See p. 253.]

On the Control and Restraint of Habitual Drunkards. By G. F. BODINGTON, M.D., Kingswinford. [See p. 255.]

Sir ROBERT CHRISTISON, after thanking Dr. Peddie and Dr. Bodington for their papers, said he desired to submit a resolution. A well considered resolution on this subject, brought forward under the auspices of the Association, ought to have great weight. Therefore they should be careful what they said, but at the same time very resolved to carry it out. He moved:

"That excessive intemperance is in many cases a symptom of a special form of insanity, which requires special treatment, with a view, first, to the recovery of those affected, and second, to the protection and advantage of them and of society. That in the present state of the law such treatment is not attainable, and that it is desirable that legal provision should be made to render it attainable."

The subject, he said, was one which occupied his attention at a very early stage of his professional career, in consequence of his occupying the Chair of Medical Jurisprudence for ten years. At that time he lived with his brother, who was a member of the Scotch bar. At their common table, he used to meet several of the most eminent members of the Scotch bar, and there was not one of these gentlemen who did not scout the idea of putting habitual drunkards under restraint. What they urged was, that they could not distinguish between a habitual drunkard who was suffering from disease and one who was suffering from the effects of vice. But in course of time several of these gentlemen came to see instances of habitual drunkenness in relatives and friends. Gradually conviction stole upon them; and he believed that now, among Scotch lawyers generally, there was a feeling that some sort of restraint should be placed on habitual drunkards. Recently he had charge, along with Dr. Peddie, of the representation which was being got up by Mrs. Dalrymple for presentation to the Home Secretary, and in the course of a day and a-half he got that document signed by the professors of Metaphysics, of Moral Philosophy, of Political Economy, and, what he considered of more consequence than all these, the professor of Scotch Law—[hear, hear, and applause]—and not only by him, but by a former Solicitor-General for Scotland, now Dean of the Faculty of Advocates. [Applause.] A great deal had been said in print and in the papers as to the difficulty of distinguishing between habitual drunkenness the result of vice, and habitual drunkenness the result of disease. He suspected they must acknowledge that this unfortunate condition was not very often purely the result of disease. He had seen it so, but by far the greater number of cases arose in

consequence of the persons having gradually yielded to the vice. They must consequently face this fact—not try to evade it—and show the Government and the Legislature that the cases in the end were not different—that there was no difference in their features and in the results to the drunkards themselves, to their families, and to society at large. When, in the little society to which he had alluded, he was asked, “How are you to distinguish between moderate excess and such excess as you consider bordering on insanity?” his reply was, that he was always very cautious about giving definitions. He was once asked in the witness-box to give a definition of insanity or unsoundness of mind. He knew very well that this was but the introduction to a dexterous cross-examination, and he replied that that was a problem on which twelve judges in England had exercised their ingenuity and had failed; that many men had written on the subject and failed; that, therefore, it was not to be expected that he should succeed; but that, if counsel would bring a case before him, he should not only satisfy himself, but satisfy his questioner, whether it was a case of insanity. [Laughter and applause.] His reply to the doubters on the question under discussion was the same: Bring before me a case, and I will tell you whether it is to be accounted for by disease or not. He was rather inclined to borrow a name from the pure English, and call this *drink-craving*; that was the real essence of the thing—the man had such a craving for drink that he could not resist it. It would, he dared say, be often difficult to distinguish, but they could always decide on examination. [Hear, hear.] Then, if they did make a blunder, and introduce among drink-cravers a man who was not so bad, was any harm done to him? No, but a great advantage, for they took him in time; no harm was done to his friends, whom he was ruining, and no harm to the public: in fact, it was one of the extraordinary cases where an error could do no harm. [Hear, hear, and laughter.] He hoped the Association would adopt the resolution, and go forward to the Legislature. They had a righteous cause; and, in his long experience, there never had been any right thing, notwithstanding all difficulties at first, that was not eventually carried in the House of Commons if they could get some zealous member to bring it forward. [Applause.]

Mr. HUSBAND (York) seconded the resolution. As medical men, they did not require to be satisfied that there were such persons as habitual drunkards, but the public mind and the Legislature required to be educated on the point. There was no one who had had large opportunities of practice but must have felt this to be one of the greatest difficulties of his professional life, and more especially when women were the subjects of the vice. He never knew an intelligent medical man who had any doubt as to the propriety of placing such people under restraint. He hoped that on some member of the House of Commons the mantle of Mr. Dalrymple would fall, and that a proper measure would ere long pass. [Applause.] The Council of the Association were, he said, taking steps in the matter, and at next annual meeting it was hoped they would present a full report. [Applause.]

Dr. MORRIS (Baltimore), as a trustee of an institution for receiving inebriates in America, said Americans were not a people who would bear restraint very well, and it might be supposed that they would be the last in the world to submit to a law of this kind. But in several States there were such laws for the restraint of drunkards—laws apparently stringent, but not actually so in operation. When any man or head of a family was known as a habitual drunkard, and any two respectable householders went before a judge and declared that, the man was committed to the inebriate asylum, as it was called, and kept there for a certain term—generally a year. The very fact of the existence of the law was a deterrent to drinkers. He would say, Do not let this bugbear of restraint of personal liberty have any weight with you, for we Americans, who know what liberty is, or at least think we do, do not find that it interferes with us. [Applause.] The institution to which he referred took in three kinds of inmates: first, those who paid nothing; second, those who paid a moderate sum, such as working classes could afford, from 18s. to 25s. a week; then the educated and wealthier classes, who paid a fair price. The original institution was too near the city, and patients frequently strolled thither and got spirits. Now they had bought a farm five miles from town, and they intended to build a new institution on the cottage system, and to classify the inmates. The institution worked admirably; it was not self-supporting, but they got a small contribution from the State and subscriptions from the public. They could not make an absolute cure under two years, for it required that time before the molecular structure of the brain tissue, destroyed by habitual drinking, was entirely reconstructed. They had thirty-three per cent. of cures, and when a reconstructed and rebuilt clerk or merchant left the institution and went about amongst his friends, the merchants put their hands in their pockets and paid for that reconstruction by subscriptions.

Dr. JOSEPH ROGERS (London) said it continually happened that persons were sent to the poorhouses in England, Ireland, and Scotland, who were suffering simply from the effects of drink. After a few days they recovered, and as soon as they were able to crawl over the door they demanded and got their liberty. He thought power should be given to enable the authorities to detain such habitual inebriates. He thought that there were too many brewers and publicans in the House of Commons. [Applause.] That was the true explanation why no proper redress could be got from the present Parliament.

Dr. J. C. REID (Newbiggin) said that one of the evils of the Scotch Lunacy Act of 1843 was to do away with the power which the Scotch had possessed from time immemorial of sending their drunkards to one of the islands in Loch Lomond. [Hear, hear.] All the talk as to the restraint of drunkards interfering with the liberty of the subject was balderdash. The liberty of the subject was interfered with from the date of his birth. [Laughter.] One could not be born but an Act of Parliament stepped in and said he must be registered; then he must be vaccinated by order of Parliament; and when he grew older, and wanted to take a sleeping partner into the concern, he could not be married in England after twelve o'clock. [Laughter.] What was worse still, he could not be decently laid away in his coffin without an Act of Parliament interfering with the liberty of the subject. But the law was too lenient, and would not interfere with the liberty of the subject who was an enemy to himself, to his family, and the public weal. [Hear, hear.] He hoped the time was not far distant when the law in regard to chemists and doctors would be made to apply to publicans. If a chemist sold poison and a person died, he was held responsible; and if a surgeon made a mistake, he was held liable in an action for malpractice. Why should the publican be freed from the same liability? Make the publicans responsible, and there would be far fewer unhappy homes. [Applause.]

Mr. LIDDLE (London) believed the love of strong drink was engendered very much among certain classes by the miserable condition of their dwellings and by overcrowding.

Dr. A. P. STEWART (London) said great harm was done by the statements made in regard to the identity of habitual drunkenness and disease. If they went before Parliament on the ground that it was a disease, they took up perilous ground indeed. If they said a man was a maniac, they would be told to send him to a lunatic asylum; and if they did that, more harm would be done than good. He approved of Sir Robert Christison's proposal to invent a new name. For nearly three hundred years the power, originally given by James I, had existed of interfering with the liberty of the subject because he was drunk; that was, the magistrate imprisoned a man for a day or two for being drunk. Let the principle be extended to continued restraint, and they would touch the evil.

Dr. CARPENTER (Croydon), in reference to the committee appointed by the Council of the Association to report on the subject, said that Committee would be glad to get all the information possible, and he hoped members would send in all they could.

The PRESIDENT said he had acted on the Committee upon Habitual Drunkards with his friend Mr. Dalrymple. He entered the Committee in an extremely doubtful state of mind, his feeling being hostile to the proposal; and this he had told Mr. Dalrymple. He then thought they must look chiefly to education and diffusion of knowledge among the people as the means of preventing drunkenness, and that restraint was a very questionable mode of procedure. But he confessed that the evidence brought forward led him to a different conclusion before the labours of the Committee were closed, and he signed the report advocating certain forms of restraint as being necessary in the case of habitual drunkards. It was because the public were not sufficiently educated on this matter, and because they had not shown sufficient interest in it, that the House of Commons was unable at present to legislate. The Association would do great good by the resolution it might adopt, but that was not sufficient. The members must educate the public, and the House of Commons must feel that it would be supported by the public in legislating on the subject. The present mind of the House of Commons was, that there were great difficulties connected with the subject, and that they must look these difficulties in the face. But he was afraid the House was like the Highland clergyman of whom Dr. Norman Macleod used to tell, who said that, whenever he saw a difficulty, he looked it fully in the face, and then passed by on the other side. [Laughter.] If, however, the public took up the question for themselves, the House of Commons, finding public feeling supporting them, would soon pass a measure. [Applause.]

The resolution was then carried by acclamation.

Notes Made in Reference to Education. By HENRY J. YELD, M.D., Sunderland.—In his introductory remarks, Dr. Yeld pointed out that the legislation of recent years has placed the children of the working

classes in a much better position, as to the sanitary and other conditions under which their education is carried out, than those of the middle classes, and affirmed that, in the matter of education, there has been class legislation, and not legislation for the general welfare of the community. The object of this paper was to bring prominently before the public the unsanitary and other conditions under which many thousands of the children of the middle classes and upper section of the lower classes are educated. For this purpose, he first stated what may be considered as the necessary requirements for healthy and efficient education: 1. The school buildings should be perfect in their sanitary arrangements, and in every other respect; 2. Education should be physical as well as moral and mental; 3. To meet this requirement, a playground should be attached to every school; 4. Persons engaged in tuition should possess a certificate of their competency to act as teachers, and should have some knowledge of the laws of health. After a few remarks upon each of these points, he proceeded to show to what extent the schools now existing throughout the country, for the education of the children of the middle classes, fail to meet these requirements, taking the hundred private schools in the borough of Sunderland by way of illustration. On inspection, only twelve of the hundred were schools specially built for the purpose of education, the remainder being rooms in dwelling-houses used as school-rooms; thirty schools were overcrowded and defective in their sanitary arrangements; while, with regard to their ventilation, in 90 per cent. the only means of ventilation was by the windows, and in most instances by a single window, there being no special means provided whereby the air might be kept pure. To several schools there was no water-closet or other accommodation attached, and only five schools had playgrounds adjoining. Lastly, with a view of placing these schools on a more satisfactory basis, and more in accordance with the spirit of the age, he proposed that an act of Parliament be passed or order in Council (if sufficient) be issued, providing: 1. For the registration of all persons acting as teachers throughout the country; and that, from and after a fixed date, no person be registered without producing a certificate of competency from an educational examining board. 2. For the registration of all schools, not directly or indirectly under the control of the Privy Council, at the office of the local authority. 3. That, at the time of such registration, a certificate shall be produced, signed by the surveyor and medical officer of health of the local authority, stating that the premises proposed to be registered are in every way adapted for the purpose of education. 4. That the number of children allowed to be educated in such school shall be fixed by the local authority. 5. That the medical officer of health, or other officer of the local authority, shall have power to inspect such schools, from time to time, at any hour between 9 A.M. and 5 P.M. 6. That with a view of encouraging the erection of efficient schools, the Privy Council shall have power to make grants of money towards the erection of such schools on such conditions as may be determined upon.

The Anomalies and Deficiencies of Parochial Medical Relief in Scotland. By JOSEPH ROGERS, M.D., London.—Dr. Rogers began by remarking that, in 1869, a Select Committee of the House of Commons was appointed for the purpose of inquiring into the working of the Scotch Poor-laws. This Committee, of which Mr. Crawford was chairman, collected during that year and the following a voluminous mass of evidence. In the year 1871 they agreed upon their report, and in the following year Mr. Crawford brought in a bill, which was based upon the Committee's report, but was, however, lost upon the second reading. Since the rejection of the Bill, no steps had been taken to remedy the evils that were shown to exist; and, as an amendment of the system of medical relief was embraced in that Bill, it occurred to him that he might revive the subject. After giving a sketch of the systems of Poor-law medical relief in England and Ireland, he pointed out that in 1873 the gross poor relief in Ireland amounted to £927,730, or 3s. 5½d. per head of population, although that sum included an outlay of £155,362 spent on medical relief; this latter amount constituting the sixth part of the total outlay, for a population of 5,344,151; whilst in the same year there was expended on the poor in Scotland £873,075 for a population of 3,360,068, or 5s. 2½d. per head of population, of which sum only £34,000 was expended on medical relief, or in round numbers about the twenty-sixth part, against the sixth part expended in Ireland. Of this sum of £155,362 spent on medical relief in Ireland, £24,279 went for medicines and medical appliances: if a proportionate sum were expended in Scotland, the outlay for medicines alone would cost the parochial medical officers £15,264. To make the matter more clear, he contrasted certain Irish with certain Scotch towns. Belfast has a population of 202,641; the medical relief in 1873 cost £4,078; gross relief amounted to £30,042. Edinburgh, with St. Cuthbert's combination, has a population of 209,917; it spent in medical relief in the same year £1,558 5s. 2d., or not half that of Belfast, while

the poor relief expenditure was £52,455, or £22,000 more. He also gave the following tables as showing contrasts.

	Population.	Medical Relief.		Gross Relief.	
		£	s. d.	£	s. d.
Glasgow	170,553	2,377	0 0	40,875	0 0
Barnhill	234,115	2,057	0 0	43,623	13 2
Dumfries	86,527	504	12 11	14,071	8 3
North	72,079	2,100	0 0	8,207	0 0
Armagh	72,384	1,638	0 0	6,480	0 0
Greenock	50,795	721	19 4	9,668	0 0
London	58,758	1,100	0 0	4,747	0 0
Aberdeen	47,077	246	6 10	12,512	16 0
Dungannon	45,990	1,069	0 0	4,587	0 0

The author next inquired whether any proof could be adduced showing the benefits arising from finding the medicines and paying a reasonably fair stipend for services. Bonhill, Dumfries, has a population of 9,408; the medical officer gets a stipend of £78 : 19 : 7; all medicines are found. The poor relief amounts to £1,597. In the adjacent parish of Cardross the population is 7,080; £46 : 8 : 2 only is paid for medical relief, out of which medicines have to be found; the poor-rate amounts to £1,390, or only £200 less than in Bonhill with 2,328 more people. In Cardross, last year, the poor relief had risen up to £1,469, nearly £100 in excess of Bonhill, medical relief remaining as before. As an instance of great disparity in payments for services, he quoted Old and New Deer, Aberdeenshire. New Deer had a population in 1871 of 4,853, of which number 152 were registered poor and their dependents, and 50 were casual poor and their dependents, total 202, with 7 lunatics. Medical relief cost £30, medicines being found by the medical officer; the total gross relief amounted to £803 : 9 : 2. Of this number of paupers 7 either died or were otherwise got rid of in the course of the year. Old Deer has a population of 5,085; there were 257 registered poor and dependents, 94 casual poor and dependents, and 24 lunatics: of this number 30 died or otherwise disappeared; the total poor relief was £1,624 : 10 : 7. Although the population, pauperism, gross relief, sickness, and mortality, was so much greater than in New Deer, the stipend out of which everything had to be found was only £9 : 10 : 1 more than in New Deer. He would ask, what chance does there exist that the sick poor in Scotland get proper medicines when they have to be supplied from such stipends? The system of medical relief in Scotland had a deteriorating moral effect on all connected with it. Referring to the enormous extent of some of the rural districts, he remarked that the whole of Sutherlandshire, with an area of 1866 square miles, and a population of 26,000, is divided into five medical districts—Assynt, Eddrachillis, Golspie, Helmsdale, and Tongue, including several minor parishes. The district of the medical officer of Assynt extended 14 miles in one direction, and 28 in the other. The whole sum paid for medical relief in this county amounts to £595, out of which horses and drugs have to be found. He could not give much information as to the interior arrangements of the various poorhouse hospitals; but if the description given of Barnhill Poorhouse, Barony—in a very able and evidently truthful report, forwarded to the House Committee by the medical officer—were typical of their general condition as receptacles for sick people, it was clear that there existed as great a necessity for a sweeping alteration in their arrangements, as he had shown to be necessary in the treatment of the out-door sick.

Mr. ERNEST HART (London) moved:

“That in the opinion of this Section the interests of the sick poor of Scotland would be furthered and the system of poor-law medical relief would be placed on a more satisfactory footing, if the following measures of reform were adopted universally throughout Scotland—viz., that the cost of medicines be supplied by every Parochial Board, exclusive of the salary of the medical officer; that medical officers be removable from office by the Board of Supervision only; that the Parochial Boards be required to superannuate such medical officers at the proper time; and that the Parliamentary grant in aid of medical relief be placed on the same footing as in England and Wales. That this resolution be reported by the Chairman of this Section to the general meeting of the Association; and that the aid of the Association and of the Scottish Branches in particular be requested in support of an effort to give legislative effect to the above recommendations.”

Nearly all the defects pointed out in the Scotch Poor-law had, he said, been removed in Ireland and England; and although, on the surface, such a measure appeared to involve greater expenditure, in the long run it promoted economy in health, life, and money.

Dr. A. P. STEWART (London) seconded the resolution, which, after some remarks from various Scotch Poor-law medical officers condemning the present system, was adopted unanimously.

On the Steadiness of the relations between Weather and Mortality in London. By ARTHUR MITCHELL, M.D., F.R.S.E., Edinburgh.—The object was to show that the distribution of deaths from many of the particular causes of death over the different weeks of the year, as deduced from the records of a long series of years, was substantially the same as that for each quinquennial period, or for each single year, composing the long series. This was shown to be true even of epidemic diseases like small-pox and scarlet-fever. It was further shown that such divergences as occurred in the distribution of the deaths over the weeks of the year, between one year and another, or one period of years and another, answered to corresponding divergencies in weather. Deaths from diarrhoea, which were greatly under seasonal influence, were used to illustrate this. The general conclusion was, that the relation of deaths from many diseases to weather was so steady as to constitute a feature in their natural history.

The Influence of Weather on the Death-rate from different Diseases and at different Ages in London and in twenty-four Large Towns of Great Britain and Ireland. By ALEX. BUCHAN, A.M., F.R.S.E., Edinburgh.—This paper was illustrated by a large series of diagrams showing by curves the weekly mortality of London from the more prominent diseases, and the weekly mortality of the other large towns from all causes, from diarrhoea, and of infants under one year of age. The results for all the large towns show during the winter months an excess above the average mortality. As regards the English towns, the excess is greatest at Norwich, Wolverhampton, and Nottingham; and least at Bradford, Leeds, Salford, and most other towns in the north. In Scotland, the winter excess is greatest at Aberdeen, and least at Leith and Greenock. At Dublin, the largest monthly mortality, 22 per cent. above the weekly average, occurs during February and March, being from a month to six weeks later than the time of the maximum of the English and Scottish towns. In all the English towns, the minimum mortality of the year is in the spring months, the amounts below the averages of each town being greatest at Norwich, Wolverhampton, Birmingham, Leicester, and Nottingham. In Scotland, on the other hand, autumn is the healthiest season. In Glasgow and Edinburgh the deaths fall about 20 per cent. below the average in the month of September. During the period of high temperature in summer, every one of the large towns of England shows an excess of deaths above the average, with the single exception of Bristol, at which place, while there occurs an increased mortality at this season, it only comes near to, but never quite reaches, the average. Taking any two consecutive weeks which indicate the highest mortality, the excess per cent. above the average is for Wolverhampton, 6; Manchester, 8; Portsmouth, 12; London, 14; Hull, 20; and Leicester, 47. The excess above the average at Leicester is thus eight times as great as that of Wolverhampton. In Scotland, no town exceeds its average during the hottest weeks of the year; but, on the contrary, the death-rate everywhere is under the average, and, in most cases, very considerably so. As regards London, it has been shown by Dr. Arthur Mitchell and the author (*Journal of Scottish Meteorological Society*, vol. iv, pp. 229 and 238), that if the deaths of infants under one year of age be taken from the total mortality, the summer excess disappears from the curve; and, it is further shown that, if deaths from diarrhoea be deducted from the whole mortality, the summer excess disappears equally as in the former case. These results hold good for every one of the large towns for which the required data have been published. Looking, then, at the large towns of England, Bristol has the least excess of infant mortality, the highest average of any week being only at the rate of eight calculated on an annual mortality of 1,000 of the whole population. In London, the rate rises to 10 in the end of July and beginning of August; and in Liverpool it rises to 16, a rate which is also reached by the deaths in Leeds, Hull, and Sheffield, and closely approached by a number of the other English towns. At Leicester, however, it shoots up to 22 and 24 in the second and third weeks of August. The season of minimum infant mortality is everywhere during the spring months in the sixteen large towns of England. The smallest spring mortality occurs at Portsmouth, the smallest summer mortality at Bristol; the largest summer mortality at Leicester, and the largest mortality during the other nine months of the year, at Liverpool. From the beginning of November to the summer solstice, the mortality from diarrhoea is everywhere small, being double, however, in Liverpool and Manchester as compared with London and Portsmouth. The following is a list of all the large towns of Great Britain arranged in the order of the greater or less prevalence of fatal cases of diarrhoea during July, August, and September, the figures being the average weekly death-rate for the thirteen weeks, calculated on the annual mortality per 1,000 of the population. *In England:* Leicester, 9.56; Salford, 7.15; Leeds, 7.02; Manchester, 7.00; Liverpool, 6.28; Sheffield, 6.20; Birmingham, 5.78; Hull, 5.56; Nottingham, 5.36;

Norwich, 5.02; Newcastle, 4.61; Bradford, 4.42; Wolverhampton, 4.03; Sunderland, 3.89; London, 3.45; Portsmouth, 2.94; and Bristol, 2.38; *in Scotland:* Dundee, 2.14; Glasgow, 1.90; Greenock, 1.75; Paisley, 1.71; Leith, 1.45; Edinburgh, 1.23; Perth, 1.08; and Aberdeen, 0.96. The summer temperature of the Scottish large towns is several degrees lower than that of the English towns, and we see that every one of the Scottish towns has a mortality from diarrhoea lower than the lowest mortality of any one of the English towns. The diarrhoea mortality of each town is found from year to year to rise proportionally with the increase of temperature, but the rate of increase differs very greatly in different towns. This points to other causes than mere weather, as determining the absolute mortality; and it is the investigation of these causes, which may arise from topographical, social, or sanitary conditions, peculiar to each town, which calls for instant and most serious attention. In order to work out the problem of the relation of the weather and mortality of our large towns, it is indispensable for the comparison of the different towns with each other, that the system of meteorological observation be uniform at all places, particularly as regards the hours and modes of observing the temperature, humidity, and movements of the air, and rainfall; and it is further indispensable that several meteorological stations be established in each of the large towns.

On Deaths by Accident in the Navy and Army. By Inspector-General WM. R. E. SMART, C.B., M.D., Haslar.—The collation of statistics through thirteen years showed, that these stand as 3 in the navy and 1 in the army against .707 in the metropolis per 1,000. The admission for treatment from all causes amounts to 132.9 per 1,000 in the navy against 114.3 in the army; the excess in the former being made up of hurts, which stand as 29.5 in navy to 9.3 in army per 1,000 men. The deaths from this cause are nearly in the same ratio, between 10 and 11 per 1,000, in both services, to the admissions "hurt." The inference was, that slighter injuries are treated among seamen than among soldiers; and that the increased ratio to mean strength or per 1,000 force, 3 in the navy to 1 in the army, is made by the greater number of injuries and not by their greater severity; which is not borne out by comparative lists of recorded injuries of a directly fatal nature, which are strongly against the navy. Reasons for this were assigned. The excess of total mortality in the army per 1,000, 16.6 against 11.6 in navy, is made up by the death-rates of diseases, which stand as 15.3 army against 8.4 navy; showing the greater salubrity of ships than that of barracks and camps. To fill the death-rate by accident of 3 in the navy against 1 in the army per 1,000 men, there fell in battle .16, 1.72 died by drowning, and 1.16 by other accidents; and, in the army, in battle .137, by drowning .426, and by other accidents .435. After stating that medical hygiene had already affected very much in lowering the death-rate by disease in both services, Dr. Smart descanted on the possibility of similar results regarding the death-rate by accidents, and suggested the good that might be anticipated if combatant officers of both the public services were instructed in the laws of hygiene in their colleges and schools.

On the Numerical Ratio of Disease in the Adult Male Community deduced from the Sanitary Statistics of Her Majesty's Customs, London, for the years 1857-74. By WALTER DICKSON, M.D., R.N., London.—The registration of disease is an acknowledged desideratum in public medicine. A more accurate and complete knowledge of the rate of sickness, and its incidence on various classes of the population, would throw light on some important social and economic questions, one of the most urgent of which, at present, is the true position of the numerous benefit societies established by the working classes for mutual aid in sickness, and comprising, according to high authority, four millions of persons, and holding eleven millions sterling of property. Very many of these institutions are known to be in a most unsatisfactory financial condition, in consequence of miscalculation as to the claims which they may be called on to meet. Mortality rates are ascertained with mathematical precision; but the ratio of industrial incapacity, by reason of illness, is as yet but imperfectly known in those classes of the community whom it most interests. The army, navy, police, prison, and Poor-law records do, or might, yield valuable information; but the bodies of men of whom they treat are too fluctuating, and their circumstances too exceptional, to furnish reliable representative data for this purpose. In the sanitary statistics of the Customs' officers of the Port of London will, it is believed, be found a fairly correct estimate of the health-condition of the middle-class, middle-aged male population. They are, for the most part, resident in London, and occupied from eight to twelve hours in daily labour, attended, in most instances, with considerable fatigue and much exposure to the weather. They form a permanent force, leaving it seldom except on promotion, death, or invaliding; and resemble in all essentials the majority of the well-doing industrious section of the community, who have to earn

their daily bread and maintain families in a position removed alike from luxury and from indigence. These officers are all under medical surveillance during their service of thirty or forty years; and the records of their sickness and results have been kept with as much fulness and accuracy as the nature of the subject will allow. Their age ranges from 21 to 65; the mean age at present is 38. Although embracing a limited number, the records extend over so long a period that they may be considered as typical of a large force. The numerical ratios of 28 years (which is equivalent to that for one year of 32,000 men), are, mean daily number incapacitated, 27 per 1,000; admissions to sick-list in year, 700 per 1,000; mean duration of each case, 15.5 days; time lost per man annually, 11 days, exclusive of Sundays, 9.5 days; mortality from disease, 11.5 per 1,060, and from accident, 1.3 per 1,000; in all, the deaths are 12.8 per 1,000; superannuations or invalidings, 8 per 1,000; death and invaliding combined, 21 per 1,000; recoveries so as to resume duty, 979 per 1,000. Of the various classes of disease, the ratio of those of the respiratory organs amounts to 27 per cent. of all the cases, 20 per cent. of the time lost, 11 per cent. of deaths, and 18 per cent. of the superannuations; phthisis yields 1.4 per cent. of cases, 8 per cent. of time lost, 31 per cent. of deaths, and 9 per cent. of superannuation; rheumatism and gout show 14 per cent. of sickness, only 0.4 per cent. of death, but 33 per cent. of superannuation; diseases of the heart exhibit 1 per cent. of cases, 2 per cent. of time lost, 13 per cent. of the deaths, and 1.5 per cent. of superannuations; diseases of the digestive organs give 17 per cent. of cases, 13 per cent. of time lost, 9 per cent. of deaths, and 7½ per cent. of superannuations; diseases of the nervous system amount to 7.5 per cent. of the cases, 9 per cent. of time lost, 9 per cent. of deaths, and 20 per cent. of superannuations, 10 per cent. being for insanity; skin and other surgical diseases give 11.5 per cent. of cases, 10 per cent. of time lost, but hardly any deaths or superannuations. Zymotic diseases occur in the small proportion of 6 per cent. of the whole amount of sickness, and 7 per cent. of the whole mortality; and no instance has occurred in many years of any officer having contracted such illness on board ship, a remarkable proof of the extreme healthiness of the port of London in regard to its vast foreign traffic, and of the satisfactory health of the Customs' force. Phthisis and heart-disease are the most fatal diseases, causing one half of the whole mortality. The former claims 4 per 1,000 men as its annual victims, of the mean age of 41 years. Heart-disease destroys 1.5 per 1,000, at the average rate of 48 years. Accidental injuries constitute 10 per cent. of the cases, 11 per cent. of the time lost, and 9.5 per cent. of the mortality. Drowning causes 4.7 per cent.; fractures, etc., 3 per cent.; and suicide, 1.8 per cent. of the whole number of deaths. These deaths from violence amount in all to the rate of 1 per 1,000 of the force.

On the Mortality of Adolescence. By JOHN BEDDOE, M.D., F.R.S., Clifton.—This paper was founded on a statistical basis, and chiefly on the figures published by Mr. Charles Ansell, junior, of the National Life Assurance Society. The author showed grounds for believing that puberty had an influence in increasing mortality, especially among young females of the upper class, the rates of girls of the lower class and of boys of both classes being less affected; and he touched briefly on some questions of hygiene suggested by these facts.

The Causes of Invaliding among Convicts in the Government Prisons of England. By D. NICOLSON, M.B., Portsmouth.

Tobacco, and its Effects on the Health of Males. By CHARLES R. DRYSDALE, M.D., London.—The author said that the result of a paper by him read at Norwich had shown that, although very many, far too many he thought, eminent physicians and surgeons made use of tobacco, yet none could be found bold enough to say that the practice of smoking, chewing, or snuffing was consistent with health. The population of the British isles used some fourteen millions sterling yearly in the purchase of tobacco, pipes, etc. Nevertheless, there had always been able medical objectors to the *sainte herbe*. The alkaloids contained in tobacco, or in tobacco-smoke, were very poisonous; and, when smoke was taken into the mouth, a portion of such alkaloids dissolved in the saliva, entered the circulation readily enough. Smoke breathed in small rooms, or railway carriages, also poisoned to a certain extent all who inhaled it, whether smoking or not. The first cigar or pipe showed the effects of acute tobacco poisoning, producing nausea, vomiting, hiccough, dyspnoea, prostration, coldness of the extremities, cold sweats, and intermittent pulse. Chronic poisoning by tobacco, the ordinary disease seen in practice, was tested by Blaton, who administered two or three grains of tobacco daily to dogs with their food. The animals lost appetite, had diarrhoea, swelled gums, loosening of teeth, irregular action of the heart, paralysis of the hind legs, blindness, and deafness. Black teeth and spongy gums, with fetor of breath, were common in smokers. An affection of the tongue and epithelioma of the lips was common enough in smokers. Tobacco

amaurosis was too well established to be denied; and Mr. Critchett alleged that the wealthier young men of this day very frequently injure their sight grievously by their great smoking. Palpitation of the heart was common among smokers and chewers, as well as paleness, and occasionally intermittent pulse. Decrepitude came far too quickly upon great smokers; and Dr. Drysdale attributed, in some cases, the occurrence of rickety children to the use of tobacco by the male parent. Brodie said of tobacco, that it tended to make the race degenerate. Sir William Jenner said smoking tended to produce palpitation, prolapse of the rectum, and impotence. Miller and Jolly alleged that chronic tobacco-poisoning caused palsy and insanity. Bertillon had shown that smoking was most injurious to the functions of the brain in youth. Kostral showed how many diseases are produced by tobacco in the Austrian State Factory. Fortunately, said Dr. Drysdale, our European women do not smoke. They prefer good breath and clean teeth to fetor and black stumps, and do not like to become dreamy, nonchalant, and fractious, like the chronic votaries of the pipe or cigar.

On the Evils of Medical Men undertaking the Duties of Nurses. By A. FREER, M.R.C.S. Eng., Stourbridge.—The growing disposition of the richer classes to have their medical attendants to nurse them during acute but ordinary illnesses, should be watched with regard to the interests of both doctor and patient. Why in such illnesses should the medical man assume the duties of a nurse? If the attendance of a medical man be demanded during several nights, this should be given, not by him in charge, but by some one free from the anxieties of general practice. The surgeon, who has been away for a time, returns to the bedside able at a glance to appreciate changes. Absence makes the eye grow clearer; and the first look at the invalid after a night's absence must not be lightly foregone. If the medical man stay in the house of the invalid all the time, the friends are tempted to put undue pressure upon him to prescribe some fresh remedy at every change for the worse. Perhaps, in the night, the patient is stirred up anew to receive a fresh attention. If the medical man suggest nothing more, disappointment is felt by the friends. They do not understand, as he does, that time itself is a remedy without which all others may be in vain. It is a happy thing that improved knowledge of disease is to us increased power; and, as luxury advances, people are becoming more impatient of the restraints of illness, and expect more from medical men than they used to do. But these must not be willing at every call to come down from the hill of observation into the battlefield to do the work of subalterns; but if this be forced upon them to a greater extent in the future, it is to be hoped that the notions of the public as to remuneration for unnecessary detention keep pace with such serious claims.

The Training of Nurses in Provincial Hospitals. By EDWARD WATERS, M.D.

Friday, August 6th.

The Section met in the Chemistry Class-room; Dr. LYON PLAYFAIR, M.P., in the Chair.

GROUP C.—GENERAL SANITARY ARRANGEMENTS: DRAINAGE; WATER-SUPPLY: VENTILATION.

The Sanitary State of Rome. By LAUCHLAN AITKEN, M.D., Rome.—It was, he said, useless to deny that the sanitary reputation of Rome was of the worst possible character; and it had been, and was, so much the custom to write and speak of its unhealthy state, that they need feel no surprise if many still associated the name with ideas of danger or disease. Many visitors came under the influence of that feeling; he might have said nearly all, except perhaps a few sentimental young ladies, who found a gloomy satisfaction in believing that all the treasures of antiquity and all the wealth and beauty of nature to be found there, could only be visited at an amount of risk which made them think their doing so little less than heroic. Proceeding to inquire if this distrust were thoroughly warranted, he referred to the excessive mortality in Rome in 1872, when the death-rate was 37.1 per 1000, due to an epidemic of small-pox which had spread over Europe from the war-stricken provinces of France; a great increase in the deaths from diphtheria and croup, the effects of the inundation of the Tiber at the end of 1870, when two-thirds of the houses were flooded; and the overcrowding of the poorer quarters, due to the influx of labourers and artisans, who eagerly poured into the newly constituted capital, in the hope of better wages and steady employment. But, since 1872, there had been a gradual improvement. The effects of the flood had ceased to tell on the death-rate; better accommodation had by degrees been provided for the new-comers. Work had been easily got by all steady men, wages had been high, and provisions, though dearer, had not attained a price which seriously interfered with the poorer classes; and, since the advent of the Italian government, the city authorities had borrowed largely, and spent money to improve its sanitary state.

Among other things, the drains in the so-called English quarter had been thoroughly repaired or entirely rebuilt. The cleansing work was better performed, and, if the scavengers still seemed to take things rather easily, yet every one who knew Rome only a few years ago now readily admitted how much pleasanter to the eye and nose it had become. Outside the city walls, too, there had been progress, though not to a corresponding extent. Garibaldi's plans were not impracticable, and would probably have the desired effect. Meantime, many of the proprietors were engaged in planting the Campagna with fast growing young trees. From the reports issued by the Statistical Office at the Capitol, it appeared that, in 1872, the proportion of deaths to the population was 40.5 per 1000; in 1873, 34.1; in 1874, 33.9; and for the first five months of this year, 35.1. Those figures, however, presented a fictitious mortality, as they included in the returns from the hospitals and city the deaths of many persons not belonging to the community of Rome. After making the due deduction, the mortality assumed very different proportions, being, in 1872, 37.1 per 1000; in 1873, 29.1; in 1874, 26.2; and in the first five months of 1875, 29.1. A great part of the deaths among those who had no fixed residence in Rome occurred in the hospitals; and, indeed, the admissions of immigrants from other provinces of Italy into those institutions greatly exceeded those of the poorer classes of Rome. The patients in the hospitals belonged mainly to the central and southern provinces of Italy, the majority being peasants, who arrived at fixed seasons to till the Campagna or to reap the harvest, while others were masons or bricklayers, who established themselves in Rome when work was plentiful, but who had not yet been included in the population. The fluctuating population was almost entirely male, and, as the occupations of the peasants exposed them to the malaria during the worst season, the deaths were enormous. They were said to be 6 per cent. annually; but that was probably under the truth. No doubt also the unhealthy state of the hospitals had much to do with the excessive mortality; the deaths in the hospitals, indeed, amounted to nearly half the mortality. Although the death-rate in the hospitals of those not belonging to the community was high, it did not seem to be so among other strangers in the city. Referring to Roman fever, he remarked that a great many deaths were registered from this cause which were really not caused by it. He had never seen any case among visitors to Rome during the winter months which could be so described. In conclusion, he said that a modern Roman had nearly as good a chance of life, and was no more likely to die from a preventable disease than the citizens of Edinburgh; and it was possible that, by the statement he had made, part at least of the fear of a visit to the Eternal City might be dispelled.—The PRESIDENT said that personally he had not a very good word to say for Rome. He went there, and on the third day took that fever. During his convalescence, he thought a good deal as to what was the cause of the fever. He did not know that he came to a better conclusion than anyone else. But one thing struck him. In ancient cities, such as Rome and Jerusalem, the *debris* of many thousand years, which had accumulated and raised the level of the surface, contained a large quantity of organic remains, which lay dormant until excavations were made, when the oxygen of the air commenced an incipient putrefaction, and produced malaria. At all events, he knew exactly the time when he was struck. It was while looking at some new excavations which were being made in the Palace of the Cæsars. He thought it would be very interesting if Dr. Aitken were to obtain an instrument for ascertaining the exact amount of organic matter in the air by means of permanganate of potash, and examine the air before an excavation had commenced, and after it was in progress. Some interesting conclusions could be obtained in that way. The enormous mortality among workmen in the hospital had been mentioned, and it was quite possible that the workmen were stricken down while excavating ruins, making new sewers, or taking out the foundations of new houses.—Mr. W. J. COOPER (Richmond) pointed out that great mortality also occurred in Jerusalem among the Jews. The sewage of centuries had sunk into the *debris*, and when it was disturbed, malaria set in, and the mortality was very great in consequence. In 1854, an old clay pit was opened in Broad Street, London, which emitted a very foul smell. Cholera came shortly afterwards, and Golden Square, adjoining, was almost depopulated.—Dr. GRIGOR (Rome) thought the unhealthiness of Rome as a winter residence was very much magnified. The community was small, and any fatal case made a great noise. He was satisfied that Rome had as little typhoid fever as Edinburgh, or any town he knew, in proportion to the population. He did not think a great deal of typhoid was generated in Rome; what they had was an ague or malarious fever. Typhoid was imported from other cities. He believed that the malaria among the workmen was due, not so much to excavations as to the poor constitutions of the men, caused by their poor living and wretched lodgings.

On the Sanitation of Houses, especially with reference to Drainage.
By W. EASSIE, Esq., C.E., London.—The evils of improper drainage were best observed in houses that had been from time to time added to. One was then able to trace the first awakening up of the inmates, when the patrimonial cesspool had filled up and choked the drains. When this happened in villages, all that was done was merely to partially empty the receptacles and clean out the drains. And when this had occurred several times, a new dumb-well was sunk and the drains led into it, the old pit being covered up with a stone. It was cheaper to do this than to fill it up; and, besides, this procedure did not necessitate the absence of the family. It was the same in towns, and lately Mr. Eassie laid bare in a West End London house three cesspools which had been dug in proximity, and abandoned in rotation as they filled up with ordure and filth. Four cart-loads of night-soil were removed, which could not have seen daylight for half a century. The reason why these ancient nuisances were found inside houses in towns and cities was not because they could not be accommodated outside the house, but because the slops from the kitchen and bath and laundry wastes were insufficient to flush the more solid wastes outside the walls. In nearly every case, too, the drains were of brick, laid with uneven bed, and through the joints of which the fluids percolated. For instance, a cottage was drained into a cesspool in the kitchen, and, when that was full, another was dug, until the place was honeycombed with them, the subsoil saturated, and the well poisoned. A common privy was used in the yard, and this performed the same evil functions. By-and-bye water-closets were introduced, and earthen pipes, and the cesspool for these was dug in the garden, with a lower one for an overflow, and both cemented down air-tight fashion. There was no ventilation, except through the trapping-water of the syphons. Drainage into a cesspool was not necessarily dangerous, provided only that the waste-pipes of the sinks delivered outside over a trap; provided, too, that the soil-pipes were carried roof high, and a foul-air withdrawing-cowl fixed upon them, all would be well. It might, in some cases, be absolutely necessary also to ventilate the cesspool by an upright shaft, or a ventilating charcoal trap in the stone cover; and it might even be wise occasionally to ventilate the march of the drain. Where a common privy was used, an earth or ash-closet ought to replace it. Where a parish sewer was put in the main road, and the value of the land enhanced so much as to make it worth while to enlarge a building, sometimes half of the house was drained into the sewer and the other half into the old cesspools. The old cesspools had not, however, been dug up in the basement of the house nor the urine catch-pit in the stables. It was very easy to so arrange the plan of a house that the whole of the wastes might deliver immediately outside the house, and to have nothing but the outside wall between the water-closets, lavatories, and sinks. When it was advisable to drain the basement, it could be disconnected from the main road by interposing over the junction a ventilating shaft. The sinks and lavatories should all deliver over an open chamber. The walls of a house should be built hollow, and protected from rising damp also by a proper damp-proof course.—Dr. CARPENTER (Croydon) said there were three canon laws that ought to be observed with reference to the disposal of sewage—(1.) That in sewers in connection with houses, stagnation should not be allowed; (2.) that there should be free ventilation, the air, however, not being allowed to pass inside the dwelling-house; and (3.) that there should be no communication between the sewage and the water-supply.

On Mortality in relation to Dwellings. By GEORGE ROSS, M.D., London.—Dr. Ross commenced his paper with questioning the correctness of the ordinary statement that "the mortality of a population is in a ratio to its density", and affirmed that "high density is not necessarily a cause of a high mortality". He pointed out that life in great cities might be made as healthy as in the best regulated villages, if the authorities would use the resources at their command. There need be no stagnant water, nor festering heaps of dirt, no decaying vegetation, nor other nuisance in cities, if proper cleansing were systematically resorted to; and houses might be built, even for the humblest, upon plans that would secure ample ventilation, and promote the health of the occupiers. He then described the condition of houses in towns as they now exist, and pointed out their characteristic evils; affirming his belief that the chief cause of the high mortality of an urban population is the bad construction and squalor of their homes. The new Act for the improvement of the dwellings of the working classes would, it was hoped, remove the worst of these evils. Dr. Ross then explained a series of tables to show the direct influence of unwholesome houses in producing disease and premature death. He gave a list of thirty-two streets in St. Giles's district; and showed that, in one street at the top of the list there was, in the course of a year, one death in every house from diseases caused by filth and bad ventilation, viz., zymotic diseases, tuberculous diseases, and asthenic bronchitis. From that high average,

there was a gradual declension until, in a square at the bottom of the list, there was only 1 death in 41 houses from the same diseases. Again, as regards population, Dr. Ross showed that the mortality from the same diseases was more than thirteen times greater in the street than in the square. In Chapel Place, a court of small cottages, the death-rate in 1870 was 69.7 per 1,000, and all the deaths were caused by the diseases named. In Queen Street, the death-rate was 48.7 from the same diseases. The death-rate of other places was given, and Dr. Ross described the peculiarities of the several courts to account for the difference of mortality. The mortality in Chapel Place from zymotic diseases was 16.4; in Queen Street, 9.7; in Church Lane, 8.4; in Dudley Street, 6.2; and in Wild Court, 5.6 per 1000 living. Dr. Ross then compared the death-rate in three blocks of buildings, under the management of the Society presided over by Lord Shaftesbury. These blocks were similar in size, had the same careful attention, and were occupied by a similar class of people, and only differed materially as regards their structure and surroundings; and he showed that, in one year, the death-rate was, in one block of the model houses, 4.6 per 1,000; in another block of adapted houses, 18.2; and in the third—a very bad old block, but adapted according to the prevalent notions for promoting health—36.5 per 1,000. The sanitary condition and mortality of portions of the Whitechapel District were then detailed, the facts being collected from Mr. Liddle's Reports. The results were similar to those in St. Giles's district. The wretched habitations in Farthing Alley and Rose Court were described—houses consisting of two and three rooms in narrow courts, without proper sanitary conveniences, and without the possibility of ventilation. Dr. Ross stated that there were many acres of this kind of property in Whitechapel. Dr. Ross then reverted to his original proposition that mere density was not necessarily a cause of disease, and illustrated his argument by a reference to the high density of population in model dwellings, and the associated low death-rate. He also stated that already in some parts of the metropolis the density ranged from 600 to 2000 persons to the acre. The difference in the mortality was caused chiefly by the difference in the construction of the houses and sanitary arrangements. It was not density, but dirt, that had to be guarded against. The defects of site, construction, and arrangement, that make houses unhealthy, were then briefly stated, strong emphasis being placed upon the evils arising from the bad foundations of houses. Dr. Ross insisted that all dwelling houses should be built on concrete or other impermeable material; as all porous soils, including gravel, let in the water, and made houses unwholesome. Brick houses, after a certain period, became unfit for habitation on account of the absorbing power of the brick, which retained miasmatic poisons, and kept up a succession of attacks of zymotic diseases. Many of the remarks in this part of the paper were evidently made in allusion to the powers for condemnation given to medical officers of health in the new Act of Parliament. Dr. Ross concluded his paper with a list of suggestions in respect of the sanitary requirements to be observed in the erection of new dwellings for the working classes.

Sanitary Remarks on Trap and Soil-Pipes. By A. FERGUS, M.D., Glasgow.—Dr. Fergus said he had for some years been investigating diseases connected with excremental pollution; and, at the Birmingham meeting of the Association, he had drawn attention to the danger arising from decayed soil-pipes. Finding that the perforations were always in dry portions of the pipes, and made from the inside, he concluded they were caused by sewer-gas—an inference sustained by the chemical analysis of the powdery corroded matter, and by the fact that ventilated pipes lasted longer than close ones. The specimens he exhibited had all been well trapped; and as tension sufficient to force gas through the trap was too rare to account for such an action, he was forced to the conclusion that the gas was either generated in the trap itself, or was absorbed by the water at the outer end, and given off at the inner end, or that both of these things took place. That diffusion by the latter means was likely—indeed, inevitable—he had proved by frequently repeated experiments with model traps, when a little gas (without pressure) on one side, was always found to diffuse itself through the water, and, in a very short time, to indicate its presence by chemical tests on the other side. This happened whether the gas was light or heavy, and the most thorough ventilation only made its passage a little slower. He had recently been giving increased attention to the other source of gas—viz., generation in the trap itself. He invariably found that part of the fæces floated on the surface of the water on the house side of a trap or cesspool. Flushing only agitated without removing them, and then they decomposed until dissolved. The gas so generated must either pass up the rain-pipe (if connected) or into the house; and was more likely to do the latter, on account of the higher temperature. He gave minute particulars of a representative case in a good locality in the West End of Glasgow, where typhoid fever, casually introduced,

was spread in this manner. The true sanitary remedy was that no excremental matter should be allowed to pass into the drains at all; it should be dealt with separately, and, within twenty-four hours of being voided, should either be returned to the earth or subjected to chemical or other action, rendering decomposition impossible.

On the Sanitary Improvements of Country Villages. By G. WILSON, M.D., Leamington.

On the Comparative Merits of the Water-Carriage and Dry Systems of Sewage from a Sanitary and Economical Point of View. By G. A. KENYON, M.B., Chester.—This paper set forth the conclusions arrived at by an impartial inquiry into the respective advantages and disadvantages of water-closets, versus dry methods of removal of excrement for urban communities. These conclusions were, in short, to the effect, that if removal at intervals of one week or less is to be insisted on, then the only advantages that can be pleaded in favour of dry systems is, the saving of the water that would otherwise be required to flush the closets; and that the quantity of water thus saved may be taken to be equal to one-seventh or one-sixth of the smallest amount needful for the convenient satisfaction of the other requirements of the community; an amount that would seldom be of serious importance. The experience of towns (Coventry, Warwick, Bristol) in which the use of water-closets is universal, was quoted to show that no serious difficulty is encountered from misuse by the poorer inhabitants. The danger of introducing sewer-gases into houses may be entirely avoided by keeping the water-closets, like all other closets, actually or virtually outside the houses. Although recently a great amount of success has been met with in disposing of the contents of the pails in one large town, yet the working expenses are so great as to exclude the idea that, on this account, the pail system has any advantage over water-closets; whilst there is, as a matter of fact, a good deal of nuisance connected with their use, and not the same security from the risk attending the deposit of infectious evacuations or discharges which is afforded by the water-closet. If removal once in three months were sufficient, there would be attainable, at a smaller expense, a great improvement in the old state of things in a town; by filling up all underground middens or cesspools, excluding rain, distributing ashes, and so arranging, that any excess of moisture, such as would be occasioned by inadvertently emptying slops therein, should escape along a surface channel to the yard-gully. Thus, there need be no drain inside, and no ashes could get into the sewers; nor would the interior remain wet; and there would be a warning afforded which would tend to prevent a repetition of misuse.

The Drainage and other Sanitary Conditions of Rural Districts. By J. A. DAVENPORT, Esq., Nantwich.—In the course of a paper, in which the question of rural drainage was dealt with, Mr. Davenport said that, of the systems of dealing with house-slops and liquid refuse, one which seemed to answer in the district with which he was connected, was that of subirrigation carried out either in the gardens or fields adjacent to the dwellings, sometimes in connection with a little tank, and sometimes without; where there was no tank, the slops were thrown to a trapped grid, below which there was a strainer to prevent any matter from passing, likely to choke the drain; where it was necessary to prevent pollution of the soil, larger sanitary pipes should be used; but, where the liquid was dealt with, common pipes were used (sometimes with sockets), and at every two or three feet, spur pipes branched out for three or four pipes' length; these drains were placed ten or twelve inches below the surface, and the liquid soaked from them into the soil. It was necessary, however, to provide subsoil drains at as great a depth as possible in order to relieve the soil of the excess of purified water; sometimes it was preferred to allow the water to drain into a little tank first, properly placed, to be kept for garden purposes; and then the overflow was simply dealt with on the above system. Sometimes he had utilised a deep ditch, running the overflow irrigating drain parallel to it, and allowing the liquid to filter through the intervening soil. If the upper drains should become choked, it would be but a small matter to take them up and relay them; but he had in his district a block of eight or ten houses that had been drained on this system for two years past, and all was working well up to the present with no signs of choking. Most of the work was roughly done, and under conditions rendering a good result a matter of some doubt. Still, so far, it was as satisfactory as might be expected. The difficulties in persuading and arranging as to this particular system had been great; for ordinary people did not quite comprehend it. The only principle that he had considered it safe to act upon, was to deal with all foul liquids by the soil; get them properly on to it or through it by some means as quickly as possible; and, in suggesting any rural drainage, he always kept this end in view; and the system sketched out, or some little variation of it, which might be frequently necessary, looking at the varying conditions under which such work had to be carried out, would

generally be found to furnish a fair solution of the difficulty. The ventilation of the drains should in all cases be insisted on. Field's flush tank would be a great addition to any system of garden subirrigation. Greater difficulties with these subirrigating systems might be experienced where the soil was excessively stiff, but the ashes from the house and the refuse from the garden burnt, together with other substances tending to lighten it being mixed therewith, would in some degree tend to remove the difficulty. Probably for villages, etc., no better method of dealing with their sewage could be adopted than that provided by the automatic sewage meter-tank.

Drinking and Table Waters. By C. H. BARTLETT, Ph.D., F.C.S., London.—The paper commenced with remarks on the necessity of a sufficient supply of aqueous fluid for the due performance of the functions of animal life, and the fundamental part water performs in the transformation of food into the animal tissues and in the elimination of the waste products of the system. The agency of water in the processes of fermentation and decomposition was then considered; and the advantage of accurate observation of the quantities imbibed in health and disease was pointed out. The author then commented on the value of microscopic research as leading to a new method of pursuing medico-chemical investigations which might pave the way to the identification of the specific poisons of infection. He then noticed the precautions required to prevent drinking water from disseminating disease. Chemically pure water was unattainable and unnecessary. The geological sources of water-supply, as affecting its wholesomeness, were considered; and the reason was given why the water from surface-wells and alluvial soil is generally unfit for drinking. The nature of different organic impurities in water was described; and the means of discriminating those which were dangerous from others less objectionable were mentioned. Remarks were made on metallic poisons in solution, and on the fallacy of the usual standard of estimation. Autumn was the period when well-water was most liable to dangerous impurities. The author described the means of prevention of lead-poisoning, by the use of tin piping and a new filtering medium which removed both lead and organic matter. The dangers of common aerated waters made with impure chemicals, and the necessity for a great alteration in the ordinary apparatus for their manufacture, were pointed out.

On Ventilation, with Model of Apparatus. By G. GOLDIE, L.R.C.P.Ed., Leeds.

The Expense of Ventilation and Warmth, as Sanitary Requirements. By JAMES A. RUSSELL, M.B.

On the Mineral Constituents of Drinking-Water. By J. A. WANKLYN, Esq., London.—Mr. Wanklyn said that within the last ten years the problem presented by the organic matters in water had been solved. Chemists would do well to return to the inorganic materials in drinking-water. It was a well established fact that, by filtration on the large scale, the organic matter in drinking-water might be so far removed that the water might be made to reach the standard of purity attained by good drinking-water; but, if there were objectionable mineral matter in the water, there was no remedy but to change the source of supply. To this statement, however, there was an exception in favour of the Clark process, whereby an excessive charge of carbonate of lime was reduced. It might be asked, Do not the mineral matters taken in food so far outweigh that in drinking-water as to reduce it to insignificance? An inquiry into the mineral matter actually present in the food led to a decidedly negative answer. Bread contains the mineral matter of the flour and the salt commonly used in making it. Assuming that one pound of flour is consumed by an individual in a day, the mineral matter supplied by the flour will be about 50 grains; and these 50 grains comprise 25 grains of phosphate of potash, 12 grains of phosphate of magnesia, a little phosphate of lime, a little silica, etc. To the pound of flour the baker adds about 70 grains of salt. The quantity of water drunk in all shapes during the day may be set down at about half a gallon; and those Londoners who drink the water of the Thames will, therefore, take daily 8 or 10 grains of mineral matter derived from the drinking-water. Putting on one side the common salt, which was artificially added, the mineral matter of the food did not by any means overwhelm the mineral matter in the drinking-water. The question had often been asked, whether the carbonate of lime present in many hard waters might not be needed by the animal economy. If the only other source of lime were the flour consumed as bread, there might, indeed, be need for the lime in the drinking-water. According to the recent analysis made in Mr. Wanklyn's laboratory, there is very little lime in flour, one pound of which contains only $1\frac{1}{2}$ grain of lime. He believed that a comparison of the mineral contents of the ordinary dietary of a population with the character of the water-supply would furnish most valuable information. The mineral required in the largest quantities by the animal economy was common salt, at least 150 grains of which were required daily by a

man. He believed that salt-famines must occur, and that whole populations must occasionally suffer from deficiency of that material; and he once recommended a water-supply with 80 grains of salt to the gallon, in a case where the population appeared not to get sufficient salt from other sources. He knew no considerable water-supply to any town in this country from which any considerable fraction of the daily dose of salt could be derived; but the various beverages often contain much salt. Beer, which is notoriously charged with a considerable amount of salt, was a good example in point. A few years ago, Webb's soda-water came into great favour; and, when this soda-water was examined, it was found to contain a large proportion of salt. Apollinaris water was a highly salted drink. The strange liking which many persons had for the water of sewage-wells, such water being notoriously charged with salt, afforded another illustration. Bearing these facts in mind, the conclusion was, that water-drinkers should add a little salt to the water—20 to 50 grains of salt per gallon. Passing from the salt and carbonate of lime, which might be looked upon as in a sense nutritious, there were in drinking-water other matters, some of which were not nutritious, being to a certain degree poisonous, or being medicinal. To this class Mr. Wanklyn would assign soluble compounds of magnesia. No water-supply should contain more than a very small proportion of magnesia; probably the limit should be set at not much over 1.0 grain (carbonate of magnesia) per gallon of water. In Thames water, he found 0.7 grain of carbonate of magnesia per gallon; in the Kent Company's water, 1.3 grain. A curious example of a magnesian water was afforded by the St. Ann's Well of Buxton, the water of which, according to the very careful analysis of Playfair, contained 4.7 grains of carbonate of magnesia per gallon.

Vote of Thanks to the President.—Dr. A. P. STEWART (London) moved a vote of thanks to the President, Dr. Lyon Playfair, whose presence had done honour to the Section. [*Loud applause.*] One of the few real statesmen, he said, sent to the House of Commons after the passing of the late Reform Bill was Dr. Lyon Playfair, whose ability was soon recognised by all, and who secured a power and position in the House which, he believed, would be strengthened in the future. Dr. Playfair had been of great advantage to the community, especially on those matters to which his life had been devoted, and to whose success he had so materially contributed. [*Applause.*]

Dr. CARPENTER (Croydon), in seconding the motion, hoped that Dr. Lyon Playfair would be able to carry out those maxims which were put forward by the leader of Her Majesty's Government and by the leader of the Opposition—viz., *Sanitas sanitatum, omnia sanitas*; and *Salus populi suprema est lex* [*applause*—for hitherto what had been introduced had been defective to a considerable extent. [*Hear, hear.*]

Dr. LYON PLAYFAIR said it had been to him an immense pleasure, and a great aid and encouragement, to have met so many Medical Officers of Health from different parts of the kingdom; because, although they had corresponded and co-operated together, still the presence of so many gentlemen interested in this great subject—which the leader of the present government had justly said was the great subject of the future—encouraged a legislator to go on with his arduous labours; because he felt assured that there were in the section practical men who could give practical suggestions which would enable this subject to be forwarded. [*Applause.*]

SECTION E.—PSYCHOLOGY.

Wednesday, August 4th.

The President, Dr. W. H. LOWE, delivered an address, which was published at page 176 of the JOURNAL for August 7th.

The Disorders of Speech in Drunkenness. By F. S. CROUSTON, M.D., Edinburgh.—A discussion ensued, in which Dr. White (Aberdeen) and Dr. A. Robertson (Glasgow) took part.

Observations on the Union of Phenomena of Mental and Nervous Disorders. By ALEXANDER ROBERTSON, M.D., Glasgow.—After some preliminary observations, unilateral mental phenomena were first considered. These consisted of illusions and hallucinations, and possibly also of the peculiarities supposed to be due to the separate and independent action of the hemispheres. The observations of French writers were specially noticed. Cases of one-sided hallucinations of hearing were quoted from Gall, Griesinger, and Schröder van der Kolk. But these cases appeared to be nearly exceptional in the experience of these observers. The writer then submitted the results of his examination of 250 insane patients, both in respect of these and other sensorial or psycho-sensorial disturbances. Of thirty-four patients who entertained clear and well-defined illusions or hallucinations of one or other of the senses, in five "voices" were heard only in the left ear, and in five others in the left ear more than the right; in one, they were audible in the right ear alone; and, in two, they were stated

to be more distinct in that ear than the other one. The disorders of the other senses were then referred to, and afterwards details of the cases of unilateral auditory hallucinations were given. The phenomena were most apt to occur in the milder and more ephemeral forms of insanity, and particularly when it had been caused by strong alcoholic liquors. The frequency with which the hallucinations were associated with the left ear was very striking, and it was pointed out that the cases quoted from the above named authors were also on the left side. The pathology of the phenomena was then considered at some length, and also the indications derived from modern research in the anatomy, physiology, and pathology of the nervous system as to their anatomical seat. The seeming dual action of the hemispheres was then illustrated. Thereafter, unilateral motor phenomena were discussed, the observations being restricted to the convulsive class; and a number of conclusions were stated, some of which were published by the writer in 1869. First, convulsive movements may begin in different parts of the body in the same case, even though there is no reason to think there is any appreciable change in the cerebral lesion. Second, in unilateral convulsions, the so-called bilateral muscles are often implicated, but the twin muscles of the otherwise sound side in most cases do not contract so firmly as those on the side first convulsed. The physician may, therefore, often ascertain for himself in a case of general convulsions the side on which the convulsive movements first began (and, consequently, the hemisphere affected), by simply grasping the limbs of the two sides, and comparing the degree of firmness of their respective muscles. Thirdly, there may be alternate conjugate deviation of the eyes during the same convulsive seizure. Fourthly, as a general rule, the higher up the lesion is situated the more apt the convulsions are to become bilateral. Fifthly, when convulsions begin on one side, there is frequently a distinct and sometimes a prolonged interval before consciousness is involved; and it is occasionally retained throughout the whole seizure. Sixthly, there is a decided increase of temperature in the convulsed members. All these conclusions were illustrated by cases. With respect to unilateral sensory phenomena, it was submitted that there seems less disposition for the "irradiation of sensations" from one to both sides, than for the extension of one-sided into general convulsions. The greater regularity of the motor than the sensory symptoms was also dwelt on and illustrated. In surveying the different classes together, it was observed that one-sided disorders of motion and sensation had their analogues in unilateral hallucinations, and just as the partial might become general in the one case, they might also do so in the other. A striking illustration of the gradual merging of illusions of vision into insanity was submitted. Lastly, some observations were made on the irregularity in the order of succession of these phenomena as compared with normal physiological sequences.—M. DUPUY (Paris) referred to his own experiments on the effects of cauterising one cerebral hemisphere, in which he had found paralysis of the same side of the body as a result; while a subsequent cauterisation of the opposite hemisphere appeared to have a counteracting effect, the paralysis then disappearing.—Dr. Clouston, Dr. Yellowlees, Dr. Deas, and Dr. Bramwell, continued the discussion.

Notes of an Unusual Case of Epilepsy. By P. MAURY DEAS, M.B., Macclesfield.—This was a case of epilepsy, complicated with mania, but also presenting some unusual and anomalous symptoms, occurring in a strong and apparently healthy young woman. The epilepsy had existed six years. Before that, she was subject to "aggravated hysteria". Maniacal symptoms first showed themselves eight months ago. She was under treatment in the Northampton Asylum for four months, and in the Cheshire County Asylum for the last six weeks. On admission, the left foot was found to be contracted and distorted, exactly like a bad case of talipes varus. The patient, who was very rational at times, said she had a bad attack of fits last Christmas, while in service, and when she came to herself she was in the union, and her foot distorted as it was now. The day of her admission she had several fits, and the following evening had a succession of several fits from 7 P.M. to 4 A.M. The noticeable points in the fits were: 1. Violent rhythmical movement of the head from side to side, to the number of one hundred a minute, and attended by a peculiar short respiration, like a bark; 2. Tonic spasms of the muscles of the limbs, which were strongly flexed; the spasms in about three minutes extending to the trunk, and ultimately producing actual opisthotonos; 3. Increasing congestion of the face and neck until, at the maximum of the spasms, the face assumed the characteristic epileptic lividity, with complete closure of the glottis; when, just as choking seemed imminent, sudden relaxation took place, followed by stertor, blowing respiration, and foaming at the mouth; 4. After the fits had lasted some time, the right foot was observed to be becoming contracted during the spasms; and by the morning it was permanently distorted similar to the left one. She became maniacal after this for ten days, with fits at intervals. During one series of fits, the left hand

became contracted and distorted also, but came right in a few days. The treatment consisted of stimulating injections, bromide of potassium, and blisters to the nape of the neck. The most interesting point, perhaps, in the case, was that, under chloroform, the contraction of the right foot was reduced. A splint was subsequently applied for a week, and now the limb was as well as ever. The left foot had since been treated in the same way. It was already much improved, but, from the longer continuance of the contraction, the result in this case must be more doubtful. The questions arose, Was this a case of true epilepsy? Could it be a form of hysteria? or had the "aggravated hysteria", from which she had suffered, gradually developed into epilepsy? or was it probable that there was organic disease? Dr. Deas was led to think that the case must be classed as one of epilepsy, from the following considerations. 1. There was an undoubted "discharge" during the fits. 2. The patient had a sensation or "aura". 3. There was complete unconsciousness during the fits. 4. There were closure of the glottis, venous congestion, frothing at the mouth, and stertorous breathing. 5. There were none of the ordinary signs of hysteria. The patient complained much of pain in the head, especially in the intervals of a series of fits; she sometimes asked to have it cut open, or that she might be killed. Dr. Deas thought it possible that there was a source of irritation in the brain of an organic nature, but whether of the nature of deposit, tumour, or other change, it was impossible to say. This view was consistent with the marked predominance of tonic spasm, and the prolonged contraction of groups of muscles.

Emotional Aphasia. By D. DE BERDT HOVELL, F.R.C.S.E., Clapton.—This affection, which might be distinguished from that more frequently bearing the name, by being usually of temporary duration and not the result of organic disease, was illustrated by the case of a lad, sixteen years of age, who, with an interval first of six, and next of eight weeks, lost the power of speaking, but not of thinking or writing; on the first occasion for twenty-four hours, on the next for forty-eight, and the third for one hundred and twenty hours. He recovered perfectly each time. The attack was brought on, in the first instance, by fatigue of speech from prolonged effort of talking, combined with excitement and anxiety. It was contended that this was an instance of aphasia proper, *i.e.*, according to the Lexicon, of speechlessness, from fright or emotion, and that the disease to which the name is usually applied would be more properly described by aphemia, if that were a classical word, but, that not being so, by the aphasia atactica of Dr. Ogle. In explanation of the symptoms, it was assumed that the vaso-motor nerves were the seat of the disorder.—A short debate followed, in which Mr. Lennox Browne, Drs. Down, Gairdner, and Clouston, took part.

Thursday, August 5th.

Statistics of Lunacy in Town and Country. By JOHN SIBBALD, M.D., Edinburgh.—Dr. Sibbald exhibited several tabular statements illustrating the statistics of lunacy. He pointed out that the problems to be solved before these could be properly understood were of great complexity. The figures which he had collected in the tables shown were intended to illustrate one branch of the subject. They showed, among other things, that the number of pauper lunatics in Scotland persistently chargeable to country parishes is larger than the number chargeable to towns, being 206 per 100,000 for the country, and 177 per 100,000 for the towns. On the other hand, the number annually added to the roll of pauper lunatics from among the residents of country parishes is smaller than the number occurring among the residents of towns, being 35 per 100,000 in the one case, and 56 in the other. He showed that this is probably accounted for by a large number of patients requiring only temporary treatment being sent to asylums in towns, who would be allowed to remain at home in the country. He adduced arguments and figures to show that the apparently enormous increase of lunacy in late years was only an apparent increase, and that there is no proof statistically that there is a larger proportion of actual insanity in the population now than there was thirty years since.

Unilateral Convulsions and Hemiplegia, depending upon a circumscribed Lesion of Cerebral Convolutins. By BYROM BRAMWELL, M.B., Newcastle-on-Tyne.—Mary Conway, aged 37, was admitted to hospital May 23rd, 1875. Eight years ago, she received a severe blow on the left side of the head. (The skull was fractured.) Three years ago, she had four right-sided unilateral convulsions, brought on, she thought, by fright. For the past three years, she had felt "pins and needles" in the forefinger and thumb of the right hand, and had not been able to use her needle as well as formerly. On May 10th, she went to bed very drunk, and vomited all the following day. On May 11th, she had a severe convulsion, and continued to have fits. A week after the fits commenced, "she lost the power of her right arm and leg". She looked fifty years of age. The pupils were equal,

moderately contracted. Both eyeballs were turned upwards and to the left. She lay on her right side. The eyes were partly closed. She was unable to move the right arm and leg. When the mouth was opened, it was drawn to the left side. She could not protrude the tongue, which was abraded at its tip and on the right side. She swallowed well; her appetite was good. She was conscious, and could say several words; knew her name and address. Her speech was thick, and difficult to understand. She could imperfectly localise impressions. She made no complaint of pain when pricked with a needle. Muscular contractility and sensibility seemed natural on the two sides. Every few minutes, she was seized with a convulsion. There were three degrees of severity. In the first or slight form, the muscles of the face and neck were alone affected, in the following manner. Both eyes were first firmly closed, and the right corner of the mouth was drawn downwards in tonic spasm, and the eyes were next partly opened; the head and eyeballs were then slowly turned to the right side. Clonic spasms next occurred in the eyelids (the left being only slightly affected), the muscles of the tongue, right side of the neck, chiefly the platysma. After a short interval, the clonic spasms became much less frequent. The head and eyeballs were slowly turned to the middle line; the eyelids widely opened; and the patient presented an animated appearance. The eyeballs were finally turned upwards and to the right; the eyelids were closed, and the patient lay apparently asleep. In the second form, the convulsion commenced as before; but the right arm and leg were affected (in a definite order, not here detailed). In the third form, the fit went on as in the first and second forms, and then became general; the left side being affected in a definite order. The slight fits occurred every few minutes. The optic disc was large and pale, in contrast to the surrounding fundus, which was highly injected. There was a depression in the skull two inches above the left ear. The diagnosis was acute softening, either from embolism or irritation below the point of depression. The treatment consisted in the application of cold to the head, bromide of potassium, and nourishment. She died somewhat suddenly on May 30th. At the *post mortem* examination eight hours after death, there was found to be a perforation of the skull at the point of depression. A sharp spiculum of bone projected from the inner surface of the skull, and pressed upon the cerebral convolutions, causing a very limited lesion of the inferior margin of the ascending parietal convolution. There was some softening at this part and below it. The brain was otherwise healthy. The membranes were generally opaque and thickened. Dr. Bramwell remarked that the important points of the case were: 1. The long lapse of time between the receipt of the injury and convulsions; the convulsions occurring for a single day, and then being unilateral; the numbness in the forefinger and thumb of the right hand for three years: 2. The remarkable uniformity of the order in which the various muscles were affected by spasms: 3. The limited lesion found after death: 4. The fact that the general convulsions were controlled by bromide of potassium. The case seemed to confirm some of Dr. Ferrier's experiments, proving that the centre for the platysma is the same in man and the lower animals. It also confirmed the soundness of Dr. Hughlings Jackson's views on epilepsy (discharging lesion of the cerebral convolutions). It was difficult to say what was the exciting cause of this attack; possibly the violent vomiting. The exact cause of death was not ascertained (the head alone could be examined). There was a decided rise in the temperature of the right side. Rigor mortis came on early (eight hours after death) in the right side, but not in the left. The bone was not trephined. It must, however, be remembered that the patient was recovering. There was no true aphasia.

Two Cases of Microcephalic Idiocy. By G. E. SHUTTLEWORTH, M.D., Lancaster.—The author gave a brief description of the physical and mental characteristics of two microcephalic idiots now resident in the Royal Albert Asylum, Lancaster. Remarking that the case of one of them had been already referred to in the last edition of "Bucknill and Tuke", he proceeded to compare the present head-measurements and characteristics of that patient with the account then quoted from Dr. Ireland's observation in 1871. He stated that, whereas at that date the circumference of the boy's head was but $14\frac{1}{2}$ inches, it was now $14\frac{1}{2}$ inches; and that other measurements showed that there had been development during the last four years, chiefly of the posterior part of the skull. The boy, who was eleven years old, was active, observant, and displayed even evidence of capacity to carry on a train of reasoning. The etiology of this case was obscure. The second case described was that of a boy aged 7, whose head measured only $14\frac{1}{2}$ inches in circumference. The vault of the skull was of fair proportions, and, in fact, the head simply seemed to be formed on a very small scale. The child had a full lustrous eye and fairly intelligent appearance; and, though possessing but feeble powers of expressing himself, was very observant and inquisitive. He was of rickety diathesis, the child of parents in whose

families, which were related, there had been previous mental weakness and a tendency to phthisis. The mother gave an account of a severe nervous shock sustained by her about the middle of pregnancy, owing to her witnessing the fall upon his head of one of her other children. The author, while stating his general disbelief in the influence assigned by mothers to such impressions, argued that in this case the malformation of the head was at least as likely to result from that cause, as from the more scientific one assigned by Virchow in similar cases of premature ossification, to which the rickety diathesis would not be likely to contribute. He remarked, further, that the essentially human characteristics of both the cases lent no support to the theory of Vogt as to the pithectic affinities of microcephales.

Bulbar Paralysis. By T. S. DOWSE, M.D., Highgate.—The author first raised an objection to the French name glosso-laryngeal paralysis, and hoped that the German term bulbar paralysis would supersede it, because it was shorter, and gave a more definite idea of the extent of the lesion in the medulla oblongata. He drew attention to the etiology, clinical features, diagnosis, prognosis, pathology, and treatment of the disease. Dr. Dowse's practice in the Central London Sick Asylum had given him considerable experience in this as in kindred diseases of the nervous system, and, in opposition to the opinions of most writers on this subject, he held that the so-called bulbar paralysis, although essentially progressive and surely fatal, might be divided into two classes, direct and indirect. The direct arose from—1. Progressive interstitial neuritis; 2. Thrombosis of medullary vessels; 3. Haemorrhage; 4. Morbid growths; 5. Spasm of vessels. The indirect arose from—1. Reflex action from peripheral irritation; 2. Inhibition from shock to the central cerebral ganglia. Of these varieties, only one could be considered to come under the term slowly progressive; the others he looked upon as retrogressive and stationary. He detailed the clinical notes of a case of paralysis of the facial, hypoglossal, spinal accessory, and glosso-pharyngeal nerves, where speech and movement of the tongue had been lost for more than four years, and which was cured by the continuous galvanic current. He also gave the clinical notes of a case of retrogressive paralysis of the bulbar nerves, which, in his opinion, was of a reflex nature. Dr. Dowse did not believe in reflex paralysis of the hypoglossal nerve from diphtheria, neither did he recognise an hysterical bulbar paralysis of a persistent character. Dr. Dowse drew attention to one point, which he considered of great importance in treatment, and gave a case where the man so far recovered as to resume his occupation of a coal-heaver, through the early administration of fluid nourishment by means of a piece of elastic tubing passed through the nostril. He said that it was unjustifiable to trust a patient to feed himself until the disease was so far advanced that he was liable to choke himself with every mouthful of food. Artificial feeding was absolutely necessary immediately the second stage of deglutition became affected. Drugs were of little value. The administration of steel and cod-liver oil was indicated, and the injection of one-fortieth of a grain of atropine into the submaxillary region had in some instances checked the overflow of saliva.

On the Effects of Various Portions of the Weight of the Several Parts of the Encephalon, in 2,050 Sons and Daughters of a Single Family. By R. BOYD, M.D., London.—The paper was founded on the results of the neurological registers kept by Dr. Boyd during thirty years in the St. Marylebone Infirmary and in the Somerset County Lunatic Asylum. As regards the sexes, it was found that the average weight of the encephalon was from four to five ounces heavier in males than in females, and that there was a difference in height of an equal number of inches. The proportions of the different parts of the encephalon, estimated according to the height in 400 males and 325 females, insane, were as follows: the average height in the males being 66 inches, and in the females 62 inches.

	Male.	Female.
Cerebrum (right hemisphere)	.301	.294
" " " " "	.302	.295
Cerebellum	.077	.076
Pons and medulla	.016	.016
Encephalon	.697	.681

The cerebrum was .007 heavier in males than in females, and the left hemisphere was heavier than the right by .001 in both sexes; the cerebellum .001 heavier in males; the pons and medulla alike in the two sexes; the encephalon .016 heavier in males than in females. Inequalities in the size of the two cerebral hemispheres have frequently been observed, especially in epileptics. (See *Medico-Chirurgical Transactions*, vol. xxxix.) The heaviest brains have often been those of epileptic idiots; hypertrophy of the connecting tissue has been found in them; to the same cause may probably be attributed convulsions and sudden death in apparently healthy children, cases of which are in the registers referred to in the Marylebone Infirmary. Of the 2,050

cases, 616 males and 653 females were sane, and 430 males and 351 females insane. From the comparative table of the effects of various diseases on the weight of the brain, in the sane and the insane of both sexes, it appeared that, taking the total numbers, the encephalon was heaviest in the insane, the difference being in the males three-fourths of an ounce, and in the females an ounce and a quarter. The average weights were as follows, taken from the whole of the cases :

	Sane		Insane	
	M.	F.	M.	F.
Cerebrum	41.4	36.4	41.8	37.5
Cerebellum	5.1	4.9	5.4	4.7
Pons and medulla	1.0	1.0	0.9	1.0
Encephalon	47.5	41.9	48.2	43.2

Tables were then given, showing the average weights in diseases of the nervous system, pulmonary diseases, cardiac diseases and dropsy, abdominal diseases, and typhus. Diseases of the nervous system were most numerous amongst the insane males, amounting to nearly 47 per cent. of their whole number; this excess was due to the frequency of general paralysis, a disease, as the symptoms indicate, usually accompanied by softening and sometimes by induration of the spinal cord as stated by Dr. Boyd in 1848, confirmed by the microscopical observations of Mr. Gulliver, and since by other observers. The encephalon was $2\frac{3}{4}$ ounces below the average weight. In pulmonary diseases, the encephalon was below the average weight in males and insane females. In cardiac diseases, the encephalon was considerably above the average weight in all classes, also in abdominal diseases, except in sane males, in whom it was the average weight. In fevers, too, the encephalon was above the average weight, so that cerebral wasting seems to accompany chronic diseases, cerebral and pulmonary.

The Psychology of Muscle. By J. S. NAIRNE, L.F.P.S., Glasgow.—According to the author of this paper, man has a psychologic and a pneumatologic nature. The latter is hidden. Muscle is entirely responsible for the former; and the identity of the nerve-centres with muscle, *i.e.*, as muscle is asserted. The psychologic phenomena are vital and intellectual; the powers are sensory and motor; and consciousness is an attribute of muscle, but not necessarily of it alone. This consciousness is progressive with organ, and at last amounts to knowledge. The senses are the highest muscular organs of knowledge, and beyond them and without them there is no remembering perceptive power. The being, the phenomena, the powers, are in all cases the result and necessity of definite equilibrium; without which equilibrium there is nothing.

Friday, August 6th.

The Hypodermic Injection of Morphia in Insanity. By J. MCDIARMID, M.B., Murthly.—After some preliminary remarks, the author spoke of the superiority of the hypodermic to the stomachic administration of morphia. The physiological reasons were the greater exactness of the dose, the easy administration in rebellious patients, and the unanimous consent of experimenters. The usefulness of hypodermic injection of morphia in insanity was commented on, and its use in melancholia, acute mania, recurrent mania, chronic mania, and general paralysis was illustrated by cases. The habits of filthy dements were improved under the hypodermic treatment. There was delayed action in some patients. Constipation was not caused by this method of giving morphia. Vomiting after subcutaneous injection was not frequent. Hypodermic injection of morphia was unsuitable in maniacs suffering from heart-disease, and was to be employed only as a *dernier resort*. The use of atropia in combination with morphia subcutaneously was described; and also the doses of morphia required in the various forms of insanity. The results obtained by this method were compared with those of cannabis Indica, chloral, bromide of potassium, and opium and morphia by the mouth.—Dr. CLOUSTON (Edinburgh) said the effects of morphia in cases of insanity might be divided into three classes: first, what might be called its specific effect on melancholia; secondly, its quieting effect in cases of mania; and thirdly, its sleep-producing effect in all cases. In regard to the first of these—the specific action of morphia in melancholia—he performed a number of experiments some years ago, treating the patients with morphia, and administering doses of from half a grain to two grains. During the progress of his experiments, he had weighed the patients every week, had taken the temperature of their bodies, and had their diet carefully attended to. He did not administer the morphia hypodermically; but he supposed that, so far as its special effect on melancholia was concerned, that was of little account. The result of his observations was not in accordance with those of Dr. McDiarmid. Of twenty-two patients with whom he had experimented, the great majority lost weight during the treatment, while the appetite at the same time seemed to diminish. In only three of the cases was there anything like that

effect following the dose which had been so much lauded by various writers. Then, again, his experiments as to the quieting properties of morphia in cases of mania were certainly neither more hopeful nor more satisfactory than those connected with melancholia. In nearly every case, indeed, he found that the dose took away the appetite of the patient; and for this reason he did not consider morphia so beneficial as bromide of potassium and other remedies. In regard to the mere sleep-producing effect of the morphia, he thought the chief objections to it were the dryness of the mouth that was apt to be experienced in the morning, and the excitement occasionally brought on instead of sleep. On the whole, the results of his experiments in relation to the action of morphia on insane patients were such that he had almost universally discontinued its use.—Dr. MCDIARMID pointed out that the results spoken of by Dr. Clouston might be attributed to the fact, that that gentleman had administered about three times as much morphia as had been done in the experiments which he had conducted.

Experiments on the Brain of Monkey, with Special Reference to the Localisation of Sensory Centres in the Convolution. By DAVID FERRIER, M.D., London.—The experiments on which the following conclusions are based were supplementary to those of the electrical irritation of the brain of monkeys, already published in the *Proceedings of the Royal Society*. They were recorded in detail in the Croonian Lecture read before the Royal Society in May last. In the absence of Dr. Ferrier, Dr. Lauder Brunton gave a brief summary of the main results. The method followed was the comparison of the effects of electrical irritation with those following localised destruction of parts of the brain by means of the actual cautery or scalpel. The two sets of experiments supported and explained each other. The most important fact demonstrated by this series of experiments was the localisation of regions of special sense in the convolutions; and this, along with localisation of centres of motion proper, served to clear up the true significance of the reactions to electrical stimulation. 1. Destruction of the frontal regions of the brain, which gives no reaction to electrical stimulation, is without effect on sensation or voluntary motion, but causes marked impairment of intelligence and of the faculty of attention. 2. Destruction of the grey matter of the convolutions bounding the fissure of Rolando causes paralysis of voluntary motion on the opposite side of the body, sensation remaining unaffected; while lesions circumscribed to areas, previously localised by the author, caused paralysis of voluntary motion limited to the muscular action excited by electrical stimulation of the same regions. 3. Destruction of the angular gyrus causes blindness of the opposite eye, the other senses and voluntary motion being unaffected. This blindness is only of temporary duration, provided the angular gyrus of the opposite hemisphere remains intact. When both are destroyed, the loss of visual perception is total and permanent. 4. Destruction of the superior temporo-sphenoidal convolutions abolishes conscious reaction to auditory stimuli, the other senses and voluntary motion remaining unaffected. The results of destruction, taken with the effects of electrical stimulation of this region, indicate that it is the centre of auditory perception. 5. Destruction of the hippocampus major and hippocampal convolution abolishes the sense of touch on the opposite side of the body. 6. Destruction of the *subiculum cornu ammonis*, taken with the results of electrical stimulation, indicates that this is the seat of the sense of smell for the same side of the body. 7. Destruction of the grey matter of the lower part of the temporo-sphenoidal lobe in immediate relation to the region of olfactory perception abolishes the sense of taste. 8. Destruction of the optic thalamus causes complete anaesthesia of the opposite side of the body. 9. Ablation of the occipital lobes produces no effect on the special senses or on the powers of voluntary motion, but is followed by a state of depression, with refusal of food, not to be accounted for by mere constitutional disturbance. In one case, which survived the operation for three weeks and was then killed, the appetite returned: a phenomenon probably to be accounted for by compensatory association. The sexual appetite, however, was exhibited during the first few days after the operation, as judged by the behaviour of the animal to a companion monkey. 10. Ablation both of frontal and occipital lobes in one monkey did not interfere with the powers of sensation or of voluntary motion.—Dr. ROBERTSON (Glasgow) thought those experiments, though doubtless very interesting, should not lead us too hastily to conclusions, as Dr. Ferrier's observations were much disputed, and the monkey's brain was not the same as a man's.—Dr. SAUNDEY referred to Veysièr's experiments on the localisation of common sensibility.—Dr. DUPUY (Paris) gave the results of his own observations, which differed from those of Dr. Ferrier.—Dr. CATON (Liverpool) had repeated many of those experiments, and could confirm Dr. Ferrier's statements. He had only just been made aware that Dr. Ferrier had been doing anything to localise special sense, and was very pleased to find that the centre, assigned by Dr. Ferrier to the sense of

sight, was one which he had localised by an entirely different method, viz., that of noting the variations in the electrical currents of the brain as caused by functional exercise.—Dr. FRASER and Dr. SMITH followed, and the latter expressed the general sense of the meeting in thanking Dr. Lauder Brunton for ably explaining Dr. Ferrier's views.

SECTION F.—PHYSIOLOGY.

Wednesday, August 5th.

DR. BURDON SANDERSON, F.R.S., President, took the Chair at 2 P.M.

Transference of the Long Tendon of the Biceps Muscle from the Scapula to the Humerus in Chronic Disease of the Shoulder. By JOHN STRUTHERS, M.D., Aberdeen.—Dr. Struthers explained how the tendon, say in a rheumatic shoulder, being no longer of any use, was removed from the upper bone and joined on to the lower bone, by which its use was thereby to some extent preserved. The steps of this process were narrated, and the subject was further elucidated by the exhibition of specimens. Adhering to the lower bone by the effects of excited action, the part of the tendon within the joint, having become functionless, was seen in various stages of passing away, while the attachment of the lower bones, on which the muscle pulled, became gradually stronger till the adaptation was completed. Dr. Struthers remarked that this might be called a pathological process; but pathological processes were also physiological processes; and, he expected that in future, the study of these processes would throw much light on questions connected with the origin and adaptation of healthy structures.

Experiments on Change of the Bodily Temperature consequent on Section of the Cord in the Cervical Region. By J. BURDON SANDERSON, M.D., LL.D., F.R.S., London.

The Electric Currents of the Brain. By RICHARD CATON, M.D., Liverpool.—After a brief résumé of previous investigations, the author gave an account of his own experiments on the brains of the rabbit and the monkey. The following is a brief summary of the principal results. In every brain hitherto examined, the galvanometer has indicated the existence of electric currents. The external surface of the grey matter is usually positive in relation to the surface of a section through it. Feeble currents of varying direction pass through the multiplier when the electrodes are placed on two points of the external surface, or one electrode on the grey matter, and one on the surface of the skull. The electric currents of the grey matter appear to have a relation to its function. When any part of the grey matter is in a state of functional activity, its electric current usually exhibits negative variation. For example, on the areas shown by Dr. Ferrier to be related to rotation of the head and to mastication, negative variation of the current was observed to occur whenever those two acts respectively were performed. Impressions through the senses were found to influence the currents of certain areas; e.g., the currents of that part of the rabbit's brain which Dr. Ferrier has shown to be related to movements of the eyelids, were found to be markedly influenced by stimulation of the opposite retina by light.

The Digestive Principle of Insectivorous Plants. By LAWSON TAIT, F.R.C.S. Ed., Birmingham.—Mr. Tait communicated the results of certain experiments he had made, for the purpose of separating the digestive principle or ferment, on which the remarkable power possessed by certain plants, as pointed out in Mr. Darwin's recent interesting work, is dependent. Mr. Tait showed that it was possible to separate this principle from the plant for experimental purposes. As to the precise method of its action, he was still engaged in inquiry; but, so far as his researches had gone, he was able to confirm the view taken by Darwin, that the chemical processes concerned in animal and plant digestion were identical.

The Effects of certain Drugs upon the Intracranial Circulation. By J. M. FOTHERGILL, M.D., London.—Dr. Fothergill stated that, in producing effects upon the intracranial vascularity, there were two factors: (1) a direct effect upon the circulatory system; and (2) an effect upon the cerebral cells by which they attracted more blood, or less blood to themselves. These factors existed in varying proportions in different drugs; and according to the exigencies of each case, one or other agent should be chosen, as opium in cases of insomnia from pain, chlorhydrate rather when the sleeplessness takes its origin in a high blood-pressure. Whether the agent administered depresses or stimulates the nerve-centres, its action can usually be intensified by giving it along with drugs which act directly upon the circulation, as opium with antimony, and quinine, which affects the encephalic blood-vessels; with digitalis, which raises the blood-pressure generally.

On a Case of Death from Suffocation in a Diver, illustrating some Effects of Increased Pressure on the Pulmonary Circulation. By R.

BEVERIDGE, M.D., Aberdeen.—The death of this man occurred almost immediately after his first descent for the season. There was no defect in the apparatus, and his companion who descended with him was unaffected; it could not, therefore, be due to deficient supply of air. On a previous occasion, this man had, under similar circumstances, nearly lost his life. It also was his first descent for the season. It was usual for divers on descending for the first time to experience a feeling of oppression and a sensation as if the head would burst. This, as a rule, passed very quickly away, and nothing further was observed in the way of discomfort till after leaving the water, when there was very often a sensation of giddiness, sometimes an attack of sickness, and in many cases a flow of blood from the nose and mouth. Most men after a few trials became accustomed to the work and suffered no inconvenience, but some did not do so, and always suffered in some way on leaving the water. These symptoms were undoubtedly due to the varying pressure on the vessels on the lungs, and in the above case had produced complete stoppage of the pulmonary circulation. This view was confirmed by the *post mortem* examination. The heart was large, pale, and flabby; its cavities were empty of blood; the lungs were intensely gorged with dark fluid blood. The air-tubes, beginning at the fauces, were much congested, dark purple in colour; and the smaller bronchi were partially filled with dark frothy blood. Other organs were also loaded with dark blood. The heavy pressure (in this case doubled) would cause partial stoppage of the lung-circulation, throwing back the venous blood on the right side of the heart, and thus inducing insensibility and suffocation, while the quick taking off of the pressure could allow all those vessels to fill to the utmost, thus producing the great gorging of all the bronchial surface, and the complete emptying of the cavities of the heart.—In the discussion that ensued, several gentlemen expressed doubts as to the cause of the man's death, suggesting that, although one of the diving-bells was safe, the other might not have been so, and that this might not have been ascertained on account of the connecting-tube being out of order.

Thursday, August 5th.

Physiological Acoustics. By J. G. MCKENDRICK, M.D., Edinburgh.—Dr. McKendrick gave a demonstration on physiological acoustics, with the view of illustrating the results of the researches of Helmholtz regarding the quality of musical sounds. After pointing out that Helmholtz had discovered that a musical note consisted, not of one tone, but of a series of tones, Dr. McKendrick proceeded to show this by means of an ingenious contrivance devised by Dr. Koenig of Paris. In a series of interesting experiments, it was shown how a tone could be decomposed, as it were, into its fundamental harmonies, and in this way an actual flame-picture of it be obtained.

Effect of Division of the Sympathetic Nerves of the Neck in Young Animals. By WILLIAM STIRLING, D.Sc., M.D., Edinburgh.—Dr. Stirling said that the division of the sympathetic nerve in the neck, for instance, of a young rabbit or dog was, in the first place, followed by the ordinary symptoms of the operation. As the animal grew, however, it was found that the ear of the side in which the nerve was divided grew more than that on the other side. The hair of the ear upon this side became stronger than on the opposite side; and, lastly, the temperature of the affected part continued higher than that of the other side for several months together.

Anatomy and Physiology of the Semicircular Canals. By A. CRUMBROWN, M.D., Edinburgh.—The main object of the paper was to elucidate the theory that these canals may afford our sense of equilibrium and rotation. After stating the conviction that we possess a sense of rotation quite distinct from all our other senses, Dr. Crumbrown proceeded to show that this sense must necessarily have a special peripheral organ physically constituted so as to be affected by rotation. The structure of the semicircular canals of the internal ear was, he considered, such as to fit them to act as such a peripheral organ; and this view was supported by the experiments of Flourens and Goltz. The bony canals in question being filled with liquid, rotation of the head about an axis at right angles to the plane of a canal would produce motion of the contents, and this might be expected to irritate the terminations of the nerves in the ampulla.

On Injection of the Kidney in Bright's Disease, in Relation to Albuminuria and Hematuria. By J. COATS, M.D., Glasgow.

A New Histological Process for Staining Tissues. By FRANCES ELIZABETH HOGGAN, M.D., London.—Mrs. Hoggan said that the process in question recommended itself principally on account of the property it possessed of staining the substance of the cell as well as the nucleus and nucleolus, and because it gave the best results where carmine of ammonia failed. It consisted in first pouring over the specimen (after treating it with water and with methylated spirit) a one-per-cent. solution of perchloride of iron; and, in a few minutes

afterwards, a few drops of a two-per-cent. solution of pyrogallic acid—both solutions being made in distilled water. A practical demonstration of the process was given by Mrs. Hoggan.

The Action of Stimulants and Narcotics. By THOMAS P. LUCAS, L.R.C.P.Ed., London.—This paper opened with a notice of nerve-force. The author expressed the opinion that vitality is dependent upon an exhibition of this force. He adduced several proofs to show that it is most closely allied to electricity, and designated it as *nervo-electricity*. He divided this *nervo-electricity* into three parts: (1) that with which the nerve-fibres, muscles, and tissues generally are always charged, and which is spent in the rigor mortis—the residual; (2) the radiant *nervo-electricity*, or that which is continuously passing from the body with the eliminated heat—the complementary; (3) that which is called forth and discharged in the exhibition of every vital phenomenon—the supplementary *nervo-electricity*. The second portion of the paper was devoted to a notice of the action of drugs on the cerebro-spinal and sympathetic nerves, in order to show that stimulants act through the former, and narcotics by means of the latter. A number of proofs were adduced to show the action of narcotics upon the sympathetic. Instances were given to prove that stimulation (narcotisation) of the sympathetic induces general relaxation, contraction of the blood-vessels, and congestion of the capillaries, and consequent coma and death. On the other hand, severe stimulation (narcotisation) paralyses the sympathetic; the result of which is that the cerebro-spinal exercise their powers unchecked, and more or less prolonged rigidity of the muscles ensues. Again, those medicines which stimulate the cerebro-spinal (stimulants), cause increased activity in the parts stimulated; but if pushed to a great degree, they exhaust, and, by a provision of nature, narcotisation sets in; if the stimulation be still further pushed, exhaustion of the vital organs takes place, and death is instantaneous. In conclusion, the paper went to show that, by watching the action of drugs upon animals, by pushing the trial to the extreme limits, and by noting the *post mortem* appearances, we could ascertain the nerves on which such drugs act. Thus, in disease, we should be able to apply remedies in a scientific manner, not by an imaginary law of *similia similibus curantur*, but by a demonstrated law, *contraria contrariis curantur*.

Friday, August 6th.

The Inheritance of Nervous Lesions. By EUGENE DUPUY, M.D., Paris.

Capillaries in the Umbilical Cord. By LAWSON TAIT, F.R.C.S., Birmingham.

Demonstration of the Method of Using the Electric Monstome. By W. RUTHERFORD, M.D., F.R.S., Edinburgh.

The Magnetic Conditions of Arterial and Venous Blood considered in relation to the influence that Arterial Blood exerts in promoting the Functions of Life; and the consequent Value of Magnetism as a Therapeutic Agent. By R. C. SHETTLÉ, M.D., Reading.—In this paper, the author referred to the experiments he had brought before the Royal Society, in which he had demonstrated the fact that a grand distinction exists in the physical properties of arterial and venous blood with regard to magnetism, and that the magnetic properties of arterial blood are dependent upon the oxygen absorbed in the blood, with the amount of which they are in direct proportion. He next went on to show that, as chemical action and electric action are in direct proportion to each other, and the direction of the electric current is in the same direction as chemical action, and as by another law the amount of electric force generated is in direct relation with the amount of magnetic disturbance, it follows that, if the arterial blood is able to sustain life by virtue of the chemical action of oxygen, it is equally able to perform the same work by virtue of the magnetic disturbance to which the motion of the corpuscles gives rise; and, inasmuch as magnetic influences are exerted at sensible distances, and chemical action depends upon the contact of bodies, it also followed that in these operations of life chemical action must be secondary to and directed by magnetic action. He next pointed out that it is to the influence of the magnetism of the earth acting upon the molecules of matter in the circulating fluid in certain conditions that the corpuscles and various other organic principles owe their existence, and that the different characters which the blood-corpuscles assume in the four great divisions of the animal kingdom result: 1. From the food upon which the animal lives; and 2. From its habits of life; and, inasmuch as they result from the mode in which matter acts upon force and force upon matter, they naturally acquire properties peculiar to the animal in which they have been formed, and these peculiarities they again impart to successive generations of corpuscles. And, in accordance with this law, they would be liable to certain modifications by a

change in the habits or food of the animal in which they existed. The proper selection of food becomes, therefore, a matter of great importance with regard to health, every form of matter taken into the system having its own specific magnetic influence: 1. Over the blood-corpuscles; and 2. Through them over the nerve-currents; disorder or disease resulting from the imperfect manner in which organic principles are formed and combined either from insufficiency of force or impurity of matter acted upon. With regard to the treatment of disease by medicines, he showed by the above law that, as a rule, all drugs act by virtue of the magnetic characters they impart to the blood. Iron, one of our best and most universal tonics, strengthens the system by adding to the magnetic character of the blood, so inducing more powerful currents of electricity in the nerves. Magnetic bands applied externally are frequently of the greatest service, either alone or in conjunction with internal remedies, as they increase the polar influence of the part over which they are placed. The author concluded his paper by pointing out that the doctrine hitherto held has been that oxygen supports animal life by its chemical properties under the influence of a mysterious vital force (the laws of which must necessarily be as unknown as they are mysterious). With reference to the theological bearing of the subject, he showed that the fact of vital activity being referred to magnetic action only testified to the simplicity and unity of purpose which pervades all the works of the Creator, the grandeur of which becomes apparent not only in the phenomena of terrestrial magnetism, but also in the application of the same force to all the phenomena of life.

Comparative Pharmacology. By JAMES ROSS, M.D., Waterfoot, Manchester.

A Means of Preventing Death during the Extraction of Teeth under Chloroform. By T. LAUDER BRUNTON, M.D., F.R.S., London.

SELECTIONS FROM JOURNALS.

MIDWIFERY AND DISEASES OF WOMEN.

THE UNMANAGEABLE VOMITINGS OF PREGNANCY.—The *Journal de Médecine et de Chirurgie* quotes a communication from M. Tarnier respecting a case in which, in a multipara in the third month of pregnancy, serious unmanageable vomitings were arrested by the simple application of a plug of wadding to the vagina. He collates with this fact three cases published in the BRITISH MEDICAL JOURNAL, in which Dr. E. Copeman saw very serious vomitings arrested by the dilatation of the neck of the uterus. In the first case, the digital dilatation of the neck was to have been followed by puncture of the membranes to induce abortion at six months. A fortunate delay demonstrated to Dr. Copeman that dilatation had a great influence on the arrest of the vomitings. Pregnancy went on in due course, and the patient was delivered at the proper time. In a second case, the result was intentionally sought and obtained in the second month of pregnancy. In a third, pregnancy had reached the eighth month. The vomitings were also stopped, and the patient was delivered eighteen days afterwards, when she had already regained some strength. The plug and the dilatation of the neck are two mechanical methods which, in the opinion of the writer who comments on these cases in the *Lyon Médical*, are very rational, though undoubtedly acting by a different mechanism. The plug prevents the shaking about of the womb; the dilatation of the neck detaches the membranes over a certain space, and prevents the twitchings or distension of the internal orifice.

PATHOLOGY.

MALFORMATION OF ABDOMINAL ORGANS.—R. Wünsche describes, in the eighth volume of the *Fahrbuch für Kinderheilkunde*, new series, a case of congenital occlusion of the pylorus, with occlusion of the duodenum at its passage into the jejunum, absence of the gall-bladder, and atresia of the sigmoid flexure. The duodenum was dilated into a large sac, almost twice the size of the stomach, which was normal; it contained a quantity of thin brownish-yellow fluid. The jejunum and ileum were of the calibre of a quill, and quite empty; the large intestine was not much stronger, and contained a little mucus. From the liver, which was of normal texture, a rather wide hepatic duct passed into the duodenum; the ducts of Wirsung and Santorini were also abnormally dilated. The child in which these malformations occurred died six days after birth. Two other children of the same parents had, it was said, previously died at the same age.—*Centralblatt für die Medicin. Wissensch.*, May 18th, 1875.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, AUGUST 28TH, 1875.

DIURETICS.

THERE exists no class of remedies so intimately wrought in with physiological knowledge for their rightful application in practice as diuretics. The well worn formulæ evolved by experience and largely used in a routine way by practitioners usually contain various forms of agents which increase the bulk of urine; but in their synthesis empiricism has received no aid from physiological research. Such formulæ, then, really are happy guesses; the guess having some direction given to it by close observation and comparison of different cases. They are creditable to the careful watchfulness of our predecessors in medicine, and demonstrate how much we owe to empiricism during long ages, ere science came to plant her finger-posts along what had been but wandering tracks, found and kept by few, and lost by the majority, who wandered on in aimless helplessness. In order, then, to comprehend the action of various diuretics, it is necessary to remember the structure and function of the kidney, its relations to the vascular system, as well as its depurative action.

One of the chief functional uses of the kidney is to excrete water. For this end, it is in peculiar and intimate relations with the circulation. In the kidney, the renal artery, itself but a short branch from the main trunk, breaks up rapidly into numerous minute arteries. These again suddenly break up into very fine and minute vessels, with extremely thin walls, through which the water of the blood escapes readily into the uriniferous tubules, and so passes away. In consequence of this rapid subdivision of an artery of considerable size springing off from the aorta, the flow of water in the kidney is in very close relationship to the blood-pressure within the arterial system. If a draught of water be swallowed, it passes readily from the stomach into the blood-stream, the bulk of blood is increased, there is increased blood-pressure, and a rapid flow of urine follows. Every variation in the condition of the elastic arterial system is readily felt in the kidney. If there be much tension, then the flow in the tubules is free; when the blood-pressure is low, the secretion is languid. In practice, it is a matter of great moment to recognise what Traube has so much insisted upon, namely, the relations of water-excretion to the condition of the vascular system. Every day we see this, that is, if we are prepared to look for it. The on-come of cold weather, and especially the first days of frost, increase the bulk of urine, and the calls to empty the bladder, very distinctly in most people. The cold contracts the vessels of the skin, and so raises the blood-pressure in the arteries, and an increase in the bulk of urine results. When the first warm days of spring induce free action in the skin, it is noticed that there is a palpable diminution of the bulk of urine. In the same way, we note how the bulk of urine falls in heart-disease; less and less is the volume of water passed, as the failure of the heart becomes more and more pronounced; the first effect of remedial agents in heart-disease, and the most cheering evidence that they are doing good, is the increased flow of urine. As soon as our agents affect the circulation and increase the blood-pressure in the arteries, the effect is visible in the flow of urine. Thus, in the administration of digitalis, squill, and similar drugs, we increase the bulk of urine by the effect of these agents upon the circulation. More careful experiments have been performed in connection with digitalis than with any other vascular diuretic;

and we know that, while this drug is so pre-eminent a diuretic in cases of failing circulation, it does not increase the bulk of urine in healthy persons; indeed, in toxic doses it produces arrest of the renal secretion. Of old, practitioners said that diuretics relieved the circulation, and that digitalis relieved the failing heart by getting rid of much water from the blood and so reducing its bulk. Even yet there are some who say that digitalis always acts best upon the heart when its diuretic effects are most distinct. This is a curious but not incomprehensible inversion of the facts of the case. Really, the flow of urine is the most satisfactory evidence of the effect of the drug upon the circulation.

So much for the relations of the vascular system and the flow of water through the kidneys. While recognising clearly the relations of bulk of urine to blood-pressure, it must also be borne in mind that the vaso-motor supply of the renal vessels is large, and functionally very active. By means of rapid dilatation of the renal vessels, a large flow of urine can be attained without much change in the blood-pressure. In cold weather, there is every reason to believe that not only is the general arterial tension increased by the contraction of the cutaneous vessels, but that there is an active dilatation of the renal vessels. This is rendered probable by the known relations of the kidney and the skin, and the effect of certain agents. For instance, draughts of fluids, especially if alkaline or alcoholic, in cold weather increase the flow of urine; in summer they increase the perspiration. Those who take potash persistently, and their number in these meat-eating days is legion, especially comparatively young men, note how their draughts of potash-water drench them with perspiration in warm weather. When the skin is acting freely, the amount of fluids consumed has but little effect upon the bulk of urine. In cold weather, when the skin is marbly and dry, the amount of fluids consumed exerts but little influence over the cutaneous transpiration. The play back and forward betwixt the skin and kidneys is very interesting and instructive. Some agents act upon the vessels of the kidney, dilating them, doubtless through the medium of the vaso-motor nerves, and so increase the flow of urine. These are diuretics in the truest sense—simple diuretics. It is obvious that such agents may be profitably combined with others which increase the blood-pressure. Such a combination is probably attained by the union of juniper and digitalis. In many instances, such a combination would be very desirable. It must not be asserted too positively that the vascular diuretics do not exert some special action upon the renal vessels; that, in fact, while producing a contracting effect upon the blood-vessels generally, they dilate the blood-vessels of the kidneys. If, indeed, they produced contraction in the renal vessels in strict proportion to their effect upon the rest of the vascular system, they would not produce an increased flow of urine: the effect upon the renal vessels would exactly neutralise their action upon the vascular system generally. It is necessary to be very clear upon this point, else it is impossible to read aright the effects of chronic Bright's disease upon the bulk of urine. It is well known that in the earlier and middle stages of granular kidney there is a great flow of urine. It is also well known that during these stages there are high blood-pressure, a low pulse-curve with the sphygmograph, accentuation of the aortic second sound, and hypertrophy of the left ventricle. There are, indeed, all the evidences of a high blood-pressure and a large flow of urine. When the heart begins to fail, then the bulk of urine falls step by step with the cardiac failure.

There are cases, however, where all these evidences of the state of increased arterial tension exist without there ever being a notable increase in the bulk of urine. What are, then, the lessons taught us by such cases?

They are these. While in the majority of cases there is increased blood-pressure due to an hypertrophied condition of the muscular portion of the vascular system, the renal vessels are not equally affected, and thus the increase in the blood-pressure produces an effect upon the urine; in other cases, there is hypertrophy of the muscular walls of the renal arteries sufficient to neutralise the rise in the blood-pressure, and so there is no increase in the bulk of urine. Clinical observation would

tend to show that the latter class of cases is much rarer than the former. The rule certainly is that the condition of vascular tension and the bulk of urine are intimately related to each other.

In those cases, then, where we wish to excite a large flow of urine, it is well to combine together in one prescription agents which dilate the renal vessels with agents which raise the blood-pressure. Some diuretics, and especially the various salts of potash, are actual depressants of the circulation, and in many cases, especially when the heart is weak, it is desirable to counteract the property by combining potash with squill or digitalis; in many cases of atonic gout this is very necessary.

The kidneys are also largely associated with the elimination of nitrogenised waste. The products of histolysis, and the waste of albuminoids split up in the liver to form glycogen—the cinders of the body-combustion—are cast out of the system by the kidneys and the skin. As in the excretion of water, so in the elimination of azotised waste, the kidneys and the skin preserve their intimate relation. When we wish to increase the elimination of solids by the urine, we do not, or at least ought not, to give a diuretic which possesses its diuretic effect by means of its action upon the vascular system. This is useless. But, instead, we give potash, buchu, and other agents which act upon the kidney itself. By these means, we increase the elimination of urine-solids. In many cases, especially in those cases of Bright's disease where there is a large flow of urine of low specific gravity—not a mere case of dilution of urine-solids, but a positive decrease of the solids, with increase of the bulk of water—it is desirable to give potash in infusion of buchu. In the scanty urine of advanced heart-disease laden with lithates, such-mixture would produce no good results, probably, in most cases, only depress the heart's action further; while vascular diuretics are the agents required by such a condition. In that form in which azotised waste is most permanent in the body—viz., lithic acid—potash increases the bulk of urine-solids by rendering the lithic acid soluble, so that, as lithate of potash, it drains away in the water of the kidney. There are thus diuretics which increase the bulk of urine-solids, and diuretics which possess the property of increasing the amount of solid excreta in the urine. They are totally distinct agents, not to be confounded with each other, not to be substituted for each other, but often to be combined together with advantage. Whenever, then, we wish to act upon the kidney, we must first clearly recognise what it is we wish to achieve, and then to prescribe accordingly. If there be a condition of urine laden with lithates, then potash is indicated. If at the same time the vascular system be atonic, and the heart act feebly, then it is desirable to give squill or digitalis as well. It is not inconsistent to give a vascular diuretic with one which increases the excretion of urine-solids; but it will not do to give one for the other, as if they could be substituted for each other. With either, or with both, may be given a simple diuretic which induces renal hyperæmia.

In the earlier stages of chronic Bright's disease, when there is a full well-sustained pulse, potash may be given alone without depressing the circulation too much. In fact, a certain amount of depression of the circulation is not without its advantages; and a lowering of the bulk of urine is commonly accompanied by a positive increase in the amount of urine-solids, not a mere relative and proportionate rise in the specific gravity. Indeed, it would seem that there is certain antagonism betwixt those branches of the renal artery which Virchow has shown to pass to the cortical substance and the glomeruli, and those which pass in an opposite direction to the vasa recta and the pyramids. When the one set are dilated, there is a large flow of water, and a small escape of urine-solids; when the others are dilated, there is a small flow of dense urine. In health, we are all subject to variations in the volume and character of the urine. In chronic renal disease, these changes are more pronounced still, and the variations in the renal secretion are such as to force themselves upon the attention of the individual. It seems probable that vascular diuretics act upon the cortical division of the branches of the renal artery, as we find under

their use a great increase in volume of urine, without increase in bulk of urine-solids. So also it would appear that agents which increase the elimination of urine-solids act upon the pyramidal vessels, at the same time decreasing the bulk of urine. Thus we find a condition of high arterial tension, with a large flow of pale limpid urine, give way to a condition of lessened arterial tension and a small bulk of dense urine: a change very common in the subjects of chronic renal disease. Also, we know that a discharge of lithates in the urine commonly precedes the breaking of a common cold and restored activity of the skin; a dilatation of the pyramidal vessels apparently anticipating the relaxation of the cutaneous vessels. On the other hand, with the corded vessels of an acute hysterical attack, we find a large flow of limpid urine, very free from solids. There is some association, not yet satisfactorily recognised, but glimmering faintly, betwixt conditions of arterial tension and the two sets of vessels in the kidneys. By vascular diuretics we act upon one, and by eliminant diuretics we act upon the other.

The anatomy and physiology of the kidney must be borne in mind whenever it is desirable to give a diuretic; and the form of diuretic to be administered must be recognised in every case, and adapted to the end we wish to attain. Agents classed as diuretics cannot be given indiscriminately and substituted for each other. They can, however, often be combined with advantage, and a vascular diuretic may often be united to a diuretic of another form with benefit in a large class of cases.

ALLIANCE BETWEEN QUALIFIED AND UNQUALIFIED PRACTITIONERS.

DURING the past week, at an inquest and in a police-court, evidence was given of two instances in which such an understanding existed between unqualified and qualified practitioners as, at least, to amount to a treaty of alliance, that is not only discreditable to the profession, but dangerous to the public. At an inquiry held by Mr. Humphreys, the coroner for East Middlesex, as to the cause of the death of an infant, it appears that there is a so-called dispensary at 20, Bethnal Green Road, kept by an unqualified practitioner, who, on examination, called himself a "student of medicine", although he admitted that he had never been a student in a hospital, or attended any medical lecture; over his door, however, he was described as "surgeon and accoucheur", and, in his window was announced, "home visitation 2s. 6d. per week, medicine and advice 1s. per week". It was stated at the inquest, that all interest in this establishment had been now handed over to a qualified practitioner, who attends at the surgery two or three times a week; the unqualified "student" still, however, occupies the premises as Dr. Bathrom's assistant. Such an arrangement savours too much of a partnership between a qualified and an unqualified practitioner to be satisfactory from a professional or a public point of view. If a qualified practitioner allow his unqualified assistant to see patients at his own residence, their relations assume those of a kind of partnership. We may, remark, moreover, that Dr. Bathrom's name, which was referred to at the inquest, does not appear in the *Medical Register* for 1875.

The other case to which we would refer, was heard before Mr. Bridge, the police magistrate, at Hammersmith. An unqualified practitioner in Kensington was summoned at the instance of the Board of Guardians for signing a medical certificate, under the Vaccination Act, alleging that a certain child was not in a fit state to be vaccinated. Two certificates were produced, one purporting to be signed by Percy Leslie, M.D., and the other bore the signature "W. C. Smith, for Percy Leslie, M.D." The defence was, that the defendant acted as assistant to Dr. Leslie, and signed the certificates by his authority. It was proved, however, that there was a brass plate bearing defendant's name on the gate of the house where he resided, while Dr. Leslie lived in Westminster. Dr. Leslie, in his examination, stated that the defendant had been his assistant in Westminster, but had not so acted for a year. Dr. Leslie, however, admitted that he had, since defend-

ant had been in Kensington, been frequently at his house, and that "no doubt the defendant was constantly in the habit of signing himself certificates for him". In the present period of antivaccination agitation, it is very satisfactory to find, not only that the Kensington guardians decided to prosecute in the case, but that they succeeded in getting a conviction. The defendant was fined £10, and ordered to pay two guineas additional for costs, with the alternative of two months' imprisonment.

M. WURTZ has been nominated Professor of Organic Chemistry in the Faculty of Sciences of Paris. He consequently resigns the office of Dean of the Faculty of Medicine.

A NEW chair of General Anatomy has been created in the College of France, and M. Ranvier has been appointed professor. The choice is an excellent one.

A DIPLOMA of honour of the Vienna Exhibition has been awarded to Dr. Liebreich of Berlin, for his discovery of the properties of chloralhydrate.

LIKE all thoughtful and strong men, Sir Robert Christison has the faculty of arousing antagonism, as well as of producing conviction. His review of the history of the Edinburgh University was full of prickles for the Town Council, who were present officially, and who could not at the time vindicate their administration. An indignant voice has been raised in the Council, however; and, if Sir Robert Christison is not shrivelled in the flame of civic wrath, it is probably because the cool waters of Loch Earn supply a special antidote.

OTHER passages in the President's address have excited attention across the Channel; and the *Dublin Medical Press*, discussing the emigration of Irish students to Scotland, which, it affirms, is disastrous to the Irish school of surgery, is to be found in the fact that "the Queen's College (Ireland) student is obliged to seek in Scotland, and cannot obtain either in Ireland or England, an education level as low as that of his own University". It says:

"Taking the aggregate of all the courses of lectures required by the Queen's University, the Scotch Colleges, and the Irish College of Surgeons, we find that, while the students of the latter must produce certificates for nineteen different courses and twenty-seven months' hospital, they are admitted to examination at the Queen's University on fourteen professional courses and twenty-four months' hospital, and at Edinburgh on eleven courses and the same hospital attendance. It is plain, therefore, that a Queen's College student must go to Scotland for any degree outside the Queen's University which he may desire to have; because if, having taken out the courses necessary for his Q. U. degree, he wishes to present himself at the Irish College or at the University of Dublin, he is obliged to spend another winter in Dublin, and pay for five extra courses."

The Irish scheme of conjoint examination would have relieved the Irish school of surgery of the severe underselling competition of which complaint is now made. The fact that the University of Edinburgh itself suffers a good deal from the same kind of competition, affords a pretty strong commentary on Sir Robert Christison's argument against an uniform minimum examination.

ANOTHER class of persons who will be aroused by the sayings of Sir Robert Christison are the antivivisectionists. Very early in this debate, we expressed a willingness to find space for any worthy contribution to the arguments against vivisection. Dr. Macaulay, the editor of the *Leisure Hour*, writes to us *à propos* of Sir Robert Christison's address, to express a wish to combat some of the fundamental propositions on which his brother medical men are wont to rely in defence of the practice of experimentation on animals. We shall be very glad that he shall do so, and can promise him open lists and chivalrous laws of combat.

SCARLET FEVER AT HURDSFIELD.

A SOMEWHAT serious outbreak of scarlet fever has occurred at Hurdsville, near Macclesfield, among the children attending one particular school, no fewer than sixteen out of seventeen cases having occurred among the pupils of the school in question. It is stated also that an application was made to the vicar for the purpose of temporarily closing the place in order to have it thoroughly disinfected; but that he declined doing so. The sanitary authorities are actively engaged in the adoption of remedial measures.

THE TRANSIT OF VENUS.

A HANDSOME recognition of the services of Dr. Henry Draper in connection with the recent observations on the transit of Venus has been made by the United States Government. It consists of a gold medal made at the United States Mint at Philadelphia. On the obverse is the motto, from Virgil, "Famam extendere factis hoc virtutis opus est", and in the centre a figure of the heliostat which was used by Dr. Draper in training the photographers. On the reverse is the inscription, "Veneris in sole spectandæ curatores, R. P. F. S. Henrico Draper, M.D., Dec. viii, MDCCCLXXIV." The phrase around the edge of the reverse, "Decori decus addit avito", conveys a tribute of praise to the literary and scientific attainments of Dr. Draper, sen. The Transit Commission have also sent Dr. Draper a handsomely bound set of resolutions illuminated in mediæval style, with a telescope, camera, etc.

UNIVERSITY OF ABERDEEN.

DR. SMITH-SHAND, lecturer on clinical medicine in the Aberdeen Royal Infirmary, has been appointed to the chair of the practice of medicine in the University of Aberdeen, vacant by the resignation of Dr. Macrobin.

THE WORCESTER INFIRMARY.

IN consequence of the resignation of Dr. Inglis, and the complaint by the medical staff "of the injustice inflicted upon him by the vote of censure for a single unavoidable absence from duty in the face of fourteen years' service, together with the interpretation put upon the rules", a subcommittee has been appointed, upon the motion of the Earl of Beauchamp, "to inquire into the rules relating to the honorary medical staff, and to report what amendments, if any, it may be desirable to make therein." A letter on the subject appears in another page.

ZIEMSSSEN'S CYCLOPEDIA OF THE PRACTICE OF MEDICINE.

WE have received the tenth volume of Ziemssen's Cyclopædia of Medicine, containing Schröder's Diseases of the Female Sexual Organs. The volumes of the German edition of this great work are not being issued in regular succession—some of those treating upon subjects of greatest interest having the precedence, although numbered to conform to the plan of the entire work. It has been concluded to follow the same course with this translation; and in compliance with the expressed wish of many subscribers, the tenth volume is now published before the fourth. Volume IV will follow on Dec. 1st, and Volume V on March 1st, 1876. The publishers announce that the rumours of an intended change in the plan of publication are entirely without foundation. This work will be obtainable only by subscription for the entire set of volumes. This Cyclopædia is now being published in the English, German, Dutch, Italian, and Russian languages.

DRUGGISTS' PRESCRIPTIONS.

DR. DIPLOCK took occasion recently to make some well-timed remarks while holding an inquest on the body of a child, who met with her death through improper treatment at the hands of a druggist. The child had been ailing for some time past, and was taken by the mother to a local druggist. Deceased got worse, and when too late a properly qualified medical man was called in, who found that the child was suffering from congestion and inflammation of the lungs, from which she died in a few hours. The coroner, in summing up the case to the jury,

said that it was very much to be regretted that druggists were allowed to prescribe for children in the way they systematically did, without knowing anything about the real illness from which the little ones were suffering. Here was a child suffering from a cold which, by active treatment, would have been probably got rid of, and yet, owing to the neglect of the parents in not calling in proper medical assistance, and to the ignorance of a local druggist, the cold had resulted in inflammation of the lungs, and terminated fatally. In his experience as coroner, he had known druggists make the most absurd mistakes in reference to the symptoms of patients brought to them. In one case, a child was suffering from a fracture of the skull, for which a druggist prescribed a mustard poultice on the chest, and another prescribed chalk mixture for effusion on the brain. As a rule, the druggist prescribed for the children, who got worse, and when they were *in articulo mortis* a doctor was called in, who could give no certificate, and an inquest followed. It was high time that strict measures were taken to stop the system. The jury returned a verdict in accordance with the facts, and thanked the coroner for his remarks, which they endorsed.

CAPTAIN WEBB.

THE unprecedented exploit of Captain Webb stands almost unrivalled as an instance of human prowess and endurance. It places Captain Boyton's achievement completely in the shade as an exploit, though its practical utility to the species may be much less. It is not merely that Captain Webb is a daring and accomplished swimmer, of unusual powers of endurance, as regards sustained muscular efforts, the great question is, by what arrangement or modification of his heat-producing and heat-conserving processes did he manage to sustain his twenty-two hours' immersion? It is notorious that J. B. Johnson's attempt to swim the Channel two years ago ended in complete failure, after an hour's immersion; and yet J. B. Johnson is a no ordinary swimmer, and a stalwart fellow, possessing good powers of endurance. There must exist in Captain Webb's case strong contractile power in the vessels of the skin, by which his body-heat was conserved and his stores of force thus rendered available for muscular effort. Combustion within the body produces heat and mechanical effort, and when the powers are taxed to produce heat, or the temperature falls, muscular effort fails partially or absolutely. But, though wearied, he fulfilled his task; and if his immersion be followed by no pyrexia, then Captain Webb's heat-regulating powers must be regarded as of no ordinary character. How far and to what extent the porpoise-oil prevented heat-loss, and so aided in the result, is a factor that can only be appraised when others have tried it, and seen how far it will enable them to undergo the heat-loss of prolonged immersion. That it will have an effect is certain, as in cold regions it is usual to grease the body thoroughly in order to retain its heat. But, admitting all this, there would still appear to be peculiarities in the vaso-motor nerves which make the difference, and which has made Captain Webb's achievement *un fait accompli*.

UNREGISTERED PRACTITIONERS.

A SHORT time ago, we called attention to some very unsatisfactory cases which had occurred in the northern counties, where patients had died while under the treatment of unregistered practitioners. Another case of the same kind has just taken place at Plawsworth, near Durham. A young man, after having been unwell for a fortnight, was so ill on the 5th instant that he was unable to leave his bed. His mother summoned Mr. Hall of Holmside to attend him on the 6th, and that gentleman saw him a second time on the 10th. On the evening of that day, the patient died. Half an hour before this event took place, Mr. Blackett was called to see him, but he was dead before he could arrive. Under these circumstances, the case came before the coroner. When Mr. Joseph Hall was examined, he said, "I am a medical student, under the tuition of my father, Perceval Hall of Holmside. My father is a medical practitioner, but not registered. He practises under the Statute of Limitation, and has done so about thirty years. I visited the deceased for the first time on the 7th instant, and he complained of pains in the joints. I found he was suffering from rheumatic

fever, and there were extensive swellings of the joints. I did not apprehend any immediate danger, for, had I done so, I would have called in some medical gentleman. I did not look upon it as a serious case, and was surprised when I heard the patient was dead." Mr. Blackett, who was ordered by the coroner to make a necropsy, was prevented from doing so by the friends. But looking at the details of the case which had been mentioned, he gave it as his opinion that deceased died from inflammation of the pericardium. Death will sometimes occur suddenly in the course of an attack of rheumatic fever, notwithstanding the most careful and attentive treatment; but this case reveals a degree of lawlessness which is far from being satisfactory. Neither Mr. Perceval Hall or his son appears to be in a position to give certificates of death; and the coroner's order for a *post mortem* examination was set at naught. The foreman of the jury thought there was no occasion to hold an inquest upon the case; but the coroner was of the contrary opinion, and we entirely agree with him. Though there may have been no doubt as to the cause of death, there was great need to check the irregular proceedings connected with the attendance of unregistered practitioners, and the refusal of a necropsy under the coroner's warrant.

DR. TOLER MAUNSELL.

WE regret to announce the death of Dr. Toler Maunsell of Dublin. Dr. Maunsell was an able and prolific writer on medico-political and sanitary subjects. He was also the honorary secretary to the Irish Poor-law Medical Association, and in that capacity laboured zealously in the interests of his brethren.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT the last meeting of the Council, when the resignation by Mr. Henry Hancock of his seat as a member of the Court of Examiners was read, the following resolution was unanimously passed: "That the best thanks of the Council be and are hereby tendered to Mr. Hancock for the efficient manner in which he has discharged his duties as a member of the Court of Examiners." Mr. Hancock was elected a member of the Council in 1870. The library and museum will be closed on and after Wednesday next, for the necessary repairs and cleaning, and will be reopened on October 1st.

THE ANTIVACCINATORS AGAIN.

THE zeal of the antivaccinators is worthy of a better cause. They lose no opportunity of disseminating their misleading assertions. We have before us in a couple of halfpenny post-cards, which are apparently now being circulated by thousands, and which say much for the astuteness, but very little for the honesty, of those who put them forward. Can anything be more disingenuous than to say, "Great risk is incurred of contaminating their (*i. e.*, the infant's) blood with loathsome and incurable maladies? In 1874, 351 infants and children under five years of age died of syphilis in London alone." And then follows a reference to Mr. Hutchinson's paper in the pages of a contemporary. The reader will observe how dexterously vaccination and infantile syphilis are associated, as if there were some necessary connection between them; and with what candour allusion is made to Mr. Hutchinson's researches, which were (if we remember rightly) undertaken at the request of the Medical Department of the Privy Council, the central authority for the regulation of vaccination, and which have, no doubt, been frequently and carefully weighed by Mr. Simon. Again, how misleading is it to say, "Death from pyæmia or erysipelas often follows the operation; 139 children under five years of age died in London of erysipelas in 1874." Here is the same want of a *sequitur* as in the previous quotation. But what matter the rules of logic so long as the cause of the antivaccinators is advanced? If, as we presume, these post-cards present an epitome of the case against vaccination, the Acts which make it compulsory are not likely to be repealed. That it requires to be practised with care we are all well aware, and to this point the attention of the Medical Department of the Privy Council is especially directed; but, when properly performed, the lapse of time only serves to establish its value as a protection against small-pox.

ASSOCIATION INTELLIGENCE.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

A SPECIAL meeting of the members of the district will be held in the Library of the County Hospital, Canterbury, at 3.30 P.M., on Thursday, September 2nd, "To further develop and carry out the details for the formation of an Ethical Committee, which was agreed to at the last meeting of the district, and which was then adjourned to a future meeting."

EDWARD WHITEFIELD THURSTON, *Honorary Secretary*.
Ashford, August 17th, 1875.

BORDER COUNTIES BRANCH: ANNUAL MEETING.

THE annual meeting of the above Branch was held at Dumfries on Friday, July 23rd, 1875, in the Board Room of the Dumfries and Galloway Royal Infirmary. Previously to the meeting, the members were entertained at a *djehner* by Dr. W. A. F. Browne.

Dr. GREEN of Kendal took the chair at one o'clock, and there were sixteen other members present.

Report of Council.—Dr. SMITH, Secretary, read the following report of Council.

"The Council have much pleasure in presenting the seventh annual report to the members of the Border Counties Branch.

"At the commencement of the year, there were sixty-five members on the list; and during the year thirty-five new members have been elected. Four members have resigned, and one member has died; so that the number at present on the books is ninety-five.

"The chief feature in the history of the Society during the past year has been the great success which has attended the change in the title of the Society and the alteration in its rules which was effected at the last annual meeting. Through these alterations, members of the profession residing in the Border Counties of Scotland have been enabled to avail themselves of the privileges of membership of a Branch of the British Medical Association, and twenty-nine have availed themselves of this privilege. One of the ordinary meetings of the year has been held at Dumfries and the other at Carlisle, and both these meetings have been of a successful and agreeable character; the average attendance being higher than at any previous meeting during the past two or three years.

"The Council are glad to find, from an examination of the treasurer's books that there is a large surplus available after all the expenses of the year have been paid, and they recommend that the example of last year be followed, and a donation of £5 be given to the British Medical Benevolent Fund.

"To the great regret of the Council, the senior Secretary has intimated his intention of withdrawing from the official position which he has held during the last seven years. In taking this step, Dr. Barnes is carrying out a purpose which he has repeatedly expressed to the Council during the past three years, but which he has hitherto been induced to forego at their request. The Council desire to express their sense of the great obligations they are under to Dr. Barnes, and to tender him their thanks for the efficient manner in which he has conducted the business of the Branch.

"The balance in hand at the commencement of the year was £12 : 10 : 8; and the receipts consist of seventy-three subscriptions for the year, eight arrears for previous years, and twelve subscriptions for 1875-76 paid in advance, amounting to £11 : 12 : 6; total, £23 : 17 : 2. The disbursements amount to £15 : 14 : 9, leaving a balance in hand, June 26th, 1875, of £8 : 2 : 5."

Medical Benevolent Fund.—The recommendation of the Council that a donation of £5 be made to the British Medical Benevolent Fund was adopted by the meeting.

President's Address.—The retiring President vacated the chair, and introduced the President for the year, Dr. W. A. F. BROWNE, who delivered his inaugural address. It was devoted to the consideration of new, or newly described, nervous diseases. The general paralysis of the insane, although now one of the most formidable and fatal maladies seen in asylums, was stated to have remained unnoticed or unrecorded until 1822 and 1826, when described by Bayle and Calmeil in their works on *Mémoire Clinique* and *La Paralyse des Aliénés*. Dipsomania, or the involuntary craving for stimulants, involving perversion of the moral sense and enfeeblement of will, seemed to have been introduced to the notice of medical men as a specific disease, in Esquirol's memoir *Monomanie d'ivresse*, in 1838. Now generally recognised, and included in the question, "What shall we do with our drunkards?"

this affection was engaging the attention of philanthropists, even of Parliament as well as that of our profession. Typhomania, or Luther Bell's disease, first announced by the observer whose name it bears, was defined as neither typhoid fever nor mania, but a form of alienation marked by sudden prostration of strength, and as sudden restoration or death, as presenting no symptoms of inflammatory action, and as curable by diffusible stimulants. Absinthism, or toxic epilepsy, resulting from the abuse of some preparation of absinthe, was diagnosed chiefly by delirium, fear, fury, and convulsions, being distinguished by the last symptom from insanity following poisoning, etc., by alcohol. This distinction had been established by experiment upon the lower animals by M. Magnan, Paris, who had written a monograph upon the subject. Inquiry had been going on in France upon the origin and features of absinthism since 1859-64, and the former had been traced to the habits acquired by the soldiery in Algiers.

New Members.—The following gentlemen were elected members of the Association and Branch: Frederick Skaife, L.R.C.P.Ed., Wigton; Robert Scott, M.B., Dumfries; Wm. Jackson Kennedy, L.R.C.P.Ed., Sanquhar; Alexander Dall McDonald, M.D., Dumfries; James Rae Anderson, M.D., Eskbank, Canonbie.

Election of Office-bearers.—The following were elected office-bearers for the ensuing year:—*President-elect*: H. Barnes, M.D. *Honorary Secretaries*: S. Lockie, M.D., Carlisle; and John Smith, M.D., Dumfries. *Council*: J. A. Campbell, M.D.; J. Crerar, M.R.C.P.Ed.; J. Gilchrist, M.D.; T. F. I'Anson, M.D.; W. S. Kerr, M.D.; W. Reeves, M.D.; W. Scott, M.D.; M. W. Taylor, M.D.; R. Tiffen, M.D. *Representative in the Parliamentary Bills Committee*: W. Reeves, M.D. Dr. Green was elected permanent vice-president.

Medical Fees.—Dr. SMITH (Dumfries) introduced the subject of fees proper to be charged in medical and surgical practice, and moved the appointment of a committee to frame a suitable scale. The motion was adopted, and a committee appointed with instructions to report to the next meeting.

This concluded the ordinary business of the meeting, and the members afterwards dined together at the King's Arms Hotel.

CORRESPONDENCE.

THE WORCESTER INFIRMARY.

SIR,—It is a trite saying that one half the world does not know how the other half lives; and I confess myself to have been hitherto in ignorance of the view taken by the medical profession of the recent proceedings of the executive committee of the Worcester Infirmary.

An impression appears to prevail that one of the honorary medical staff has been censured by the committee for non-observance of the rules under urgent circumstances which compelled his unavoidable absence from duty, and reflections have further been cast upon his colleagues for apparently acquiescing in the propriety of the treatment I have described.

There is a melancholy reason for refraining from more than a brief attempt to correct the misapprehension which has arisen. The sad event to which I refer has gained Dr. Inglis the deep sympathy of all who know him, and makes me reluctant to touch, even in the lightest manner, on the facts of the case; yet it is fair to the executive committee to say that, unless the committee of such an institution have before them some statement of exceptional circumstances requiring infringement of rules or some plea of justification on the ground of urgency, they necessarily find themselves in a position of great difficulty when invited to deal with a complaint that rules have not been complied with.

The executive committee probably regret that no such plea of extenuation was alleged; and if hereafter they refrain from recommending the governors to make alteration in the rules which have occasioned comment, their conduct will, no doubt, be dictated by a conviction that the rules, if prudently and wisely understood on both sides, do not impose upon the honorary medical staff, to whose talents and unbought services the infirmary is so largely indebted, any rigid or inflexible yoke. As practical men, they also probably are of opinion that it is difficult, if not impossible, to express under a common formula those exceptional circumstances which are beyond rules, and which ought in each of such cases to be the subject of individual judgment and explanation.

I have the honour to remain your obedient servant,

ONE OF THE EXECUTIVE COMMITTEE.

August 24th, 1875.

THE TRAINING OF IDIOTS.

SEN.—I beg to make a few remarks upon the subject of Sir Charles Trevelyan's resolutions, recently submitted to the Council of the Charity Organisation Society, with reference to idiot institutions. I learn from the *Charity Organisation Reporter* of June 23rd that these resolutions, together with a draft Bill upon the same subject by Canon Hopkins, were, after a (briefly reported) discussion by several gentlemen interested in existing institutions, referred to a Committee for further consideration.

It is not my intention to occupy your space with observations upon the proposed scheme for the association of pauper and non-pauper idiots and imbeciles, in institutions partly charitable and partly maintained by government aid or out of the poor-rates. Suffice it to say that such a plan, though working well in America, has hitherto not found much favour in this country; and it appears to me at least worthy of consideration, whether separate pauper institutions, both educational and custodial, might not with advantage be established throughout the country, upon the model of those already set up in the metropolitan district, leaving to voluntary effort the necessary provision for idiots and imbeciles of the non-pauper classes. However this may be, the Charity Organisation Society deserves the thanks of the community for pointing out the inadequacy of existing arrangements for the unhappily large proportion of idiots and imbeciles amongst our population. Accurate statistics as to the present number of *pauper* idiots and imbeciles, as distinguished from lunatics, it is not easy to obtain, owing to the looseness of the nomenclature used in the returns from unions (a subject I would respectfully commend to the attention of parish medical officers); but the number was estimated at over ten thousand in 1866; and for these, except in the metropolitan district and in the county of Warwick, there is absolutely no specific accommodation.

With these few remarks upon the general scope of the resolutions, I pass to the consideration of some points of detail of more immediate interest to our profession. First, with regard to the educational grant mentioned in Resolution 4. It is certainly well that training schools for idiots should be regarded as places for *education*; but I fear there is some risk of the term being understood in this connection in too limited a sense. There are grades in the education of idiots never dreamt of in the philosophy of Her Majesty's Inspectors of Schools; but the education of the muscles and the senses, and the utilisation of this education in practical industrial training, are assuredly as worthy of government recognition as is mere proficiency in the "three r's". Then, with regard to Resolution 6, there can be no question that some of the provisions of the Lunacy Acts, especially the forms of medical certificate and of various returns to the commissioners, require modification to adapt them to the case of idiots; but, in the Bill drafted in connection with this resolution, much more sweeping alterations are contemplated. Amongst other things, it is proposed that idiot asylums which do not contain more than two hundred and fifty patients may dispense with a *medical* superintendent, the present law requiring such an officer to be resident in every institution containing more than one hundred patients. Surely there is no good reason for this very salutary rule to be relaxed. It should never be forgotten that the idiot is truly an "insane person", and a person often *unsound* not only in mind, but in body also. If a *pupil*, he must still be regarded as a *patient*; and the operations of the schoolmaster must be subordinate to those of the physician. The success that has hitherto largely attended the training of idiots and imbeciles may be said to be in the main due to the scientific recognition of the physical basis of mental defect, and to the judicious application of physiological principles to the subject. The Americans, practical people as they are, have not failed to see the necessity of *medical* superintendence for their idiot institutions, both large and small; and the general opinion of those entrusted with the organisation of such establishments may be gathered from the report to the legislature, of the Trustees of the Illinois State Institution for the Feeble-minded, with reference to the appointment of their first medical superintendent, Dr. C. T. Wilbur. After referring to him as "a gentleman of medical attainments and experience—indispensable qualifications for a superintendent of such an establishment as ours, which is, as well as educational, to a very great extent sanitary in its nature"—they go on to say: "Though idiocy may not be essentially a disease, yet diseases and deficient organisation are so frequently connected with it, that it requires careful, constant, and skilful treatment, and the facilities and appliances of a well regulated hospital, and such gymnastic exercises as are most conducive to physical and mental culture and development." This was in 1866: now, it would be almost safe to say that the progress of inquiry tends to show that idiocy is essentially a disease, the origin and correlations of which demand all the skill and research of a well-trained physician. The contributions to the patho-

logy of the subject by Drs. Langdon Down, Graham, and Ireland, in this country, are sufficiently well known to the profession; but much remains to be made out, and the work is of such a character as to require and repay close and special attention. I am aware that different opinions exist amongst medical men as to the ultimate economic value of idiot-training; but I suppose all will agree that the grouping of idiots in establishments apart from the general community is *pro tanto* an advantage. Taking, for the sake of argument, merely this lower view of the subject, the opportunity should not be lost to the profession, as it is to be feared would probably be the case in an institution under non-medical management, of the scientific study of idiocy. Family history, constitutional tendencies, symptoms of physical disease often much masked by the mental condition, all these have to be weighed in the balance before a just opinion can be arrived at as to prognosis and treatment; and last, but not least important, the revelations of the *post mortem* room must be thoroughly scrutinised in connection with abnormalities observed during life.

In conclusion, I would beg leave to commend to those who are laudably promoting the establishment of new idiot institutions, the words of Lord Derby at the festival commemorative of the completion of the Royal Albert Asylum. "The greater part of the value of an asylum," says he, "as of a hospital, consists in its usefulness as a school where a particular complaint there treated may be studied, not merely that we may know how to cure it, or how to alleviate it when it comes before us, but that, if possible, we may trace it back to its source, and so guard against it in future.....If we are to look to it as a work of humanity and charity, an asylum such as this is admirable..... Being wanted, it is good that we should have it; but it will be better still if within its walls, and within the walls of other establishments such as this, a lesson can be learnt which shall render their application superfluous and obsolete in the future."—I am, sir, yours, etc.,

G. E. SHUTTLEWORTH, B.A., M.D., etc.,
Medical Superintendent, Royal Asylum for Idiots and Imbeciles of the Northern Counties, Lancaster.

MILITARY AND NAVAL MEDICAL SERVICES.

INDIAN MEDICAL SERVICE.—The following candidates for Her Majesty's Indian Medical Service were successful at the competitive examination held at Burlington House on the 9th August, 1875. Thirty candidates competed for ten appointments. All were reported qualified.

Order of merit.	Names.	Order of merit.	Names.
1	Foster, P. J.	6	O'Neil, J. H.
2	Wear, P. A.	7	Purdon, F. H.
3	Hugh, P. H.	8	Casson, J. W.
4	Lawson, James	9	Law, C. H.
5	Ferguson, Edward	10	Parsons

ARMY MEDICAL DEPARTMENT.—The following gentlemen competed successfully for appointments in Her Majesty's British Medical Service at the examination held at the University of London on August 9th, 1875.

	Marks		Marks
1. Hasler, F. C. C.	2157	10. Dauleny, C. A.	1775
2. Taaffe, R.	2132	11. Levers, P. G.	1765
3. Leveson, W. J.	2031	12. Burgess, W. A.	1740
4. Briggs, W. H.	1932	13. Fleming, H. B.	1720
5. Fox, E. H.	1825	14. James, W. M.	1705
6. Kellett, L. H.	1825	15. Hayes, P. A.	1700
7. Thompson, I. W.	1735	16. Kirkwood, K. D. L.	1450
8. Fenway, J.	1730		

NAVAL MEDICAL APPOINTMENTS.

ANDERSON, Staff-Surgeon W., to the *Porpoise*, for Haslar Hospital.
BENTLEY, Staff-Surgeon W. R., to the *Porpoise*, for temporary service.
BENTLEY, Staff-Surgeon T. D. A., to the *Porpoise*.
CLINTON, Fleet-Surgeon W. F., to the *Minotaur*.
FRANKS, Staff-Surgeon William J., to the *Porpoise*.
HARRISON, Staff-Surgeon C., to the *Porpoise*.
FISHER and Fleet-Surgeon D. M.D., to the *Porpoise*.
FISHER, Staff-Surgeon William S., to the *Vestal*.
HARRISON, Staff-Surgeon T. J., to the *Porpoise*, additional, for duty at Somerset House.
HARRISON, Staff-Surgeon J., to the *Minotaur*.
IRVINE, Staff-Surgeon William, to the *Porpoise*.
IRVINE, Surgeon G. J., to Haslar Hospital.
LAMBERT, Staff-Surgeon J., to the *Lily*.
LAMBTON, Staff-Surgeon W. J., to the *Porpoise*, for service in the *Sphinx*.
O'CONNOR, Staff-Surgeon D., to the *Sapphire*.
PEARS, Staff-Surgeon W., to the *Porpoise*.
SCOTT, Surgeon A., M.D., to the *Black Prince*.
TERRY, Staff-Surgeon S., to the *Dunoon*.
WALSH, Fleet-Surgeon J. C., to the *Sphinx*.
WARD, Fleet-Surgeon John A., to the *Sphinx*.
WATSON, Fleet-Surgeon A., M.D., to the *Serapis*.
WATSON, Surgeon Henry C., M.D., to the *Serapis*.

OBITUARY.

ALEXANDER FLEMING, M.D. Edin., F.R.C.P., BIRMINGHAM.

WITH sincere regret we announce the death of Dr. Alexander Fleming, which occurred at Buxton, on the 21st instant, in the fifty-second year of his age. He was born in Edinburgh, and educated in the University of his native city. In 1844, he graduated as a doctor of medicine, with the highest honours, a gold medal being awarded for his inaugural thesis. After taking his degree, he spent some considerable time in the hospitals of Paris, Vienna, and Prague, whence he returned to Edinburgh, and edited for some years, in conjunction with Dr. Day and Dr. W. T. Gardner, *The Edinburgh Monthly Journal of the Medical Sciences*. He subsequently resided for a few years in Cork, where he held the professorship of *Materia Medica* in the Queen's College, and was also one of the examiners in the Queen's University in Ireland. About eighteen years ago, he came to Birmingham, and was immediately appointed professor of *Materia Medica* in the Queen's College, and physician to the Queen's Hospital. In 1859, he was elected a Fellow of the Royal College of Physicians of London. At the end of 1871, signs of chronic renal disease appeared, and he shortly afterwards relinquished private practice, and went to the south of France, where he chiefly resided during his illness. In 1873, he resigned his office at the Queen's Hospital, and was at once elected, in recognition of fifteen years' service, consulting physician. At the time of his death, he was also consulting physician to the Women's Hospital, and to the Ear and Throat Infirmary. Since the amalgamation of the two medical schools of Birmingham, Dr. Fleming was an active member of the Council of Queen's College. He took a prominent part in the foundation and subsequent management of the Institution for Trained Nurses—a much needed and very successful establishment. When the Association held its annual meeting in Birmingham, in 1872, Dr. Fleming was appointed to deliver the Address in Medicine. His failing health obliged him to decline the request of the Council, and his place was filled by Dr. Wilks. Dr. Fleming was well known as a contributor to medical literature. The following are the more important of his writings: *A Treatise on Aconite; Medical Education, with especial reference to the course for the degree of M.D. in Queen's University, Ireland; The Classification of Medicines; Clinical Notes in Therapeutics, taken in the Hospitals of Vienna, Paris, and Prague; Treatment of the Habit of Opium-eating; Lead-poisoning and its Treatment, etc.* His researches concerning aconite won him early fame.

Dr. Fleming was a prudent and painstaking physician. He will long be remembered as a most admirable clinical teacher. He was very exact and methodical in his observation of disease, and he had a rare facility in making students understand the details of a difficult case. He always taught diagnosis by the well-known "method of exclusion". His knowledge of the action of medicines was wide and extensive, his therapeutic resources were vast and varied, and he thoroughly believed in the virtues of the remedies he used. He was very gentle to his patients, and he always showed a kindly and almost affectionate interest in the welfare of his pupils. Dr. Fleming enjoyed a very large consulting practice in Birmingham and the Midland counties.

DAVID PETER EVANS, M.B., BELPER.

MR. D. P. EVANS of Belper died on Tuesday, July 20th, at the age of 53, after a month's painful illness terminating in abscess (pyæmic) of the brain. He was the fifth son of the late Mr. David Evans (who for upwards of forty years was one of the most distinguished surgeons in the midland counties), and brother to the late Dr. Evans of Birmingham. Another brother is Mr. S. H. Evans, who has lately retired from the practice of his profession after a long and honourable career at Derby. Mr. Evans received his education at King's College, London, and in 1845 took the degree of M.B. at the University of London, coming out in the first class. His funeral was attended, it is calculated, by at least 1,500 people of all ranks.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

CERTIFICATES IN STATE MEDICINE.—The examination in State Medicine for certificate of proficiency will commence on October 5th. Candidates are required to send their names to Professor Liveing, Cambridge, before September 15th. Any person whose name is on the *Medical Register* may present himself for the examination, provided he is twenty-four years of age.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—FIRST M.B. EXAMINATION. Examination for Honours.—Anatomy.

Second Class.

Miller, Richard Shalders, University College
Bury, Judson Sykes, University College
Benham, Frederick Lucas, University College

Physiology, Histology, and Comparative Anatomy.

First Class.

Henderson, Geo. Courtenay (Exhibition and Gold Medal), University College

Second Class.

Benham, Frederick Lucas, University College
Wilkinson, Arthur Thomas, B.A., B.Sc., Owens College School of Medicine
Pye, Walter, St. Bartholomew's Hospital
Stevenson, Leader Henry, Guy's Hospital
Miller, Richard Shalders, University College

Third Class.

Seignfield, Arthur Robert Watt, King's College } equal
Willcocks, Frederick, King's College }
Hudson, James, University College }
Wiglesworth, Joseph, Liverpool School of Medicine } equal

Organic Chemistry, and *Materia Medica* and Pharmaceutical Chemistry.

First Class.

Wilkinson, Arthur Thomas (Exhibition and Gold Medal), Owens College School of Medicine

*Henderson, George Courtenay (Gold Medal), University College

Second Class.

Goodchild, Francis, St. George's Hospital

Third Class.

Miller, Richard Shalders, University College

Obtained the number of marks qualifying for the Exhibition.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, August 19th, 1875.

Bruce, Robert, 121, Old Street, St. Luke's
Chant, Thomas, Bridgewater
Clark, Wm. Theobald Blanton, Malmesbury, Wiltshire
Joseph, Sidney Westbrook Jorwerth, St. Leonards-on-Sea
Willans, William Blundell, Singapore

The following gentlemen also on the same day passed their primary professional examination.

James, Thomas, Middlesex Hospital
Morris, Clarke Kelly, St. Thomas's Hospital

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At examination meetings of the College, held on Tuesday, Wednesday, and Thursday, July 13th, 14th, and 15th, 1875, the following gentlemen obtained the License to Practise Medicine.

Alexander, Thomas	MacNamara, Joseph
Baker, Arthur Edward James	O'Meara, Michael Aloysius
Deeley, Ambrose William	Townsend, Charles Bryan
Elliott, Robert Andrew	Warnock, Hugh Thomas
Hunt, Daniel De Vere	Wood, Edwin Stanley
Jones, John Thomas	Yourelle, Michael
MacGrath, William Michael	

The following candidates obtained the License to Practise Midwifery.

Banks, Alfred	MacGrath, William Michael
Barker, Arthur Edward James	O'Carroll, Martin
Deeley, Ambrose William	Townsend, Charles Bryan
Drapes, John Benward	Warnock, Hugh Thomas
Drummond, David	Wood, Edwin Stanley
Ievers, Philip Glover	Yourelle, Michael
Jones, John Thomas	

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS, EDINBURGH: DOUBLE QUALIFICATION.—The following gentlemen passed their first professional examination during the recent sittings of the examiners.

James Griffith Macaskie, Barron, Tweed; Ernest Aylward, Hastings; Andrew Douglas Ramsay Thomson, Dalkeith; Hugh Murray, Sutherlandshire; Harrison Harley, Yorkshire; John Michael de Verde Raiton, Dublin; Edward John Baxter, Middlesex; Thomas Henry Smith, Stockton-on-Tees; Daniel Stenhouse, Aucherarder; Wm. Ellis Mumford, West Indies; Henry Crawford M'Bryan, Dublin; Francis Henry Wood, Wakefield; John Elettson Richards, Yorkshire; James Watson, Lanarkshire; John Albert Howard, Taunton; Alfred Wyatt Crane, France; William Alexander Logie, Kirkwall; Alexander Tratman Bremner, Gloucestershire; Harry Pell Ilderton, Manchester.

The following gentlemen passed their final examination, and were admitted L.R.C.P. Ed. and L.R.C.S. Ed.

Robert Green Douglas, Northumberland; George Herbert Bentley, Bombay; Jeremiah Spott, County Cavan; Arthur Gregory Sandberg, Yorkshire; Jas. Alexander Dyer, Fife-shire; Arthur Wigley Bateman, London; Thos. Bowes Shaw, Yorkshire; Maryat Hahnemann Green, London; George Taylor Schofield, Hull; John Parker Breerton, County Tipperary; Charles Gibson, Newcastle-on-Tyne; Edwin Goddard, Jersey; Bryan Charles Waller, Yorkshire; William Cranston, County Cavan; John Macdonald, Skye; Roderick Ross, Lewis; Wm. Frederick Bailey Eadon, Shetland; Wm. Dudley Power, Cork; Wm. McCarthy, Cork; Robert Harvey, India.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen passed their first professional examination during the July examinations.

George Gibson Hamilton, Falkirk; Robert Davies Evans, North Wales; John Macnught, Glasgow; Louis Windham Fox, Bristol.

The following gentlemen passed their final examination, and were admitted Licentiate of the College.

Joseph Montagu Catterill, Brighton; Henry Wm. Laing, Bridge of Earn; Frank John Cannon, London; David Makin Kennedy, Liverpool; Frederic Hamilton Crowley, Newfoundland; Thos. Duddingston Wilson, Edinburgh; Chas. Sidney Richardson, Dover; Herman John Groesbeck, Cincinnati, Ohio; Andrew Smith, Fifehire; Charles Thornton Champneys, Glasgow; Henry Miller Sand, Aberdeen; John Stevenson, Edinburgh; Thos. R. Macdonald, Skye; John James Underwood, Cumberland.

MEDICAL VACANCIES.

The following vacancies are announced:—

BOURNEMOUTH GENERAL DISPENSARY—Resident Medical Officer and Secretary. Salary, £120 per annum, with furnished apartments, coals, gas, and attendance.

CARNARVON UNION—Medical Officer for the Llandwrog District. Salary, £65 per annum.

DISPENSARY FOR SICK CHILDREN, Manchester—Assistant Medical Officer. Salary, £180 per annum. Applications on or before September 15th.

DORE UNION—Medical Officer for the Kontchurch District and the Workhouse.

DUDLEY DISPENSARY—Resident Medical Officer at Michaelmas.

EASTRY UNION—Medical Officer for the Eythorne District. Salary, £30 per annum, and fees. Applications on or before the 31st instant.

HAY UNION—Medical Officer for the Herefordshire District.

HOSPITAL FOR SICK CHILDREN, Manchester—Assistant Physician. Salary, £300 per annum. Applications on or before September 15th.

INVERNESS DISTRICT ASYLUM—Assistant Medical Officer. Salary, £70 per annum, with bed, board, and washing. Applications on or before the 17th prox.

LEEK UNION—Medical Officer for the Norton District.

LYMINGTON UNION—Medical Officer for the Hordle, Lymington, and Milford Parishes.

NORWICH DISPENSARY—Salary, £120 per annum, with unfurnished residence and apartments.

PEMBROKE UNION—Medical Officer for the First District.

PLOMESHGATE UNION—Medical Officer for the Aldeburgh District.

ROYAL CORNWALL INFIRMARY—House-Surgeon, Secretary, and Dispenser. Salary, £200 per annum, with furnished rooms, gas, coals, and attendance. Applications on or before September 1st.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road—House-Physician. An allowance of £100 per annum is made in lieu of board and residence. Applications on or before the 31st instant.

ROYAL PORTSMOUTH, PORTSEA, and GOSPORT HOSPITAL—House-Surgeon. Salary, £120 per annum, with board and residence. Applications on or before the 31st instant.

ROYAL SOUTH HANTS INFIRMARY—House-Surgeon. Salary, £80 per annum, with board, lodging, and washing. Applications on or before September 6th.

ROYAL SOUTH LONDON DISPENSARY—Honorary District Surgeon. Applications on or before the 31st instant.

ROYSTON UNION—Medical Officer for No. 5 District. Applications on or before September 6th.

STAINES UNION—Medical Officer for the Shepperton District.

UCKFIELD UNION—Medical Officer for the Maresfield District.

WARWICK COUNTY LUNATIC ASYLUM—Second Assistant Medical Officer. Salary, £100 per annum, with board, lodging, and washing.

WEST SUSSEX, EAST HANTS, and CHICHESTER GENERAL INFIRMARY and DISPENSARY—Assistant House-Surgeon. Salary, £20 per annum, with board, lodging, and washing. Applications on or before the 28th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BURNES, Alex. G., M.B., C.M., appointed Physician to the North London Hospital for Consumption and Diseases of the Chest.

CADDY, Henry, M.R.C.S.Eng., appointed Senior House-Surgeon to the Royal Southern Hospital, Liverpool, vice W. Williams, M.D., resigned.

*DAVIES, Andrew, M.R.C.S.Eng., appointed Consulting Surgeon to the Swansea Hospital.

GWATKIN, Owen, M.R.C.S.Eng., appointed Junior House-Surgeon to the Royal Southern Hospital, Liverpool.

*JONES, A. Emrys, M.B., C.M. Edin., appointed Resident Medical Officer to the Hulme Dispensary, Manchester.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTH.

PLATT.—On August 21st, at Priory Villas, Kilburn, the wife of *William Henry Platt, L.R.C.P.E., of a daughter.

DEATH.

*FLEMING, Alexander, M.D., F.R.C.P., of Birmingham, at Buxton, aged 51, on August 21st.

TESTIMONIAL.—Mr. Owen T. Evans, of Brymbo, M.R.C.S.Eng., has been entertained at a complimentary dinner, and presented with an address and a purse of £60, on leaving the neighbourhood.

OPERATION DAYS AT THE HOSPITALS.

MONDAY Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

TUESDAY Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY .. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.

THURSDAY St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.

FRIDAY..... Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.

SATURDAY St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M.—Royal Free, 9 A.M. and 2 P.M.

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with Duplicate Copies.

AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor: those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

DR. TOMKINS.—Candidates for the Fellowship of the College of Surgeons of England have now to undergo an examination in Medicine, unless already in possession of a recognised medical license.

SIR,—Will a Member of the Association be good enough to inform me what is the best disinfectant to get rid of the offensive smell from the discharge from a cancerous breast?
Yours obliged,
TRICEPS.

ERRATA.—In the paragraph on Auscultation of the Esophagus, in last week's JOURNAL, page 228, column 2, the remarks at the end in confirmation of the value of Dr. Clifford Allbutt's paper, attributed to Dr. Crichton of Perth, should have been stated to have been made by Dr. Crighton of Tavistock.

UNQUALIFIED ASSISTANTS.

SIR,—I am glad to perceive a portion of your columns devoted to a discussion of this growing evil, and that, in a proper spirit of fair play, the unqualified are allowed to air their grievance, which is, that they are not sufficiently recognised. Their champions in these columns have endeavoured to demonstrate that a part is greater than the whole, and that they must know more of the practical part of our profession than those who have had the advantages of the very practical teaching now adopted at the schools. These worthy persons (I doubt not many of them are) who are practising *sine diploma*, as they euphemistically style it, might often add *sine curriculo*. They are clamouring for a dangerous precedent. I had a short time ago a *locum tenens* sent me by an agent as unqualified but thoroughly competent. I found soon after his arrival that he had never spent a day in a hospital. Such help as this, in a manufacturing district where accidents were frequent, had to be at once dispensed with; and though there are, doubtless, many of them efficient and useful men, I think we should consult the dignity of our profession, no less than the safety of the public, by having as little to do with them as possible. And though no objection can be taken to a qualified practitioner availing himself of the services of an unqualified assistant under his direction, and giving him only temporary charge of any case, nothing, I should think, can be more reprehensible than the plan—very common, I fear, in some places—of putting such men in charge of branch practices, and in position away from the immediate control of the principal. Such conduct as this is unworthy of members of this great Association, including as it does so many of high standing and position in our ranks, and whose motto should be, *Sans peur et sans reproche*.—I am, yours truly,
AUGUST 1875. SCRUATOR.

SIR,—In answer to a request in the JOURNAL of April 24th, I beg to state that my present address is "No. 369, Calle Florida, Buenos Ayres".

I am, sir, your obedient servant,
Buenos Ayres, South America, June 30th, 1875. W. N. HIRON.

A METROPOLITAN TEACHER.—We have heard that the annual registration of students at the College of Surgeons will, in all probability, be discontinued after October next; the registration by the General Medical Council serving all the purposes. The College of Physicians long since discontinued it.

L.R.C.P. (Dublin).—We shall not probably differ in opinion in the end; but we should be better able to decide the ultimate questions if the argument were stated with less irrelevant and discursive attack upon collateral subjects of difference.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than Thursday, twelve o'clock.

THE CASE OF THE LATE MR. P. F. MERRILL.

SIR, In forwarding to you a list of the names of the persons who have signed the petition published the other day to this effect, I should wish to be understood to be a subscriber to the petition to those who have kindly signed it, in the intention of knowing that the petition has had some great and prominent names in its support, and thus, by their signatures, it has benefited Mrs. Merryweather, the widow of the deceased, who is now daily prospering, and maintaining and providing for the education of her children. I have been particularly glad to find two names which I have only extended the help of my pen to in the first place. The appeal of the petition to the public has been so successful even from distant Kurrachee.—We have the honour to be, sir, yours faithfully, CHAS. J. HARE, M.D. Cantab., F.R.C.P., W.A.A.S., L.K.Q.C.P.

57, Brook Street, Grosvenor Square, W., August 21st, 1875.

Table listing names and addresses of subscribers to the petition, including Dr. Waggott, Mr. Niles, Mr. Popplin, Mr. H. A. L., Mr. Smith, Mr. Penhall, etc.

H. (St. Bartholomew's).—We understand that the vacancies in the Court of Examiners of the College of Surgeons will be filled up in October.

MR. HINSELL (Bury St. Edmund's).—We know nothing of the hospital to which our correspondent refers.

MR. WORTH (Nottingham).—Yes; but we must beg our correspondent, in consideration of the demands on our space, to be as concise as possible.

CORONERS AND THEIR JURIES.

SIR,—My attention has been called by a medical friend to a letter signed H. H. P., in your issue of the 24th July. I shall be obliged if you will allow me to correct some of the writer's mistakes, not unusual, by the way, on the part of medical men. Any one who takes the trouble to read Blackstone, or other such authorities, will be aware that the office and court of the coroner are amongst the most ancient and important in the country. The coroner is a magistrate and "principal conservator of the peace," and as such a judge, and possessed of the same judicial powers in relation to his own court, as the Lord Chief Justice of England. It is true that some medical coroners, forgetting their proper dignity and position, indulge in the discussion of medical and social ethics to delighted audiences of jurymen and reporters. Legal coroners, I flatter myself, never so indulge. But when H. H. P. presumes to assert that neither a coroner nor his jury have the right, judicially and before the court has broken up, to express opinions, or make presentments, upon matters fairly arising out of the inquiry, he either ignores the universal practice of judges, magistrates, and grand juries, in this behalf, or he puts a slur upon an institution which he deems humbler, and spares offices which he supposes to be higher, in public estimation, and, therefore, not safe to be attacked. I will only remind him that the coroner's duty is not so much to ascertain the cause of death, which any medical man could do by a dissection; but to ascertain, by a formal public inquiry, by sworn evidence before a sworn jury, "if any be culpable." For H. H. P. to say that no opinion to this effect is to be expressed short of a verdict of manslaughter, especially now that, through the wretched policy of modern days, deadlands have been abolished, is an opinion which, I trust, will meet with no favour among your readers generally.

Yours, etc., A LAWYER.

Will the writer of a letter signed M. D. Erlangen, which appeared in our issue of the 14th instant, kindly forward us his address in confidence?

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

THE EDITOR (Caster)—I have the pleasure to inform you that your letter of the 14th inst. has been received, and that I have been very glad to receive your visiting card with his new address, writing on it "change of residence," or something of the kind. I have, however, to beg that you will not be so kind as to send me any more of the kind.

L. S. A.—The Apthorpian is disposed to defend the notes of its members, but in part of the notes, they have not shown any evidence of their own.

M. A. M. D.—It is right to put the M.D. on a separate page; but it would be better to put both M.A. and M.D. on the same page, as they are both degrees of the same kind.

AN EDINBURGH VISITOR.—We do not know where best Mr. Lister's antiseptic preparations and appliances may be obtained in London. Probably some of the London Dispensaries, or the Edinburgh Dispensary, may be able to inform the advertising columns of this JOURNAL, will supply them.

ARMY MEDICAL OFFICERS.—I am glad to hear that you will be fairly treated to have the medical part of the JOURNAL sent to you.

V. D. S. W.—I am glad to hear that you are a member of the governing body of the Medical Benevolent College wrote to us after the publication of the leader in the JOURNAL to which you refer, stating his belief that the cause was won, and that henceforth it was only a question of time. After the vacation, it will be necessary to convene a general meeting of the governors be summoned for the purpose of considering the question; and, if necessary, we shall take steps in the matter.

MEMBER FILES.—The use of a Valerianum Zinci Benzoiati was, we believe, due to the late Mr. Alexander Ure of St. Mary's Hospital. It was for a long time in general use before it was brought into the Pharmacopœia.

X. Y. Z.—We have no means of knowing, other than those which our correspondent himself possesses. If we were to comment upon the matter, we might be liable to misinterpretation. Do good men practice of any kind bring their own punishment.

DR. H. W.—No medical man is bound to attend a patient, unless, indeed, no other medical relief is within reach, and the case is urgent.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of general interest:—The Bristol Daily Post; The Daily Bristol Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Glasgow Herald; The Sunderland Daily Echo; The Cornwall and Denbigh Herald; The Manchester Guardian; The European Review; The Hackney and Kingsland Gazette; The Worcestershire Chronicle; The Birmingham Daily Post; The Brighton Daily News; The Sussex Daily News; The Gas and Water; The Cork Examiner; The Scotsman; The Cork Daily Herald; The Southampton Times and Hampshire Express; The Hampshire Advertiser; The Birmingham Morning News; The Chester Courant; The Metropolitan; The Live-Stock Journal; The Shield; The Grocer; The Shipping and Mercantile Gazette; The Advertiser; The Islington Gazette; The Penrith Observer; The Hastings and St. Leonard's Gazette; The Ripley Free Press; The Leicester Daily Post; etc.

COMMUNICATIONS, LETTERS, etc., have been received from:—

- Dr. Thomas Chambers, London; Mr. E. Oliver, Manchester; Mr. T. C. Eager, Woking; Dr. G. F. Burder, Bristol; Dr. E. J. Tilt, London; Dr. W. Macfie, Edinburgh; Dr. C. E. Underhill, Edinburgh; Mr. J. E. Ingpen, London; Dr. W. Hitchman, Liverpool; Dr. John Alexander, Paisley; Mr. A. Speedy, London; Mr. R. H. A. Hunter, Dalston; Dr. B. T. Moore, London; Mr. E. L. Hussey, Oxford; Dr. H. D. Foote, Rotherham; Mr. T. L. Webb, Ironbridge; Dr. P. Eade, Norwich; The Registrar-General, Dublin; Dr. T. J. Walker, Peterborough; Mr. J. Hudson, Clapham; Mr. Henry Cadly, Liverpool; Dr. E. Slade-King, Ilfracombe; Dr. W. A. Satchell, Kew; Mr. J. H. Barnes, Liverpool; Dr. J. Sawyer, Birmingham; Mr. L.H. Blenkarne, Buckingham; Mr. H. M. Jay, Chippenham; Dr. C. J. Hare, London; Dr. R. W. Crighton, Tavistock; Mr. A. Davies, Swansea; Mr. A. H. Allen, London; Dr. O. T. Woods, Hatton, Warwick; The Director-General of the Army Medical Department; Mr. R. H. Smith, Manchester; Dr. Joseph Bell, Edinburgh; Dr. J. W. F. Smith-Shand, Aberdeen; Mr. R. Hordley, Hartshill; Mr. W. E. Wyllys, Great Yarmouth; Dr. McCall Anderson, Glasgow; The Military Secretary, India Office; Dr. Carroll, New Brighton; Mr. John Liddle, London; Mr. H. Hailey, Newport Pagnell; The Secretary of Owens College, Manchester; Dr. T. J. MacLagan, Dundee; Mr. J. Ashburner Thompson, London; Mr. R. Laidlaw, Glasgow; Dr. Bramwell, Newcastle-on-Tyne; Mr. Francis Vacher, Birkenhead; Dr. J. R. Kealy, Gosport; Dr. G. E. Shuttleworth, Lancaster; Mrs. Fleming, Buxton; Mr. C. H. Collins, Chew Magna; Our Dublin Correspondent; Mr. R. A. H. Wood, Liverpool; Mr. J. I. Green, Tisbury; Dr. C. C. Wimberley, Coventry; Dr. J. J. K. Duncanson, Edinburgh; Dr. J. Candy, Devonport; Mr. W. F. Tomkyns, Yeovil; Mr. B. D. Taplin, Malvern; Dr. T. F. J. Messer, Helensburgh; Mr. H. Mitchell, Colchester; Mr. J. Bankart, Exeter; Mr. G. H. Smith, Edinburgh; Mr. R. P. Cotton, London; Mr. Woodie, Stirling; Mr. J. V. Lucas, Ahmedabad; Mr. R. H. B. Nicholson, Hull; Mr. T. P. Salt, Birmingham; Mr. J. B. Walker, Golcar; Mr. H. Swinson, Leamington; Mr. E. N. Smith, Paddockhurst; Dr. G. M. Humphry, Cambridge; Mr. E. Heywood, Manchester; Dr. E. T. Tibbits, Rugeley; Dr. E. M. Sherritt, Clifton; Dr. W. J. Kennedy, Dalkeith; Mr. J. Ll. Roberts, Denbigh; Mr. A. S. Cooks, Stroud; Mr. Kenworthy, Bowden; Dr. Fraser, Edinburgh; Dr. W. R. S. Jefferiss, Lochmaben, etc.

AN ADDRESS

ON

THE PRESENT STATE OF ANATOMICAL SCIENCE.

*Delivered to the Anatomical and Physiological Department of the
Biological Section of the British Association:
Bristol, August 25th, 1875.*

By JOHN CLELAND, M.D., F.R.S.,

Professor of Anatomy and Physiology in the University of Galway;
Vice-President of the Section.

I SHALL not venture to occupy the time of the Section with any *résumé* of the work done in anatomy and physiology during the past year, as such information is readily accessible in the pages of journals and year-books. I shall content myself with making some comments on the condition of anatomy at the present time in a few important particulars.

I had intended to speak also of some subjects connected with physiology; but I find that I cannot do so without lengthening my remarks to a greater extent than might be desirable. I shall be content, therefore, so far as that science is concerned, to mention that, although experimental physiology is probably less cultivated in this country than in any other in which biology is studied, it has been practically decided by Parliament that it is quite time to put some check on investigation in that direction; for, as every one knows, a Royal Commission has been appointed to inquire into vivisection. In the scientific world, all are agreed, whatever opinions may prevail in other sections of the community, that the man who would wantonly inflict pain on a brute beast is himself a brute, and deserving to be roughly handled; and because there is no difference of opinion on that subject, and because no experimental science can well prosper if one man is to judge for another what experiments are justifiable to institute or to repeat, or are likely to give important results, I do deplore the clamour which well-meaning persons have raised, and regret that it has been so far yielded to.

In anatomy, the most important progress in recent years has been made in those departments which abut most closely on physiology; namely, the microscopy of the tissues and development. The whole conception of the nutrition of the body has become altered in comparatively recent years by the additions to our knowledge of the nucleated corpuscles, which are the living elements of which it is composed; and principally by the recognition of the secondary nature of cell-walls, the close connection or even continuity of the nerves with other textures, and the identity of the white corpuscles of the blood with amoeboid or undifferentiated corpuscles outside the vessels. The origin of every living corpuscle from corpuscles pre-existing is no longer difficult to imagine, but may, I incline to think, be almost looked on as proved. The history of each may be traced back through conjugated germs to the corpuscles of preceding generations in uninterrupted succession, and the pedigree of the structural elements is seen to differ in no way from that of individual plants or animals. It is true, indeed, that no absolute proof exists that new living corpuscles originating by mere deposit are not added to the others; but the evidence against such a thing taking place is exactly of the same description as that which exists against spontaneous generation of independent organisms; viz., that things previously unexplained by the theory of parentage are explained now, while, on the other hand, there is no sufficient evidence of the origin of life by any other mode.

The advance of histology in recent years is owing in part to the facility of obtaining good microscopes at moderate prices having brought the study within the reach of a great and increasing crowd of observers. At first, the progress of histology was influenced by the steps of improvement in the manufacture of microscopes; but now, for a number of years back, we have been in possession of instruments thoroughly suited for the investigation of tissues; and I think it will be generally admitted that the highest powers which have been manufactured are not those which have advanced discovery most, or are most likely, in the present state of science, to yield the richest harvest. We appear to be more dependent now on new methods of preparation. Thus, if we go back for a considerable number of years, we cannot but remember what a valuable addition glycerine proved when it came first into use, and what a harvest of discovery followed the introduction of chromic acid. More recently, the methods of transparent injection, of preparing sections by imbedding, the freeing of

tissues, the use of carmine and other pigments for staining, the resort to metallic depositions by the use of osmic acid, silver and gold, and a variety of other additions to our means of preparation have produced results of an astonishing kind, which have changed the whole aspect of histology from that which it wore when I myself first took an interest in the subject.

Leaving histology, I shall devote the rest of my remarks to the morphology of the vertebrata. Here I am less disposed to indulge a gratulatory vein. No doubt, within the last dozen years, we have had work to be grateful for. Worthy of a prominent place in this, as in other departments of anatomy, is the encyclopædic work, the *Lectures*, of Milne-Edwards, invaluable as a treasury of reference to all future observers; while the memoirs of Gegenbaur on the carpus, on the shoulder-girdle, and on the skulls of Selachian fishes, and Kitchin Parker's memoirs devoted to mature forms, may be taken as examples that morphological problems suggested by adult comparative anatomy have not lost their attraction to men capable of elaborate original research. And I the more willingly select the names of these two writers, because, on one subject on which they have written, the shoulder-girdle, I am compelled to differ from their conclusions, and to adhere rather to those of Owen, so far as the determination of the different elements in fishes is concerned; and by stating this (although the subject cannot be now discussed) I am enabled to illustrate that the appreciation of the value of elaborate and painstaking work is a matter totally distinct from agreement with the conclusions which may be arrived at in the investigation of complicated problems, although wisdom and penetration as to these must ever command admiration.

But, when one looks back on the times of Meckel and Cuvier, and on the activity inspired by the speculations of the much abused Oken, the writings of Geoffroy St. Hilaire, the less abstrusely speculative part of the works of G. C. Carus, and the careful monographs of many minor writers; when one reflects on the splendid grasp of Johannes Müller, and thinks of the healthy enthusiasm created in this country for a number of years by Owen's *Archetype and Homologies of the Vertebrate Skeleton*, and then contemplates the state of vertebrate morphology at the present moment, it seems to me that its homological problems and questions of theoretical interest do not attract so much attention as they did, or as they deserve.

There can be no doubt that a great and curious influence has been exercised on morphology by the rise of the doctrine of the origin of species by natural selection. Attention has been thereby directed strongly for a number of years to varieties; and probably it is to this doctrine that we owe the larger number of observations made on variations of muscles, nerves, and other structures. Particularly elaborate have been the records of muscular variations, very praiseworthy, interesting to the recorders, very dry to most other people, and hitherto, so far as I know, barren enough of any general conclusions. So much the more credit is due to those who have worked steadily in faith that beauty will emerge to gild their results some day.

But the doctrine of natural selection has had a further effect in anatomical study, aiding the reaction against the search for internal laws or plans regulating the evolution of structures, and directing attention to the modifying influences of external agencies. This effect has happened naturally enough, but it has been far from just; rather is it a pendulum-like swing to another extreme from what had previously been indulged in. The doctrine of natural selection starts with the recognition of an internal formative force which is hereditary; and in the development of the doctrine, the limits of hereditary resemblance have been greatly studied; and further, it will be observed that one of the fundamentals of the doctrine is, that the formative force alters its character gradually and permanently when traced from generation to generation in great tracts of time. Now I am not going to enter on a threadbare discussion of the origin of species in this company; suffice it to say that, while the existence and extensive operation of such a thing as natural selection seems to have been convincingly proved, it is a very different thing to allege that it has been the sole, or even the principal agent in producing the evolutions of living forms on the face of the earth. So far as anatomy is concerned, it is a secondary matter whether the link between the members of the evolving hosts of life have been genetic or not. But I wish to point out that, even pushing the Darwinian theory to the utmost possible extreme, the action of external agents infers the existence of something acted on; and the less directly they act, the more importance must be given to the hereditary or internal element. We are, therefore, presented with a formative force, which exhibited itself in very simple trains of phenomena in the first beginnings of life, and now is manifested in governing the complex growth of the highest forms. We are set face to face with that formative force, and are obliged to admit its inherent capability of changing its action; and that being the case, it is more of an assump-

tion to declare that the changes are all accidental and made permanent by accident of external circumstance, or to consider that it has been the law proper to this force to have been adequate to raise forms, however liable to modification by external circumstances—to raise them, I say, from the simple to the complex, acting through generations on the face of the earth, precisely as it acts in the evolution of a single egg into an adult individual? This is that formative force which has been elaborately shown by Mr. Darwin, in founding his theory of "pangenesis", not only to be conveyed through whole organisms and their seed, but to pervade at all times the minutest particles of each; and I merely direct attention to the fact that its extension over the whole history of life on the globe must be granted, and ask if, in the range of forms which furnish at the present day an imperfect key to the ages which are past, there is not exhibited a development comparable, in its progression to definite goals, with what is shown in the life of a single plant or animal. For my own part, I am fully convinced of an unity of plan running through animal forms, and reaching, so far as the main line is concerned, its completion in the human body. I confess that I think that there is evidence that animal life has reached its preordained climax in humanity; and I cannot think it likely that, as myriads of years roll on, descendants differing *in toto* from man will be developed. To argue the subject would be to enter on the largest subjects of morphological anatomy, and on speculations on which agreement could not be expected. Even, however, in the nature of the variations in the human race there seems to be some evidence that the progress of evolution is to be traced from man, not to other animal forms yet to appear, but, through his psychical nature, into the land of the unseen. Those variations, keeping out of view differences of bulk and stature, which appear to have some relation to geographical position, are principally to be found in the head, the part of the body most closely connected with the development and expression of the mental character; and I may mention that when, some years ago, my attention was directed to the variations of the skull, the only part whose variations in different races I have had opportunity of studying with any degree of minuteness, I became satisfied that in uncivilised races there might be distinguished skulls which had undergone hereditary degeneration, others which had reached the most advanced development possible for them; and a third set, notably the Kafirs, with large capabilities for improvement in the future. Indeed, it is beyond doubt, that there is a limit for each type of humanity beyond which it cannot pass in the improvement of the physical organisation necessary for mental action.*

There are also some curious indications in human structure of the formative force nearing the end of its journey. In the details of the skeletons of other animals, one sees the greatest precision of form; but there are various exceptions to this neatness of finish in the skeleton of man, and they are found in parts specially modified in connection with the peculiarities of his development, and not requiring exactness of shape for physiological purposes; while, on the other hand, physiognomical mould and nicety of various physiological adaptations are found in perfection. Look at the variations in the breast-bone, especially at its lower extremity, which is never shapely, as it is in the lower animals. Look at the coccygeal vertebræ; they are the most irregular structures imaginable. Even in the sacrum and in the rest of the column the amount of variation finds no parallel in other animals. In the skull, except in some of the lowest forms of humanity, the *dorsum sellæ* is a ragged, warty, deformed, and irregular structure, and it never exhibits the elegance and finish seen in other animals. The curvature of the skull and shortening of its base, which have gradually increased in the ascending series of forms, have reached a degree which cannot be exceeded; and the nasal cavity is so elongated vertically, that in the higher races nature seems scarcely able to bridge the gap from the cribriform plate to the palate, and produces such a set of unsymmetrical and rugged performances as is quite peculiar to man; and to the human anatomist many other examples of similar phenomena will occur.

Questions of homology are matters which must be ever present in the study of structure as distinct from function—both the correspondence of parts in one species to those in others, and the relations of one part to another in the same animal; and perhaps I shall best direct attention to the changes of opinion on morphological subjects in this

* I allude to the circumstances, that, under the influence of civilisation, the length of the base of the skull does not increase, but positively decreases; that the proportion of the extent of the arched to the base has strict limits; that the curvature of the base in some uncivilised races falls slightly short of the normal; that in others it transcends the normal by a peculiar process of degeneration between the sphenoid and ethmoid; and that increased capacity of the cranial cavity in the progress of civilisation is obtained almost entirely by increase of breadth and by the rounding out of those flat surfaces above and below the temporal ridges which give savage skulls a roof-like appearance. See "Inquiry into Variations of Skull" (*Philos. Trans.*, 1870).

country during the last twenty-five years, by referring shortly to the homological writings of three eminent anatomists—Professors Owen, Goodsir, and Huxley.

For the first time in English literature, the great problems of this description were dealt with in Professor Owen's work already referred to published in 1848; and it is unnecessary to say that, notwithstanding the presence of unquestionable errors of theory, that work was a most valuable and important contribution to science. The faults in its general scope were justly and quietly corrected by Goodsir at the meeting of this Association in 1856 in three papers, one of them highly elaborate; and in these he showed that the morphology of vertebrate animals could not be correctly studied while reference was made exclusively to the skeleton. He showed the necessity of attending to all the evidence in trying to exhibit the underlying laws of structure, and especially of having constant regard to the teachings of embryology. Among the matters of detail which he set right, it may be mentioned that he exposed the untenability of Professor Owen's theory of the connection of the shoulder-girdle with the occipital bone, and pointed out that the limbs were not appendages of single segments corresponding with individual vertebræ. Referring to the development of the hand and foot, he showed the importance of observing the plane in which they first appear, and that the thumb and great toe are originally turned toward the head, the little finger and little toe toward the caudal end of the vertebral column. But he probably went too far in trying to make out an exact correspondence of individual digits with individual vertebral segments, failing to appreciate that the segmentation originally so distinct in the primordial vertebræ becomes altered as the surface of the body is approached: a truth illustrated in the vertebral columns of the plagiostomatous fishes, in the muscle-segments over the head in the pleuronectids, and in the interspinal bones bearing the dorsal and anal fin-rays of numbers of fishes, but so far, as I know, not hitherto sufficiently appreciated by any anatomist.

Goodsir also exploded, one would have thought for ever, the erroneous theory of the correspondence of the mammalian tympanic plate with the quadrate bone of birds and the suspensorium of fishes, directing attention to the neglected but just appreciation by St. Hilaire of the homological importance of the ossicles of the ear, and to the embryological work of Meckel and Reichert. But undoubtedly he fell into great mistakes of his own in matters of detail connected with the exceedingly difficult question of the correspondence of the bones of the skull, the principal of these probably being an unfortunate notion that the *great frontal* of fishes was a bone which disappeared from the skulls of mammals, a notion which spread its influence over his determination of a number of other elements, and introduced a confusion which made his paper on the skull hard to understand.

In 1858, Professor Huxley delivered his Croonian Lecture on the Vertebrate Skull; and in 1863, his lectures at the Royal College of Surgeons on the same subject. He profited by the wisdom of Goodsir, and studied the works of Rathke, Reichert, and other embryologists. But, rightly or wrongly, he took a step further than Goodsir. He assumed from the first that the homologies of adult structures could be determined by development, and that by that study alone could they be finally demonstrated. As regards the skull, the constitution of which always remains the central study of the vertebrate skeleton, his writings marked the introduction of a period of revulsion against not only the systems of serial homologies previously suggested, but even against any attempt by the study of the varieties of adult forms to set them right. Mr. Huxley has added materially to the previously existing number of interpretations as to what elements correspond in different animals; and, in doing so, has found it necessary to make various additions to the already troubled nomenclature. Those who consider these changes correct will, of course, see in them a prospect of simplicity to future students; but to those who, like myself, have never been able to agree with them, they are naturally a source of sorrow. Among the changes referred to, may be mentioned the theory of the "*periotic bones*". That theory I venture to think a very unfortunate one, introducing a derangement of relations as wide-spread as did Goodsir's theory of the frontal bone. And do not think me presumptuous in saying so, seeing that this theory is in antagonism with the identifications of every anatomist preceding its distinguished originator, not excepting Cuvier and Owen; nor is it easy to discover what evidence it has to support it against the previously received decision of Cuvier as to the *external occipital and mastoid* of fishes. Without entering into the full evidence of the subject, it may be stated that, so far as this theory affects the *alisphenoid* in the skull of the fish, it must be given up, and the determination of Professor Owen must be reverted to, when it is considered that in the carp the third and fourth nerves pierce what that anatomist terms the *orbitosphenoid*, the bone which is *alisphenoid* according to the theory which terms the *alisphenoid* of Owen the *prootic*. A proof still more

striking is furnished by *Malapterurus* and other Silurids, in which the bone in question is pierced by the optic nerve. That being the case, the prootic theory will be seen to have arisen partly from giving too much importance to centres of ossification, and partly from considering the nerve-passage in front of the main bar of the *alisphenoid* of Owen as corresponding with the *foramen ovale* of man rather than with the *foramen rotundum* and sphenoidal fissure. A spiculum, however, separating the second from the third division of the fifth nerve, and having therefore the precise relations of the mammalian *alisphenoid*, does exist in the carp and other fishes. But in reptiles Professor Huxley's determination of the *alisphenoid* is right, and Professor Owen's clearly wrong; for in the crocodile the *alisphenoid* of Huxley and others is perforated by the sixth nerve, so that it cannot have any claim to be called *orbitosphenoid*. I must, however, maintain against Professor Huxley's view of Professor Owen's determination of the *nasal* in fishes, notwithstanding that Professor Owen has failed to appreciate the exact relation of that bone to the nasals of mammals, and has thereby laid his position open to attack. The arguments on that point Professor Huxley was good enough to lay before the public fourteen years ago, by kindly reading for me before the Royal Society a paper, which subsequently appeared in its *Transactions*; and I am not aware that anyone has since attempted to controvert them.

I shall not trouble you further with such matters of detail; but it will be clear from what has been said that the beginner in comparative anatomy must at the present day find himself at the outset, in the most important part of his osteological studies, faced with a diversity of opinion and confusion of nomenclature sufficient to produce much difficulty and to have a repelling effect on many minds. Such difficulties might well be encountered with enthusiasm where a belief existed that behind them lay a scheme of order and beauty; but not many will spend time investigating such intricate details if they doubt the interest of the general conclusions likely to be reached by mastering them. On this account, it is a great pity that the scepticism generated partly by the difficulties of the subject, and partly by reaction from the dogmatism of the admirers of Oken, does too frequently discourage the investigation of the serial homologies of the parts entering into the segments of the skull, and the determination of the nature and number of those segments. It is a pity that so much clamour has been made for a number of years against the expression "vertebral theory of the skull", because fighting against words is but stupid warfare at the best, and because all that was really meant, and that could be justly stated, could have been brought into prominence without objecting to a time-honoured phrase. It is questionable if anyone who ever used the convenient term "vertebral theory" meant to indicate more than a certain community of plan on which were built the segments of the skull as well as those of the spinal column; that, in fact, the two constituted one complete chain, of which the first few segments were so different from the rest that, till Oken pointed the fact out, it was not recognised that they were segments lying in lineal continuity with the rest. But the matter has recently stood thus: that to some minds, in the imperfect state of our knowledge, one thing seemed essential to a segment comparable with the rest, and to others something else seemed requisite; and the oddity of the position of affairs is this, that the objectors to the phrase "vertebral theory" have been as crotchety in setting up imaginary essentials to a segment as their neighbours. On the one side, we were taught to expect certain definite osseous elements in each segment, to which definite names were given; while, on the other, in opposition schemes, centres of ossification have been built on as matters of primary consequence, although a glance at the modifications in the vertebral column proper might convince anyone that they are things of the very slightest importance morphologically. Also those who have objected to speaking of cranial vertebræ, have put great importance on the point at which the *chorda dorsalis* terminates, although it has been long known that in one animal the *chorda dorsalis* runs right on to the front, that in others it fails to enter the skull at all, while in the majority it passes for a certain distance into the base. Johannes Müller, on such grounds, concluded, thirty years ago, that the presence of *chorda dorsalis* was not necessary to constitute a cranial vertebra; and there seems no reason to doubt that he was right. Looking at the early embryo, the cerebro-spinal axis is seen to be one continuous structure; and the walls of the canal containing it are likewise manifestly continuous, not at first distinguishable into a spinal and a cranial portion. Looking at the adult condition, in the higher classes the vertebræ of the tail are seen dwindling into mere bodies developed round the *chorda dorsalis*, and giving off rudimentary processes without separate centres of ossification, while towards the head the bodies diminish and the arches enlarge; and in the skull the *chorda*, round which the bodies in the rest of the column are developed, comes to an end, and the neural arches are enormously enlarged and have additional centres of ossifica-

tion, precisely as in the mammalian thorax costal centres of ossification are found which do not exist in the costal elements of cervical vertebræ. It would, therefore, be quite as justifiable to object to the term vertebræ as applied to a joint of the tail because it has no *lamina*, or none with separate centres of ossification, as to object to its applicability to segments of the skull because the *chorda* is absent, or the osseous elements different in number from those found usually in the segments of the trunk.

However, it is gratifying to observe that, among the most recent additions to morphological anatomy, there is a highly suggestive paper by Professor Huxley, appearing in the Royal Society's *Proceedings* for December last, and entitled "Preliminary Notes upon the Brain and Skull of *Amphioxus lanceolatus*", in which the learned professor, who has for many years been the most determined opponent to the mention of cranial vertebræ, declares, so far as I can comprehend his meaning, that the region of the head represents no less than fourteen segments, all of which he terms *protovertebræ Amphioxus*. This determination of correspondence is made the more remarkable by being followed up with a suggestion that the numerous protovertebræ lying in front of the fourteenth in *Amphioxus* are represented only by muscles and nerves in the higher vertebrates.

I hail this paper as being practically at last an ample acknowledgment that there is no escape from admitting the correspondence of the region of the head with the segments of the trunk; but the details of the new theory scarcely seem convincing; and I might have preferred to leave its discussion to others, were it not that the notions which it opens up are far too important to allow it to be passed over in any account of the present state of opinion on the subject of vertebrate morphology. The argument in this new theory runs thus: that the palate-curtain of *Amphioxus* is homologous with that of the lamprey, and that the palate-curtain of the lamprey is attached below the ear; that, therefore, all the seven segments seen in front of the palate-curtain of *Amphioxus* are represented by parts in front of the ear in the lamprey and the other Vertebrata. Again, the branchial arches of the higher Vertebrata are assumed to be of the nature of ribs; and in none of the Vertebrata next above *Amphioxus* "are there more than seven pairs of branchial arches; so that not more than eight myotomes (and consequently protovertebræ) of *Amphioxus*, in addition to those already mentioned, can be reckoned as the equivalents of the parachordal region of the skull in the higher vertebrates". Everything, observe, depends on the segment to which the palate curtain of *Amphioxus* belongs. Now, I have already pointed out to you that the segmentation of the vertebrate body is not perfect; and there is no method by which the alimentary canal, of which the mouth and palate are the first part, can be divided into segments corresponding with the cerebro-spinal nerves. Most certainly we cannot judge that a portion of a viscus belongs to a particular segment from its lying underneath some other structure in definite relation, like the ear, to the cerebro-spinal system; for then should we be obliged to grant that one-half or more of the heart belongs to segments in front of the ear, since it is undoubtedly so situated in a chick of the thirty-sixth hour. But the brachial arches are in front of the heart, and, according to the theory which we are considering, are behind the ear; thus the principle assumed in the starting-point of the theory is taken away.

Again, it is important to observe that the branchial skeletal arches cannot be ribs, for they lie internal to the primary circles of the vascular system formed by the branchial arteries and veins, while the ribs are superficial to both heart and aorta. If the ribs are represented at all in the branchial apparatus (and I doubt it very much), it is by the cartilages superficial to the gills in sharks, rays, and dog-fishes; and it would seem impossible for any one who has dissected them to doubt that those cartilages are homologous with the branchial skeleton of the lamprey, which they somewhat resemble. In fact, if the external and internal branchial openings of the lamprey be enlarged, its gills are reduced to a form similar to those of the shark.

There is nothing in this, however, which interferes seriously with the proposed theory of the skull. It is merely a point in the argument which I have thought right to clear. More important it is to remark that, on the supposition that numerous protovertebræ are represented in the region of the head, there are most serious difficulties interfering with the idea that they are, as Professor Huxley states, represented only by muscles and nerves in the higher Vertebrata; and that there is any correspondence between "the oculo-motor, pathetic, trigeminal, and abducens nerves with the muscles of the eye and jaws", and the regular nerves and muscle-segments of the fore part of *Amphioxus*. Even in the lamprey, the eyeballs are supplied with muscles similar to those to which, in other vertebrates, the oculo-motor, pathetic, and abducens are distributed; and I find in the large species that, notwithstanding this, the series of regular muscle-segments is continued over the head—

not, indeed, in the same way as in *M. can.* but in a highly instructive and curious manner. The five foremost muscle-segments have their upper extremities attached considerably in front of the nasal opening by a short tendon, which touches its fellow in the middle line; and, extending thence in an outward and backward direction, they pass behind the eyeballs, the first two running in front of the first gill-pouch, and the third lying over it. Therefore, in this instance, as surely as the nostril is in front of the eye, so surely the upper extremities of these muscle-segments are shifted forwards out of their morphological place, probably in connection with the great protrusion of the jaws for the physiological purpose of forming a sucker. There is no escape from granting this shifting, even were it possible to believe that the eyeball could be further forward than the nostril; for, while the fifth muscle-segment can be traced in front of the nostril, the sixth occupies the interspace between the skull and first vertebra, so that, if the muscle-segments are taken as a guide, the whole skull, forward to the nostril, belongs to one intersegmental space: a view which is clearly absurd. The succeeding intermuscular septa correspond each with a cartilaginous vertebral arch; and it is interesting to observe that the branchial cartilages are not placed one for each septum, like the fibrous representatives of ribs detectable within the septa; for the second cartilage is opposite the sixth septum, the third opposite the ninth, the fourth opposite the eleventh, the fifth opposite the thirteenth, and the sixth and seventh opposite the fourteenth and fifteenth septa; and this is one reason for doubting that even these superficial branchial cartilages, though attached to the vertebral column, are to be regarded as ribs.

It may be noticed as a wholesome symptom in anatomical speculation, that the new theory which has led to these remarks is founded on arguments drawn altogether from comparison of different species, and not from embryology: a very remarkable circumstance, as coming from one who so lately as last autumn reiterated in this Section his slowness to believe in reasonings founded on adult forms, and even on "later development". The wisest know so little, that humanity must be content to gather information from every possible source, and leave no set of ascertained facts out of view in attempting to arrive at generalisations. If we had before us all the adult anatomy of every species that ever lived on the earth, we should only then have the record completed from which to frame a full system of morphology; and, as matters stand, we must translate embryological phenomena with the aid of the series of adult forms, as well as translate the teachings of the adult series with the aid of embryology.

Falling back on my proposition, that the segments of the vertebrate body are nowhere complete, and that segmentation at one depth may exist to a greater extent than at another, I may mention certain embryological phenomena in the brain which have received too little attention, and which to some extent warrant belief in a larger number of segments in the head than is usually admitted; although I do not see that they are necessarily at variance with that theory of seven segments in every ossified skull which I indicated in 1862. In the chick, in the middle of the second day of hatching, already is the third cerebral vesicle divided into a series of five parts, separated by slight constrictions, the first part larger than those which succeed, and the last part narrowing to the spinal cord. The auditory vesicle lies opposite the constriction between the fourth and fifth parts. At the end of the second day and during the third, these divisions assume dimensions which give them a general appearance exceedingly similar in profile to the protovertebræ of the neck. In the following day they exhibit a more complex appearance, and after that the first compartment alone remains distinct as cerebellum, while the divisions between the others disappear in the thickening of the cerebral walls. In their first two stages, Mr. Huxley, whom I have already referred to so often, has figured these crenations, but he has not, so far as I know, described them.

I may also direct attention to another embryological point, to which I referred last year at Belfast as a probability. I speak now from observation. That which is termed the first cerebral vesicle in the early part of the second day of hatching of the chick, is an undifferentiated region of the brain from which a number of parts emerge successively from behind forwards. As early as the thirty-sixth hour the optic nerves can be traced, separated from the rest of the vesicle by distinct elevations of the floor of the brain, reaching inwards to the constriction between the first and second vesicles: and as early as this date the first trace of bifidity of the brain in front may be discerned—that bifidity which, to my thinking, is only one of several instances of longitudinal fission in the fore part of the head, the trabeculæ presenting another instance of the same thing, and the cleft between the maxillary lobe and the part of the head above it a third; while in the muscular system such longitudinal cleavage or fission is common even in the trunk. In a chick of the third or fourth day, when rendered very

transparent, the optic nerves can be seen extending from beneath the front of the optic lobes; while in front of the optic lobes there are placed in series from behind forwards a posterior division of the first vesicle, an anterior division, the cerebral hemispheres, and the olfactory lobes. Thus there is a large supply of material presented in the brain for the study of segmentation: the difficulty to be overcome by future inquiry and careful collation of all available facts is to determine the value of the parts placed one in front of another.

Perhaps I have occupied time too long with matters involving a large amount of technical detail; but I trust that I may have, in some measure, illustrated that both in aim and in accomplished work anatomy is no mere collection of disconnected facts, no mere handmaid of the physician and surgeon, nor even of physiology. I do not doubt that it is yet destined, as dealing with the most complex sequences of phenomena, to take the highest place among the sciences as a guide to philosophy. One cannot help noticing the increased importance now given to natural history studies as a part of education; and it is worth while to note that it is most of all in anatomy and physiology that the close connections of matter with mind are brought under review—physiology exhibiting the relations of our own mental being to our bodies, and anatomy revealing a body of organised nature, whose organisation points to a source of beauty and order beyond.

The people of Bristol do well to rally round their medical school. They do well to furnish it with buildings suitable for the prosecution of all the natural history studies which adhere to medical education; and they do well to join with that school a complete college of literature and science. Let us hope that they will make it worthy of so wealthy and historic a city. But if they will have their medical school the success which in so flourishing a locality public enthusiasm may well make it, and if they will have it aid as well as be aided by a school of general education, let them follow the system latterly adopted in Oxford and Cambridge, long carried out in the Universities of Scotland, and recognised, though not in all instances sufficiently provided for, in Ireland. Let anatomy, human and comparative, receive its place as an important and fundamental science. Let thorough and adequate provision be made for its being taught as a science; and see that it do not, as in too many medical schools which shall be nameless, degenerate to the etymological and original meaning of the word, a mere cutting up of carcasses.

ON TRACHEOTOMY IN CROUP AND DIPHThERIA.*

By GEORGE BUCHANAN, M.A., M.D.,
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THE prevalence and fatality of diphtheria of late years, as may be seen by a perusal of the Registrar-General's returns, has drawn the attention of the profession to the etiology of that disease, and has recently given rise to a controversy as to the identity or non-identity of croup and diphtheria. Many able papers have appeared in the pages of the BRITISH MEDICAL and other journals on this subject, and to them I refer those interested in the question; but there is one point of resemblance which is of the utmost importance in a practical point of view. Although the two diseases may be as distinct as to cause, course, and sequelæ, as scarlet fever is from simple tonsillitis, yet both are characterised by the effusion, on the mucous membrane of the air-passages, of a tough false membrane. This membrane may differ in its nature and in situation, at least at the commencement, but the tendency in both cases is to obstruct the breathing and cause suffocation.

This seems so self-evident that I must almost apologise for mentioning it; but I have been so often met with the objection that, because the primary disease causing the effusion is diphtheria and not croup, therefore it is hopeless to interfere, as the operation will not cure the specific disease, that I have considered it not out of place to introduce it. We might as well refuse to open an abscess of the tonsil which was about to choke a patient suffering from scarlatina, because the operation will not cure the fever, as refuse to relieve a patient from instant death from suffocation because the operation is not a cure for diphtheria.

Now, the point I wish to bring out is, that there is a stage both in croup and in diphtheria at which it becomes evident that recovery is hopeless and death from suffocation certain. It is quite true that it is exceedingly difficult to say when that stage has arrived, and mistakes may sometimes occur; but I believe practically it is better to err on the safe side, and acknowledge the inefficacy of treatment, rather than delay till it is too late to resort to the last resource. Tracheotomy *per se*, though

* Read before the Surgical Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

a difficult, is not a dangerous, operation; and I, for one, would be inclined to urge its performance before the strength of the little sufferer has been brought to the lowest ebb by the struggles which result from the approaching suffocation.

I wish, however, clearly to guard myself from being supposed to advocate tracheotomy in all circumstances of approaching death from croup or diphtheria. I have elsewhere explained my views on this subject, but I cannot avoid referring to them again.

The diseases in question, but especially diphtheria, when they prove fatal, cause death in one of two ways: either by exhaustion or by suffocation. Hence, we may say there are two varieties, viz., the asthenic and the sthenic. In the great majority of instances, croup is a sthenic inflammation attended with effusion of lymph in the trachea, and proves fatal by suffocation. In some cases, however, the attack is attended with such a depression of the vital powers that the patient sinks apparently from the virulence of the disease. This, however, is a rare case. But in diphtheria there are two well marked types: the sthenic, which closely resembles an attack of sthenic croup, except that the effusion of lymph begins on the fauces and extends through the glottis into the trachea; and the asthenic, which more closely resembles scarlet fever, and in which the effusion covers the whole of the mucous membrane of the fauces, tonsils, and even the pharynx, and in which the false membrane soon becomes foul, putrid, ichorous, and contagious.

In the former of these types, the danger is suffocation; in the latter, it is vital depression, death from asthenia.

Now, with regard to the treatment of these affections at the early stage, I wish here to make no reference; the scope of my remarks is the duty of the medical attendant, when medical treatment has failed, or is clearly failing, to arrest the disease. And I think that it is very important that medical practitioners, especially those commencing practice, should be supported by the opinion of those qualified to advise them in such a delicate matter as this, seeing it is a most painful and disagreeable task to advise parents to submit their children to such a repulsive proceeding.

I believe, then, that I am justified in calling on all those who have seen much of these diseases to unite with me in asserting that, when medical treatment has been fairly tried and when it is proving unavailing, and when death seems imminent from suffocation, not from vital depression or exhaustion, it is the duty of the medical attendant to perform, or advise the performance of, tracheotomy.

I know that here I shall be met with the objection that some cases which seemed hopeless have ultimately recovered; but these isolated examples are very few in number, and are counterbalanced out of all proportion by others in which delay, owing to repugnance to the operation and a hope that symptoms will improve, has deprived the patient of that chance of life which the surgeon can offer.

In pressing this view on my medical brethren, I am aware that I am adding nothing new to what has been frequently advanced by those who have had occasion to operate much in croup and diphtheria, but every year convinces me that it is the duty of those whose experience qualifies them to speak with authority on the matter, to reiterate their convictions, even if it be in nearly identical terms.

Last December, I was called to a case of croup, and when I arrived I found the child, a girl seven years of age, in the last stage of suffocation. The two medical gentlemen in attendance declared that the patient was beyond the reach of surgery. One of them, who had never seen the operation, strongly dissuaded me from making the attempt; the other, who had at one time been one of my clinical students, on hearing my wish to give the child a chance, persuaded the parents to consent. The little patient was livid, and though I did not use chloroform, as I usually do, it did not wince when I made the incision through the skin. The result was that the child is now alive, and in the enjoyment of excellent health.

To one who sees the operation for the first time, the hopelessness as to the attempt is only equalled by the surprise and gratification at the result.

But, while I am so strongly advocating the operation in the circumstances referred to, there is one condition in the suffocative form of those diseases which contraindicates tracheotomy, and which, if discovered, should prevent anyone from performing it. When the suffocation depends not only on obstruction of the trachea, but also on effusion of false membrane or the glutinous fluid which precedes it, into the smaller bronchial tubes, then the case is not one for operation. The difficulty, then, is to discover when the false membrane which causes the obstruction to breathing is limited to the trachea and larynx and when it has invaded the bronchia. Percussion and auscultation ought to assist in the diagnosis, but the restless tossing of the child and the noise of the breathing always make this a difficult proceeding.

There are two signs which appear to me to be valuable guides: one

is the amount and loudness of the stridor, which is always great in proportion to the patency of the small tubes and obstruction in the trachea.

But the most valuable test is a view of the naked chest. When the obstruction is in the trachea, while the bronchial tubes are free, the respiratory movements are continued with exaggerated energy, but the chest will not respond to the muscular efforts. The result is that at each inspiration the flexible parts of the thoracic walls are drawn in with great force, the intercostal spaces are hollowed, and the ensiform cartilage sucked back. But when the small bronchial tubes, and, perhaps, the air-cells, are stopped with the viscid or membranous effusion, the muscular efforts are more feeble and the chest remains puffed out, and the whole aspect is that of a child thirsting for breath, but with the lungs already full and themselves unfit for respiration. In this latter case, I never operate; in the former, with every hope of success.

This is not the place to enter into details with regard to the operation, which vary in many respects in different cases; but one thing may be impressed on the young operator by one who has had considerable experience; and that is, that tracheotomy is not the simple plunge of a knife into the trachea that many suppose, and that can be easily effected in the bloodless neck of a subject on a dissecting-room table. It requires coolness and patience on the part of the operator. Sometimes the trachea can be exposed by very little dissection; at others, numerous obstacles come in the way, especially in young children. Among these may be mentioned overabundant cellular tissue and fat, turgid veins, isthmus of the thyroid gland, which is very large in infancy, and protrusion into the wound from below of the thymus gland, a frequent cause of surprise and annoyance to those who are not forewarned. In consequence of these possible complications, the operation must be done slowly and systematically, obstacles turned and held aside, bleeding vessels secured; and the golden rule is that the trachea is never to be opened till its white rings are seen clearly at the bottom of the wound.

The following table contains an account of my operations of tracheotomy in croup and diphtheria, and the respective results.

- CASE I. Croup; aged 6. Cured.
 II. Croup; aged 3½. Death in three hours.
 III. Croup; aged 3. Death immediately.
 IV. Croup; aged 1¼. Death in sixteen hours.
 V. Diphtheria; aged 2. Death immediately.
 VI. Diphtheria; aged 2½. Death in six hours.
 VII. Croup; aged 1½. Death in eight hours.
 VIII. Croup; aged 3. Death in twenty-four hours.
 IX. Diphtheria; aged 4. Cured.
 X. Diphtheria; aged 2½. Cured.
 XI. Diphtheria; aged 1¾. Death in twenty-four hours.
 XII. Croup; aged 5. Cured.
 XIII. Diphtheria; aged 2½. Death in forty hours.
 XIV. Croup; aged 5. Cured.
 XV. Diphtheria; aged 5. Death in twenty-eight hours.
 XVI. Diphtheria; aged 5½. Death in five days.
 XVII. Diphtheria; aged 6. Cured.
 XVIII. Diphtheria; aged 3. Death in four days.
 XIX. Diphtheria; aged 3½. Death in seven days.
 XX. Diphtheria; aged 2. Death in five days.
 XXI. Diphtheria; aged 2½. Cured.
 XXII. Diphtheria; aged 6. Death in two days.
 XXIII. Diphtheria; aged 5. Cured.
 XXIV. Diphtheria; aged 8. Death in thirteen days.
 XXV. Croup; aged 1½. Death in six hours.
 XXVI. Croup; aged 5. Cured.
 XXVII. Diphtheria; aged 5. Death in five days.
 XXVIII. Diphtheria; aged 7. Cured.
 XXIX. Croup; aged 5. Death in three days.
 XXX. Diphtheria; aged 5. Cured.
 XXXI. Diphtheria; aged 2. Death in two days.
 XXXII. Croup; aged 2½. Death in two days.
 XXXIII. Diphtheria; aged 5. Death in six days.
 XXXIV. Croup; aged 9. Cured.
 XXXV. Croup; aged 4. Death in three days.
 XXXVI. Diphtheria; aged 8. Death in eight days.
 XXXVII. Diphtheria; aged 7. Cured.
 XXXVIII. Diphtheria; aged 7. Death in three days.
 XXXIX. Diphtheria; aged 5. Cured.
 XL. Diphtheria; aged 5. Death in two days.
 XLI. Diphtheria; aged 4. Death in three days.
 XLII. Diphtheria; aged 6. Cured.
 XLIII. Diphtheria; aged 4. Death in two days.
 XLIV. Croup; aged 7. Cured.

XIV. Group; aged 9. Death in four days.
 XV. Diphtheria; aged 6. Cured.
 Total cases of Tracheotomy, 46. Cured 17; Died 29.
 Tracheotomy in Group. 10. Cured 6; Died 10.
 " Diphtheria, 30. Cured 11; Died 19.

The average result is precisely the same, viz., one child is saved out of every two and two thirds operated on; and, as the operation was always done when there seemed no hope of recovery otherwise, it may safely be stated that the lives of these seventeen children were saved by tracheotomy.

UNUSUALLY RAPID ACTION OF THE HEART.

By JOHN CAVAFY, M.D.,

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DR. FARQUHARSON'S interesting paper on this subject, published in the *JOURNAL* of June 12th, recalls to my mind a very similar case which came under my notice some years ago, and which deserves, I think, to be recorded.

A groom, aged 32, was admitted into St. George's Hospital, under the care of the late Dr. Fuller, on March 15th, 1871. He had suffered from acute rheumatism seven years before, but had presented no cardiac symptoms till his present illness, the history of which was as follows. He had been in the service of a French family, with whom he was shut up in Paris during the siege. In October, his master's horses were killed for food, and he was consequently discharged. Since that time, he had lived very poorly, barely supporting himself by odd jobs of various kinds, and for the last two months had been subjected to great privation. He could obtain no meat, and only small quantities of bread and wine. He grew thin, and became subject, for a fortnight before his admission, to violent palpitation and præcordial pain on the least exertion or excitement. The fits of palpitation would often last a whole night. He left Paris on March 13th, with only two pounds of bread, and, on reaching Charing Cross, was penniless and destitute. He begged a lodging, and was offered food, but could not eat. The next morning, he swallowed a cup of tea, but this was immediately vomited. Violent pain and palpitation came on, and continued with barely appreciable intervals of rest, till he was admitted into the hospital on the following day.

He was then sweating profusely; there was great dyspnoea, and the heart's action was extremely rapid. The pulsations were counted as follows: at 1.30 (by Dr. Barclay), 228; at 2.15 (by myself), 216; at 2.20 (by the house-physician), 208; a little later (by Dr. Dickinson), 200; at 3 (by Dr. Whigham and myself), 176. A few minutes later (by Dr. Jones), the pulse suddenly became very weak, irregular, and intermittent, and dropped to 100-108. He was fed with small quantities of egg and brandy mixture every hour. The feeding was continued during the night, which was quiet, with the exception of one comparatively slight attack of pain and palpitation, and, at 11 on the following day, I found the pulse irregular, 100 to 108, with occasional intermission, and a harsh systolic murmur was now audible at the apex. Next day, the pulse had fallen to 82, and he steadily improved. He gradually became able to take food, the palpitation diminished in force and frequency, and by April 12th he was well enough to go to the Convalescent Hospital at Wimbledon. The treatment consisted of egg and brandy mixture, gradually diminished and replaced by food; bark and ammonia, and latterly citrate of iron and bromide of potassium in effervescing ammonia draught. No digitalis was given.

In this case, there are, it will be seen, many points of similarity to that published by Dr. Farquharson. There was valvular disease, the murmur was inaudible during the very rapid action of the heart, and there was a sudden fall (preceded in my case by a gradual diminution) in the number of pulsations, accompanied by irregular and intermittent action. With regard to the causation of palpitation, it seems probable that, in the great majority of instances, it is due to paresis of the inhibitory fibres of the pneumogastric, and not to stimulation of the accelerator nerves. Palpitation occurs chiefly in anæmic and otherwise weakened patients; in the case before us, it came on after insufficient food and consequent exhaustion, and it is difficult to suppose that, in cases such as these, there can be increased nervous action of any kind. I am aware that, in exophthalmic goitre, the palpitation and increased action of the heart are considered by some to be owing to stimulation or irritation of the accelerator nerves. But even here the majority of symptoms—dilatation of arteries, flushing, heat, sweating, etc.—point to paralysis of the sympathetic, or at least of the vaso-motor nerves. Friedreich has suggested that the increased action of the heart is secondary to vaso-motor paralysis, the coronary arteries being thus dilated, and the heart in consequence receiving an increased blood-

supply. It should, however, be remembered that dilatation of arteries means diminution of blood-pressure, and that this always increases the frequency of the heart's contractions. A high blood-pressure, on the contrary, stimulates the centre of origin of the pneumogastric, and thus diminishes the frequency of the pulse.

THE LATE DISCUSSION ON PUERPERAL FEVER, AND ON ITS TREATMENT BY INTRAUTERINE INJECTIONS.

By EDWARD JOHN TILT, M.D.

WHEN, in opening the discussion, Mr. Spencer Wells stated that he came to learn and not to teach, those who hold him in high esteem thought this was only the usual artifice of the orator, seeking to moderate expectations so as to ensure the success of a final effort; and great was our surprise, when his turn came to close the debate, to find that he had trotted us out to show our paces, without having any definite object in view. Henceforth this discussion will be memorable among others; for, although the business of the Society was suspended for four consecutive meetings, and although the discussion was well carried on by many men well prepared by length and quality of observation, and who did their best to put their thoughts in small compass, no one gave them their proper place and weight in a general *résumé* of the debate; for this was left undone by Mr. Spencer Wells, by the President of the Society, and by the principal organs of the medical press.

I have no intention to do the work that should have been done by others; but, before responding to an appeal made to me by a correspondent in the issue of the *British Association Journal* of July 17th, that I should more fully state the best means to evacuate the fetid contents of the womb, I propose to make a few remarks on puerperal fever. I am glad of the opportunity to rectify the apparent one-sidedness of the remarks I made at the Obstetrical Society; for it is obviously advisable, when a speaker has to treat a vast subject in fifteen minutes, that he should devote the time to the elucidation of some undervalued point of practice rather than to the delivery of a mere syllabus of his views of the subject.

I am not aware that I am indebted to the discussion for any new views on puerperal fever; but it has deepened the conviction I already entertained, and I hold—1. That, during the puerperality, the blood is in such a state "of trembling equilibrium", to use Dr. Richardson's happy expression, that the unknown poison of puerperal fever may be developed within the blood by cold, or mental emotion, or zymotic influence, while the lochia remain perfectly normal. I say *may*, for sometimes even the poison of scarlet fever follows its usual course in a puerperal patient without causing puerperal fever, and without in the least interfering with the healthy tenor of the puerperal processes. 2. That, the womb and lochia being in a healthy condition, cold, mental emotion, or zymotic influence may render the lochia putrid, and thereby develop a poison which, soaking into the surface of the womb and its sinuses, is taken up by the uterine lymphatics, which pass it into the blood, so as to cause puerperal fever. 3. That the seat of placental attachment, a bruised portion of the womb, or any rent in its tissue, may inflame unhealthily, and thus produce pyrogenic fluids, which may be taken up by the lymphatics and cause puerperal fever, as already mentioned. 4. That fragments of placenta, of the membranes, and blood-clots, if retained in the womb, decompose, and produce septic fluids which may cause puerperal septicæmia. 5. That, as with other patients, so with puerperal women, when attacked by zymotic influence, the whole of their secretions may be vitiated, so that scarlatina, for instance, may poison the lochia, if it find them healthy, or intensify the virulence of the poison if it find them already made putrid by any of the causes previously enumerated. 6. That, just as other poisons often pass through the lymphatics into the blood without inflaming them, so the poison of puerperal fever may pass through the uterine lymphatics into the blood and into the peritoneum without inflaming the lymphatics sufficiently to fill them with pus; extensive purulent lymphangitis being rather the exception than the rule, unless certain epidemic influences prevail.

For all that relates in the previous propositions, to the mode in which the lymphatics convey from the womb the poison which, on coming in contact with puerperal blood, lights up puerperal fever, as well as for the explanation of the very early advent of puerperal peritonitis and the subsequent occurrence of puerperal cellulitis, pelvic abscess, and ovaritis, I refer the reader to my paper on Lymphangitis in Pelvic Pathology, in the sixteenth volume of the *Transactions* of the Obstetrical Society of London. Those who take interest in this mo-

mentous question will find a satisfactory attempt to establish the differential diagnosis of puerperal lymphangitis and puerperal phlebitis in a recent communication of Dr. Siredey.*

I do not share the dislike that some entertain for the term puerperal fever, and, however much they may object, it will be the term used by medical men to their patients, so long as they speak English, while the scientific name will vary according to the notion entertained by the profession respecting the nature of the complaint.

Drugs were not mentioned at the late discussion, yet it was eminently practical; for, as each speaker laid most stress on what he considered the chief cause of puerperal fever, the auditors were urged to renew their efforts to shield puerperal women from cold, mental emotion, zymotic influence, and to prevent the stagnation of foul fluids in the womb by ascertaining more carefully the state of the lochia.

Vaginal Injections.—It is customary with many practitioners to tell the nurse to inject a weak solution of Condy's fluid, or of carbolic acid, or of chloride of lime, into the vagina by means of an India-rubber syringe, when the lochia are said to be offensive. The plan is highly commendable; but I think it would be well, if it were accepted as a rule of practice, that, whether the lochia be fetid or not, a vaginal injection should be made every morning, about the third or fourth day after parturition; that is, when the blood-flow from the womb has greatly diminished. The cervix is always bruised and often lacerated, the fourchette often torn, and almost always so in primiparæ; it is therefore advisable to bathe the parts with a warm fluid, as well as to remove foul secretions. I have already advocated the practice as a means of preventing uterine inflammation; and it would also provide for the early removal of whatever is foul in the vaginal fluids. I can recommend nothing better for this purpose than a solution of a drachm of acetate of lead in a pint of warm water, with the addition of a dessert-spoonful of laudanum, if there be pain, or of Condy's fluid, should the lochia be at all offensive. The womb will better relieve itself of its contents if the patient be shifted from back to side, and her position thus changed several times a day; and by letting her micturate in the usual way, much sooner than we usually do, after parturition, according to the practice of Dr. Goodell of Pennsylvania University.

Intrauterine Injections.—Nothing that I may have said or written should be construed as meaning that it is the common practice on the Continent to use intrauterine injections when the contents of the womb are supposed to be fetid during puerperality. There is no mention of intrauterine injections in the accounts of the epidemic of puerperal lymphangitis, by which the Great Maternité of Paris was decimated from 1827 to 1832, nor in the two that occurred in 1842-44 at the Hôtel-Dieu of Rennes, graphically described by Dr. Botrell. As far as I am aware, Dr. Dupierris, a Cuban practitioner, is the first who had recourse to intrauterine injections; but principally with the view of preventing *post-partum* flooding. Dr. Wynn Williams has lately stated that he has made intrauterine injections to cure puerperal fever by the removal of fetid secretions from the womb for the last twenty years. Professor Stoltz, once Dean of the Strasburg, and now of the Nancy Faculty of Medicine, assures me he has done so with singular advantage for the last fourteen years. Dr. Fontaine,† who now practises in Madrid, has made three hundred intrauterine injections soon after parturition. Dr. Despine§ of Geneva has done so in thirty cases, Dr. Lucas-Championnière informs me that lately, at the Paris Maternité, a patient of Dr. Hervieux was rapidly cured of *post partum* purulent metritis by intrauterine injections; and that, during last winter at the Hospital of Anger, Dr. Guichard made intrauterine injections in fifteen cases, in which the lochia were fetid, and that pus was found in the lymphatics of those who died. If I had time to search the journals, I should find a certain number of cases in which French or English practitioners have resorted to the same practice. Several of the speakers in the late discussion have likewise done so; and, while many testified to the remarkable coincidence between the abatement of uterine factor and the amendment of alarming symptoms of puerperal fever, none mentioned peritonitis or any other untoward symptom having been caused by the practice.

I have recommended intrauterine injections during puerperality only when the lochia are fetid, as a curative measure; but I have suggested to those practising in India, that it would be worth while trying whether the plan would not be useful there, as a means of preventing *post partum* flooding, dysentery, and defective uterine involution. I did so because

when practising in Cuba some thirty years ago, Dr. Dupierris,* finding that his patients frequently died of *post partum* hæmorrhage, and that tetanus supervened if he checked flooding by the introduction of ice into the womb, adopted the plan of injecting a solution of iodine into the womb, immediately after removing from it the placenta and the clotted blood. This plan prevented flooding, and had also the advantage of preventing that form of puerperal fever that depends on fetid uterine secretions. The success of the plan was so great, that it was adopted by several Cuban practitioners, and it seems to have stood the test of time; for Dr. Dupierris published an account of it in 1870, substantiating his assertions by numerous cases.

When employed as a means of curing puerperal fever, I should like it to be accepted as a rule, that it is the duty of a medical man to make disinfecting injections into the womb, whenever symptoms of puerperal fever coincide with fœtor, however slight, of the vaginal secretions, unless the fœtor can be explained by lesions of the vagina itself.

Instruments Required.—To prevent accidents, it is always advisable to use an instrument with a double current when making intrauterine injections in the *unimpregnated* womb; but, during the first eight days of the puerperal period, during which intrauterine injections are most wanted to remove fetid secretions, the cervical canal is sufficiently wide to permit the free escape of small fragments of decomposed tissue with the outflowing stream of water; I therefore think a No. 9 or 10 gum-elastic catheter, in the extremity of which can be fitted the nozzle of an India-rubber bottle, is as good an instrument as can be used; it is one easily obtainable, and none other has been used by some of those who speak best of the practice. The use of so simple an instrument as a gum-elastic catheter ensures the possibility of its being burnt to avoid chance of spreading infection to another patient. The little instrument sold for injecting perchloride of iron into the womb would do very well. I have used the ordinary patent India-rubber syphon syringe for the same purpose, and that portion of the tube that screws on can in like manner be burnt at the end of the case. I place the woman on her back, with her thighs well separated and the edge of the bason well under the nates, the bed having been previously protected by a square of mackintosh. The tube of the instrument should be pushed well up to the fundus, and the fluid should be injected very gently and evenly.

Professor Stoltz uses an instrument with a double current action, the two tubes being enclosed in a third about the size of the index-finger; and he assures me he has never found a difficulty in passing this tube through the cervix during the first week of puerperality. No such instrument is to be found at the instrument-makers'; but Mr. Coxeter has made one at my suggestion. It may be objected that fragments of septic tissue may lodge inside this instrument, remain there, if it be carelessly washed, and thus transfer contagion to another woman; but I think that due care would prevent such an occurrence; for the instrument would carry within itself the antidote to the poison it encountered, and, before using it, the nozzle could be steeped in a strong solution of the disinfectant to be afterwards used in a more diluted state.

Fluids to be used.—A solution of Condy's fluid of chloride of lime might be made available, if nothing better were at hand. A strong solution of alcohol has been frequently used by Dr. d'Espine and several French practitioners; but it seems to me that its disinfecting action is indirect, and that the alcohol acts by contracting the womb and closing the uterine sinuses, while the fetid contents of the womb are diluted and evacuated. There is also a certain amount of alcohol in the lotions that have been most extensively used in association with carbolic acid and with iodine.

I do not know the strength of the alcoholic solution of carbolic acid that has been always used by Professor Stoltz; but Dr. Guichard washes out the womb with a pint of tepid water, in which he puts an ounce of a solution made by adding to ten ounces of water six ounces of alcohol and an ounce of crystallised carbolic acid. It would be well to begin with this dose of half a drachm of carbolic acid, and to increase it cautiously, if at all; for carbolic acid is a powerful remedy. One of carbolic acid to 200 of water is Dr. B. Hicks's proportion.

I believe tincture of iodine is the best disinfectant for intrauterine injections; for iodine is well borne by fistulous passages, closed cavities, and even by the peritoneum. Tincture of iodine, by its action on the nerves of the womb, is a powerful hæmostatic, while its antiseptic properties are undeniable; so it is doubly useful when there are putrid contents to purify and uterine sinuses to close; and I have no doubt it will ultimately supersede the perchloride of iron in cases of *post partum* hæmorrhage. I have repeatedly injected one of water

* La Fièvre Puerpérale n'existe pas, *Annales de Gynécologie*, Mars et Avril 1875.

† On the Prevention of Uterine Inflammation. *BRITISH MEDICAL JOURNAL*, November 1st, 1872.

‡ *Études sur les Infections Uterines après l'Accouchement*, 1869.

§ *Contribution à l'étude de la Septicémie Puerpérale*, Paris: 1873.

¶ *Health in India for British Women, and on the Prevention of Disease in Tropical Climates*. J. and A. Churchill.

* Dr. Dupierris D. *Thèse des Faculté des Sciences Médicales de Paris*, sous le patronage de l'Université pour avouer les Médecins qui se sont occupés de la Fièvre Puerpérale, et de leur action comme moyen préventif de la Fièvre Puerpérale. Thèse de Paris, 1870.

and two of tincture of iodine into the womb in cases of chronic internal metritis. It has occasionally caused severe uterine tormina, which subsided in a day or two. My friend Dr. Emmet of New York, after operating on the interior of the womb, injects it or soaks it with tincture of iodine; and, since he has adopted this plan, he has not had a case of septicæmia. Dr. Fordyce Barker, to check severe hæmorrhage following abortion, lately injected an ounce of the undiluted tincture of iodine (and the American tincture has double the strength of ours) with perfect success and no ill-effects; so it is not likely that any would follow the injection of a very strong solution of iodine into the womb soon after labour. I have then injected four drachms of the tincture in half a pint of tepid water, Dr. Wynn Williams has been in the habit of using three drachms to the same quantity of water; but Dr. Dupierri's practice has been to inject into the womb, immediately after the removal of the placenta, four drachms of tincture of iodine (double the strength ordered in the *British Pharmacopæia*), ten grains of iodide of potassium, and one ounce of distilled water.

It remains to be seen which is the best plan, either to inject the tincture of iodine little diluted, so as to act strongly on the womb, or to largely dilute the tincture, so that it may wash away fragments of putrid tissue.

Had I been aware that Dr. Braxton Hicks had already treated this subject, I should have contented myself by referring to his trustworthy teaching,* which shows that he has been long aware that puerperal fever is likely to arise from the retention of foetid uterine fluids. These remarks of mine may not be, however, altogether useless; and most acceptable were those made by Dr. Wynn Williams, in the *JOURNAL* for August 7th, on the washing out of the puerperal womb.

CASE OF INVERSION OF THE UTERUS, OF THREE MONTHS' STANDING.†

By J. H. EWART, L.R.C.P.,
Surgeon to St. Mary's Hospital, Manchester.

ELIZABETH V., aged 22, married, was attended by a midwife in her first confinement on March 27th, 1874. She was at full term, and the labour went on well to the end of the second stage; there was then, according to her account, some difficulty with the afterbirth, which the midwife endeavoured to overcome by pulling at the cord. Eventually a surgeon was called in, and he and his assistant attended the patient up to the time of her admission to St. Mary's Hospital, Manchester on the 6th July, 1874, *i.e.*, for upwards of three months. She stated that she lost an alarming quantity of blood at the time of her confinement, and that she had had more or less hæmorrhage ever since. Sometimes she had lost a very considerable amount of blood; the last occasion on which this occurred was about a fortnight before her admission. Various injections had been given to her for the purpose of controlling the loss; no vaginal examination, however, was made after the confinement.

On admission to the hospital, the patient presented a most blanched appearance. She complained of no pain; the appetite was pretty good; the pulse 100, feeble. A small pear-shaped tumour, bleeding readily when touched, was found in the vagina.

On the following day (8th July), the patient was placed under the influence of chloroform, for the purpose of further examination. The tumour was smaller than I should have expected an inverted uterus to be; it bled very readily; on passing a finger into the rectum and pressing the fingers of the other hand at the same time deeply above the pubes, no intervening substance could be felt. The absence of the uterus from its normal position was further demonstrated by passing a sound into the bladder, and again by the impossibility of introducing the uterine sound by the side of the tumour, the neck of which was tightly constricted. Being now satisfied that the case was one of inversion of the uterus, I tried digital pressure, and persisted in it for some length of time. (I regret I did not notice the time accurately.) Considerable force was used; as much, indeed, as I deemed justifiable. I therefore desisted, with the intention of employing the elastic stem-pessary described by Dr. Barnes in the first volume of the *Obstetrical Transactions*, and in the event of that failing, of incising the neck, as recommended in the same communication. Some of those present, however, thought that further efforts should be made with the hand, and I reluctantly gave my consent. Pressure was accordingly resumed; and

after some time the operator announced that he had succeeded in reducing the inversion. It was obvious to the onlookers that the success was due to the exertion of extreme force; and, on examination, two fingers could be passed into a rent in the anterior vaginal wall just where it formed the cervix uteri. There was also some laceration of the perinæum, but at what stage of the proceedings this happened is uncertain. After the operation, the patient's pulse was pretty good, and her general condition was not alarming.

July 9th. She complained of soreness, and a little abdominal pain. Temperature normal; pulse 110.

July 10th. She felt chilly; had no pain. Temperature 98; pulse 104.

July 11th. She felt better. Temperature normal; pulse 100.

July 12th. There was a good deal of whitish discharge. Temperature normal; pulse 100.

August 8th. Since the last note, the patient had not had a single bad symptom; the vaginal rent had healed, a very slight thickening marking its site; the uterine sound passed two inches in the normal direction. The woman then became an out-patient, and preparations of iron were prescribed for her on account of her extreme anæmia. She subsequently went to Southport for six weeks; and on October 21st, she again presented herself at the out-patient room, looking much improved in colour and general appearance. She had menstruated twice since leaving the hospital. The uterus was normal in position; the sound passed rather more than two inches; the os was somewhat flabby, and presented the appearance of a little superficial ulceration, which soon yielded to the application of nitrate of silver; the situation of the vaginal rent could not be discovered.

I saw my patient after some time, when there were signs of commencing phthisis; after this, I lost sight of her, and am now unable to obtain any trace of her.

Inversion of the uterus is not a very common occurrence, only fifteen cases having been reported in the English journals since the year 1871. It does not seem necessary to enter into the details of these cases; suffice it to say, that nearly all of them are said to have been due to traction on the cord.

In the *BRITISH MEDICAL JOURNAL* for January 28th, 1871, Dr. Tylecote reports a case of spontaneous inversion twenty-four hours after labour. Dr. Braxton Hicks relates a similar case in the *JOURNAL* for August 31st, 1872; and also another where the inversion followed delivery by forceps; and in the first volume of the *Obstetrical Journal* (page 319) Mr. J. Prankerd narrates a case where inversion occurred during the effort of straining at stool seven days after labour. With regard to the possibility of spontaneous inversion, and for an explanation of this phenomenon, I beg to refer my hearers to Dr. Hicks' paper in the *BRITISH MEDICAL JOURNAL* for 1872.

The treatment of these fifteen cases varied; most of them were reduced by pressure of one kind or another; two died before medical aid could be procured; in two, the uterus was removed as a last resource in order to save life; and in two others Dr. Barnes succeeded in reducing the inversion by the method to which I have already alluded, and the value of which cannot be overestimated.

Dr. Barnes has clearly pointed out how an inverted uterus *ought* to be treated; it has fallen to my lot to bring before the profession a case which teaches how it *ought not* to be treated; for the satisfactory termination of the case does not prove that the treatment was one to be recommended.

How many women would have recovered after such severe injuries? and what would have been the result if the rent had occurred posteriorly instead of anteriorly? Now, how are such accidents to be avoided? We are directed to use as much force as is justifiable: what is the measure of justifiable force? What amount of strain will the vaginal walls bear? Speaking from my experience in the case here recorded, I would urge that the utmost care, care even approaching timidity, be used in the application of manual pressure to chronic cases, and that, in the event of failure by this method, recourse be had to the air-pessary, or even incision of the neck, inasmuch as such an operation must be far less serious than rupture of the vaginal wall.

INVERSION OF THE UTERUS.

By WILLIAM KELLY, M.D., Physician to the Taunton and Somerset Hospital.

In the abstract of Mr. Ewart's case of successful reduction of an inverted uterus of three months' standing, as given at page 231 of the *JOURNAL* of August 21st, the author is stated to have said "that, in any future case, he would firmly discountenance the treatment adopted in the case here recorded".

* On *Post Partum* Douching of the Womb (*BRITISH MEDICAL JOURNAL*, November 14th, 1874).

† Read before the Obstetrical Medicine Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

I have recently had under my care a case very parallel to that related by Dr. Ewart, with one important exception; viz., that the inversion was *not* reduced. I append a brief account of the case.

The patient, aged 24, had been delivered of her first child by a midwife in December last. She was admitted into the Taunton and Somerset Hospital on March 22nd, suffering from extreme exhaustion and uterine hæmorrhage, the latter having continued more or less from the time of her confinement. She had received medical treatment before coming to the hospital, but no vaginal examination had been made. The state of inversion being ascertained, she was put under chloroform, and for more than an hour efforts were made with considerable force to effect reduction; but they were ineffectual. Some amount of constitutional disturbance followed, and a second attempt was not made for a month (after the next catamenial period had passed over); this proved equally unavailing with the first. The patient having soon recovered from the effects of this second operation, and the uterine hæmorrhage with its attendant exhaustion having also disappeared, she was anxious to leave the hospital, as the displaced uterus caused her little inconvenience. She was, however, prevailed upon to submit to a third attempt at reduction; but, this being followed by no better results than those which had gone before, her husband removed her from the hospital, and the case has now been lost sight of.

In employing taxis, I followed, or rather I endeavoured to follow, the directions given by Marion Sims in his *Clinical Notes on Uterine Surgery; i. e.*, after pushing the body of the uterus up within the cervix, he says the reduction should be completed "by compressing the fundus laterally, and deeply imbedding the thumb in the cornus uteri, by which means we slide one-half of the organ at a time through the os internum, instead of the whole fundus, which presents a greater diameter". The first stage was easily got over; but all the sustained pressure I could employ failed to open the internal ring (for that was the form the part assumed) for the passage of the fundus. I varied the position of the patient, and I also used alternately both my right and my left hand.

CLINICAL MEMORANDA.

THE TREATMENT OF CHLOROFORM-POISONING.

As I have always taken a deep interest in all that pertains to the induction of anæsthesia by means of chloroform, I have perused the remarks of Mr. Messenger Bradley of Manchester with interest. The state in which he has described his patient to have been is an unusual one; it is a state of collapse preceding chloroform-sickness, complicated with a fit; and, although the phenomena are sufficiently alarming, they invariably pass off with the advent of the sickness, if not before. I would call attention to the rigidity of the jaws: "his teeth were closed". The patient is never fully under the influence of chloroform—complete paralysis of the sensorium—so long as a single muscle of the body is capable of contraction, either spasmodically or otherwise; and I have long observed that the last muscle to lose the power of contracting is the orbicularis palpebrarum. As soon as this muscle ceases to resist the finger in raising the right upper eyelid, *cæteris paribus*, one may consider the patient fully anæsthetised, and ready for the severest operation in surgery.

Although I have frequently seen similar phenomena to those of Mr. Bradley, I am not prepared to say they have been the same. I have never observed closure of the jaws. Clenching of the teeth or closure of the jaws is not a symptom of deep anæsthesia under chloroform, and is only possible in the first stage, or when the patient is returning from complete anæsthesia; therefore, in itself it is not a dangerous, but rather a favourable symptom. In chloroform-poisoning, as a rule, whenever there is muscular contraction or rigidity, I should consider my patient's life safe. I was once asked in a Medical Society, "Are you not afraid when the patient kicks violently?" to which I replied, "No; I am more afraid when he ceases kicking." In any dangerous case which I have seen, the lower jaw has always fallen or become relaxed. This I believe most certainly to be the rule; therefore, taking into consideration the frothing at the angles of the mouth, the lividity of the lips, and the temporary arrest of the respiratory and circulatory organs, I conclude that the lad had taken an epileptic seizure, or something very like one, whilst under the influence of the anæsthetic, and most likely when he was beginning to come to himself, as it occurred towards the "completion of the operation".

The treatment I do not object to; only I should have been inclined to trust most to encouraging vomiting, if there were any threatening of the same, by turning the patient on his side, with his face looking somewhat downwards, which at once protrudes the tongue and saves

the laceration from the use of a vulsellum; tickling the fauces with the fingers, the jaws being forced open if necessary; and giving him plenty of air in the horizontal, and not in an inverted, position. Time and quiet will do the rest, as in an ordinary attack of epilepsy. It is worthy of note, that the lad had had chloroform on a previous occasion "without any bad symptom". As to artificial respiration in such a case, is it of any use? I doubt it, simply because of the fit, if fit it were. No amount of artificial respiration will ever overcome an epileptic seizure; it simply comes right of itself. It is just possible that in this case, as in many others, the *post hoc* may be mistaken for the *propter hoc*. The indication to my mind would be to induce or precipitate the sickness, which has relieved, if not saved the life of, many an epileptic. The sickness failing, artificial respiration was the sheet-anchor.

I only offer these remarks as suggestions from the study of Mr. Bradley's interesting case. I think it would be well that every such case were so probed and digested: good is sure to come out of it. It is said that prevention is better than cure; and I beg to suggest, for the future guidance of those who have the responsibility of administering chloroform, never to give it on any account except on an empty stomach. No food should be taken for at least four hours beforehand. Although this rule is well known and generally appreciated, there is no rule of practice so universally neglected or so constantly broken. Surgeons will give brandy and water beforehand, and chloral, and laudanum, and mixed anæsthetics; they will do anything and everything but the right thing in order to obviate sickness and other consequences of the administration of chloroform. For the future, if they will only make sure that no kind of food, solid or liquid (water or a mild cup of black tea excepted), be taken by the patient for at least four hours before taking any anæsthetic, I will guarantee less sickness and a decided fall in the number of accidents from anæsthetics in general, and chloroform in particular.

I trust that Mr. Bradley will kindly take these remarks in the purely suggestive spirit in which they are meant, and that humanity may profit by them.

THOMAS SKINNER, M.D., Liverpool.

RHEUMATISM WITH HIGH TEMPERATURE AND FATAL CEREBRAL COMPLICATION.

W. H. S., a hosiery, aged 35, of arthritic diathesis, regular habits, and healthy appearance, usually excitable, had lately been subject to additional excitement, consequent on his having opened a new business and being about to be married. He had lost two sisters and one maternal aunt from rheumatic fever and its complications. On August 5th, he felt pains in his knees; and on the 7th he put himself under my care, labouring under acute rheumatism. He was put in bed between the blankets; the affected joints were wrapped in cotton-wool; and bicarbonate of potash was administered every four hours. Slight pericarditis showed itself on the fourth day of the attack, but it yielded to small blisters. A draught containing half a drachm of solution of muriate of morphia procured comfortable rest at night. On the tenth day, although his pains were better, his tongue cleaning, and his appetite slightly improving, he was restless and languid. On the eleventh day, when seen at 6 P.M., he complained of feeling very weak, and had been a little delirious once or twice during the day. He had also had frequent micturition, passing more urine than previously. The pain and swelling of the joints were very much better; the perspiration was not quite so profuse. A careful examination of the heart showed no fresh complication. His temperature, which throughout the illness had varied from 101 to 103 deg., was not taken at this visit. His pulse was about 100, and his tongue cleaning. Later in the evening, feeling very restless, he asked his mother, who was nursing him, to send for his draught, which he took at 10 P.M.; and shortly afterwards both he and his mother dropped asleep. Three hours afterwards, at 1 A.M. on the twelfth day, Mrs. S. was roused by the noisy breathing of her son; and, finding she could not awaken him, she sent for me. I found my patient quite unconscious; the pupils were moderately contracted, as in natural sleep; respiration was catching and irregular; pulse weak, about 120; skin intensely hot; temperature in the axilla, 110½ deg.; in the palm of the hand, 109 deg. By applying towels wrung out of cold water, and fanning, the temperature of the surface was lowered; but the intense heat in the axilla and the palms of the hands continued; and, as the respirations became worse and the pulse flagged, it rose to 111½ deg. in the axilla. The patient died at 3 A.M., only two hours from the first observation of the serious symptoms. The decomposition of the body after death was extraordinarily rapid. The symptoms in this case correspond in every point with those observed in the other cases, now tolerably numerous, in which, during the last five or six years, the coincidence of fatal cerebral rheumatism

and very high temperature has been recorded; and its chief interest lies in the occurrence, although in very slight a degree, of its premonitory symptoms, nervous prostration, slight delirium, and frequent micturition; and in the very rapid development of the serious symptoms. I have notes of two cases, one a man who died in the Queen's Hospital at Birmingham in 1860, with fatal cerebral complications and burning hot skin; and the other a lady who died here under my care in 1862, with a similarly suddenly fatal so-called metastasis to the brain; and in each of these, I doubt not, had the clinical thermometer been in use, a similar high temperature would have been registered.

THOMAS JAMES WALKER, M.D., Peterborough.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

UNIVERSITY COLLEGE HOSPITAL.

CASE OF EPITHELIOMA OF THE THUMB ORIGINATING IN A CHRONIC WART.

(Under the care of Mr. ERIBSEN.)

THE fact that apparently simple warts may, after years of quiet vegetation, develop malignant characters, is now generally recognised, and the only remarkable points about the following case are the youth of the patient and the situation of the growth.

A young man of dark complexion, short stature, and fair physique, aged 21, was admitted into University College Hospital on January 14th, under the care of Mr. Eriksen. He had been employed at a skin and leather warehouse, had always lived well, had enjoyed good health, and had never had syphilis. His father had died at 40, of consumption; and his maternal grandmother of cancer. His mother was alive, and aged 44. He was one of a family of nine children, of whom six were living. A brother had died of acute rheumatism; the other two in infancy.

About six years previously, the patient had noticed a small wart on the back of the phalangeal joint of the left thumb; it bled occasionally when rubbed, and grew slowly larger, but did not trouble him for four years. It then began to spread rapidly towards the nail and round the outer side of the distal phalanx. He then came to the hospital, and the growth was apparently destroyed with caustic. After a few months, however, it reappeared, and soon extended further than before. In February 1874, nitric acid was again applied, but ineffectually; for, on the readmission of the patient eleven months afterwards, nearly the whole of the distal phalanx of the thumb was covered by a nodular growth with a sloughy ulcerated surface; only a small part of the inner aspect of the thumb was free. Over the metacarpo-phalangeal joint were three smaller nodules of a similar nature.

On January 20th, Mr. Marcus Beck amputated the thumb opposite the middle of the metacarpal bone; and on February 3rd the patient was discharged, the wound being almost healed.

TWO CASES OF STRANGULATED HERNIA IN OLD PEOPLE.

(Under the care of Messrs. C. HEATH and BECK.)

CASE I. - *Very large strangulated Umbilical Hernia: Partial Rein-Force by Truss: Rupture of Intestine and Death.*—A very stout old woman, aged 62, was admitted into University College Hospital under Mr. Christopher Heath on April 19th. She had been married thirty years, had had three children, and, with the exception of two attacks of acute rheumatism, had generally enjoyed good health. She stated that a lump had first appeared at the umbilicus after a severe strain about three years previously. This lump gradually increased in size, and, about a year after its first appearance, the patient strained herself again in lifting a fender, and the hernia became strangulated, but was soon reduced. On the evening of the 17th, it again became strangulated, and she had not been able to return it since.

On admission, the patient was pale, depressed, and anxious-looking. She complained much of sickness and of pain in the abdomen. Over the centre of the abdomen was a large lobulated tumour, which could scarcely be grasped by the two hands. The larger part of the mass consisted of two lobes, right and left, above the umbilicus; below and between them was a third, smaller and softer. The tumour was tender on pressure, for the most part resonant on percussion; and there was no impulse on coughing.

The patient having been etherised, Mr. Heath attempted to reduce

the tumour. The aspirator was then introduced in two places, when fluctuation was perceptible, and some brownish fluid drawn out. Flatus also escaped: but still reduction could not be effected. An elastic bandage was therefore applied round the tumour, with ice over it. A hypodermic injection of morphia was given, and enemata of brandy and beef-tea ordered to be given regularly. Next morning, the patient seemed easier. She had not been sick since the operation, and was in no pain; but the tumour continued in the same state, and her pulse was very feeble. The bandage was reapplied. Soon afterwards, she began to sink rapidly, and died in a state of collapse.

NECROPSY.—On opening the hernial mass it was found that the small lower lobe consisted of a sac containing omentum, which was quite distinct from the main bulk of the tumour. The upper and larger sac was much lobulated; it contained nearly the whole of the ileum, together with part of the jejunum and about a foot of the transverse colon. The coils of intestine were firmly adherent to each other and to the wall of the sac. The latter contained also a considerable amount of dark fæces, which had escaped from a large rupture of the colon. The contained intestines were of a very dark purple colour, and softened. Lying just outside the neck of the sac, was another foot of small intestine, also very dark and congested, but still glazed; it was separated from the healthy gut beyond by a sharp line of demarcation. There was abundant evidence of general peritonitis.

CASE II. - *General Illness: Strangulated for five and a half days: Gangrene of the Gut: Operation and Death from Exhaustion.*—A needlewoman, aged 67, was admitted under the care of Mr. Marcus Beck on the afternoon of February 5th. She stated that, eight or nine weeks before, she had first noticed a small lump in the left groin; it grew somewhat larger, but gave her little inconvenience; and she did not trouble herself about it. On the morning of January 31st, whilst lifting, she suddenly felt great pain in the groin, and nearly fainted. This passed off; but she continued very uncomfortable all day, and soon became very sick. Becoming worse next day, she sent for a doctor, who gave her medicines, but who eventually sent her to the hospital. The bowels had acted last on January 29th. Lately, the vomiting had been stercoraceous.

The patient was a very emaciated, aged-looking woman. In her left groin was a tumour larger than a hen's egg, having a distinct neck at the saphenous opening. It was very tender; the skin over it was red and œdematous; and there was no impulse on coughing. The patient was vomiting occasionally, and complained of great tenderness over the abdomen. She was at once put under chloroform. Mr. Beck then dissected down to the neck of the tumour, and opened the sac. It contained a knuckle of intestine, part of which was of an ash-grey colour, and evidently gangrenous. The sac contained also gas and fæculent fluid, which were found to have escaped from two minute openings in the sloughing gut. This was accordingly laid open; and, all constriction having been relieved, the healthy margin of the gut was attached to the skin on each side of the wound, and a dressing of oiled lint applied.

The operation was perfectly successful. On the 8th, the patient's pulse was 100, and of fair strength. Her tongue was clear and moist, and fæces passed freely by the wound. The peritonitis also subsided. But, after going on well for some days, the patient's strength failed again rather rapidly, and she died on the evening of the 14th, of old age and debility, accelerated by the shock she had undergone.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

CASES OF ACCIDENT.

(Under the care of Mr. JABEZ HOGG.)

CASE I. - *Traumatic Cataract: Extraction: Detached Retina.*—Joseph T., aged 13, was admitted on January 14th, 1875. He stated that, three years ago, a stone struck his left eye. The eye was red and painful for a week afterwards, but the sight was apparently good. Shortly his vision became misty, and it had been gradually getting worse since. On admission, there was a dense, uniform, white cataract, and he could only see light and shade with his left eye. His right eye was normal. Under ether and chloroform (given alternately), Mr. Hogg proceeded to tear the lens through with two needles. The capsule proved to be tough, and the lens not fluid. Atropine (four grains to an ounce) was instilled, and a bandage applied to both eyes. He had no pain afterwards, and slept well. Atropine was instilled daily. The right eye was uncovered on the second day, and a shade worn on the third. On January 23rd, the torn capsule had reunited, and therefore Mr. Hogg determined to remove it. This was done under chloroform and ether, by separating adhesions between the iris and lens with a

needle, and withdrawing the lens almost entire with a sharp hook. A little remained in the pupil. A very small quantity of fluid vitreous humour escaped. The atropine, pad, and bandage, was used. The pupil cleared completely, no inflammation followed, but vision was not greatly improved. He was discharged on the 31st.

On March 16th, he again appeared as an out-patient. His vision was no better, and was unimproved by glasses. On an ophthalmoscopic examination being made, the retina was found to be completely detached, only a dark metallic reflection being obtained.

CASE II. *Bleeding Eye: Detached Retina: Exstirpation.*—George S., aged 4, was admitted on January 20th, 1875. Eighteen months ago, he fell and struck his right eye against the corner of a piece of furniture; the eye at the time did not appear to be much injured, nor was vision much impaired until three months afterwards. It had, however, been red and painful for the last week. On admission, some conjunctivitis existed; the cornea was normal; the iris did not contract on exposure to light, but dilated under atropine. The pupil had a yellow appearance. On careful examination, the lens was seen to be clear, whilst just behind it an uniformly bright yellow substance appeared, slightly vascular at its periphery. The iris bulged slightly forward, and the globe was somewhat tense. Under methylene, Mr. Hogg extirpated the eye in the usual manner. There was considerable hæmorrhage, which was soon checked by cold water and a firm compress. It did very well, healing up nicely. The patient was discharged on January 24th.

On examining the eyeball, the retina was found completely detached, except just at a point near the entrance of the optic nerve; it was also thickened and opaque. The vitreous body was entirely absorbed, and, between the retina and the choroid, a large quantity of a greenish-yellow fluid (*hydrops retinalis*) had been secreted. The choroid was much atrophied and nearly transparent. A small hard cartilaginous nodule of the size of a pin's head existed on the choroid opposite the yellow spot. The lens was quite clear. On a microscopic examination being made, the yellow fluid appeared to consist of serum containing a large number of circular pigmented granules loosely cohering, and mixed up with numerous cholesterine crystals.

CASE III. *Traumatic Cataract: Needle Operation: Panophthalmitis: Exstirpation.*—Robert H., aged 31, was admitted on February 10th, 1875. He said that, four years ago, he was struck with a boxing-glove on his right eye. His sight remained good for two years, but since then it had been gradually becoming worse. On admission, he had an uniform white cataract in his right eye, and with it he could barely distinguish light. The eye was quite quiet, and only slightly painful. His health had been indifferent for some time. Without chloroform, the lens was broken up. Atropine was instilled, and a pad and bandage applied to both eyes. On the second day, acute iritis set in. In a few hours, the anterior chamber was half full of pus. He complained of violent pains in the eye and head, and was very sick. Notwithstanding the administration of remedies and paracentesis corneæ, together with a generous diet and stimulants, the inflammatory action continued, and general suppuration of the globe commenced. The acute symptoms having subsided, on March 8th he was sent into the country to improve his general health; on the 16th, he was readmitted. The eye was now quiet, with commencing atrophy of the globe. On the 18th, Mr. Hogg removed the eye in the usual way under chloroform. It healed up rapidly; the œdema of the lids subsided, and he was discharged on March 30th.

On examining the eye, the cornea was found to be opaque and enormously thickened; the iris was infiltrated with pus and partly adherent to the cornea; the vitreous humour, however, was inspissated, infiltrated with pus and lymph, and containing large vessels in its anterior. The lens was broken up and mixed with pus; the retina was thickened, and attached firmly to the choroid.

CASE IV. *Traumatic Cataract: Needle Operation.*—Frederick L., aged 14, a bootmaker's apprentice, was admitted on March 1st. Whilst engaged at his work three weeks ago, his hand slipped, and the awl he was using was thrust into his right eye. It had penetrated the cornea, leaving only a small cicatrix at the outer part, and wounded the lens. On admission, the eye was quiet and the lens uniformly opaque. He could just distinguish light with it. Without chloroform, Mr. Hogg, with a short straight needle, broke up the lens; atropine was instilled into the eye, and a pad and bandage applied. Atropine was continually applied, and no inflammation followed. On the second day, the lens appeared to be well broken up, and a large quantity of it was lying in the anterior chamber. On March 23rd, as a good deal still remained in the pupil, Mr. Hogg again cut it up. The pupil cleared very much after this, but still a good deal of capsule remained undissolved, and on April 13th a small incision was made at the inner margin of the cornea with a bent needle; and, on passing in a curette, the aqueous humour gushed out, carrying with it large fragments of lens-substance.

The pupil gradually cleared, a little capsule remaining at the outer part only. On the 26th, this was nearly absorbed, and his vision was improved on dismissal. He again appeared as an out-patient on June 3rd, and had perfect vision.

REVIEWS AND NOTICES.

A MANUAL OF DIET IN HEALTH AND DISEASE. By T. KING CHAMBERS, M.D., F.R.C.P., Consulting Physician to St. Mary's Hospital, etc. Pp. 352. London: Smith, Elder, and Co. 1875.

THERE exists a marked tendency in the present day to bring the hygienic conclusions reached by scientific observation within the sphere of the general reader, so that they may be "understood of the people". That such practice is desirable cannot be disputed, since a large portion of the general public take much interest in matters concerning their health, and expound their views with much earnestness, if not always with very profound knowledge. Scraps of information gathered from the remarks of their medical men, often widely different and utterly incompatible, in spite of much stretching and speculative piecing; crumbs from more formal consultations, and some research amidst popular works, whose information is of a very questionable character, form the material for much general conversation and some proselytising on small matters. That people should feel an interest in the matter of food is very natural, as diet has formed a part of medical advice probably from its earliest development in the suggestions of the old matrons of the hordes of primitive man, or of the medicine man or priest, down to the most recent physiological dieting of the diabetic. Minds, too, were much exercised on the subjects of the sustaining and the lowering treatments practised by rival medical men, each the inspired prophet of a small coterie, so well described by George Eliot. Then, Mr. Banting's scheme for the reduction of obesity and superfluous and deforming adipose tissue, by a regulated system of diet, usurped public attention for a time, and endeared itself to the corpulent of all ages, of both sexes, and of all grades of society. The great truths that fat was formed from the excess of hydro-carbonaceous matter consumed as food, and that the avoidance of such material in the diet would lead to a consumption of the fat garnered up in the system, then took hold of the public mind, and thus some elementary facts were introduced into public opinion. However mischievous in its consequences—and most mischievous consequences have followed the adoption of Bantingism as a means of reducing excessive weight—this scheme has laid part of a solid foundation of information amidst the public at large.

The comparatively recent, but already actually antiquated, notions of regarding the amount of nitrogenised matter in any article of food as forming the measure of its value for nutritive purposes, have given way to a sounder knowledge on the part of physiologists; which from them, in suitable form and shape, is passing swiftly into the recognition of the well informed portion of the public. Such corrected knowledge is very desirable, and this work of Dr. CHAMBERS is admirably calculated to serve the end he has in view of giving sound and trustworthy information on the subject of diet to both lay and professional readers. There is one serious omission in it, however, and that is the physiological destination of our food after it is digested. Here the work falls short of the more elaborate treatise by Pavy. If, however, the work is wanting here, the omission is ably compensated by the amount of practical information given throughout its pages. The writer is evidently perfectly at home in his subject, and every page reveals that the work is the outcome of the fulness of knowledge, and not a mere compilation written to order.

In the commencing chapter, the writer introduces in pleasant guise the subject of "what is the Natural Food of Man", and shows that it is at once no particular form of food, and yet is everything almost upon which he can lay his hands. The arrangement of the viscera of man permits his consuming the most varied forms of food, and in so far as a compromise betwixt the arrangements of the carnivora and the herbivora, much aided, however, by the general intelligence of the creature. It would appear, however, that such modifications are not confined to humanity; "and our cats have accommodated themselves to a mixed diet, assimilating their form to that of herbivora by a considerable increase in the length of their bowels over those owned by their cousins of the mountains". As a consequence of his internal arrangements, man can combine various forms of food to constitute his diet, and mix fat with farina, and the red flesh of other animals with vegetables, in order to get combinations which will best enable him to manifest so much force daily without loss of weight. There are two

points to be attended to in the choice of food: the supply of material convertible into force, and the maintenance of the body-weight. These are put strikingly as follows.

"Suppose, for instance, a gang of a hundred average prisoners to excrete, in the shape of breathed air, urine, and feces, daily $71\frac{1}{2}$ lbs. of carbon and $4\frac{1}{4}$ lbs. of nitrogen, which is pretty nearly the actual amount of those elements contained in the dry solids of the secretions, as estimated in current physiological works. Nitrogen and carbon, to that extent at least, must be both supplied. Now, if you fed them on bread and water alone, it would require at least 380 lbs. of bread daily to keep them alive for long; for it takes that weight to yield the $4\frac{1}{4}$ lbs. of nitrogen daily excreted. But in $380\frac{1}{2}$ lbs. of bread there are $128\frac{1}{2}$ lbs. of carbon, which is 57 lbs. above the needful quantity of that substance. If, on the other hand, you replaced the bread by a purely animal diet, you would have to find 354 lbs. of lean meat to give them the needful $71\frac{1}{2}$ lbs. of carbon; and thus there would be wasted 105 lbs. of nitrogen, which is contained in the meat, over and above the $4\frac{1}{4}$ lbs. really required to prevent loss of weight. In the former case, each man would be eating about 4 lbs. of bread; in the latter, $3\frac{1}{2}$ lbs. of meat *per diem*. If he ate less, he would lose his strength. In the former case, there would be a quantity of starch; and in the latter, a quantity of albuminous matter, which would not be wanted for nutrition, and would burden the system with an useless mass very liable to decompose and become noxious."

This is a distinct way of putting the necessity of a mixed diet for the wants of man. The excess of albuminous matter involved in a meat dietary is not, however, so entirely waste and useless as the author would seem to infer. It is quite true, undeniably true, that but a comparatively small amount of nitrogen is required to maintain the tissues of man in their integrity; nevertheless, the economy of man is such that he can not only live, but lead a very active life, upon a purely albuminous diet, as is seen in the Indians of the Pampas. They live upon meat and water; nor is there reason to suppose that they are careful to see that their meat is fairly accompanied by fat. The albuminous principles which are assimilated have two different destinations; one, a well recognised one; the other, less generally known. The first is the growth and repair of the tissues, the second is the production of glycogen. By far the greater part of the azotised food of man is split up in the liver into glycogen and waste. The glycogen is the fuel of the body, chiefly burnt up in the muscles, and forms the force-producing material of the body. The glycogen furnished by the splitting up of the albuminoids in the liver is useful, but the nitrogenised waste is a source of trouble. The urea and uric acid we excrete are mostly the products of azotised waste from the liver, and only to a small extent the products of histolysis, of tissue-waste—that is, in health; in pyrexia it is different. Glycogen is largely produced by saccharine and farinaceous foods. The liver is the storehouse of glycogen, which is given out gradually but unintermittingly into the blood, and, probably, in the form of lactic acid in union with soda, forms the fuel of body-combustion. It is of much importance that this process be understood, not only from its importance in the treatment of diabetes and in the dietary of the gouty, but even in the requirements of ordinary life. It is, then, to be regretted that Dr. Chambers has not gone sufficiently into the destination of food, especially albuminous food.

His remarks on the choice of food, the characteristics of good as compared to bad qualities of food, in flesh, in fish, in vegetables, are excellent and to the point. This portion of the book is especially valuable to those who cater in the market or the store, and buy the different articles consumed in a household. A similar conclusion is forced upon one by the perusal of the section on wine, as to form, character, and utility. He states that some of the cheaper wines, especially of Bordeaux, are perfectly made, and that such is the case is clinically corroborated by their wholesomeness and freedom from disagreeable after-results when taken by the gouty. The author is of opinion that the occasional use of wine in social festivities is not to be restricted, and the "moderate use will not shorten, but both cheer and lengthen life". All alcoholic beverages, he insists, should be carefully chosen and good of their sort. "However little a man's purse allows him to drink, let it be good", is the concluding sentence of the consideration of alcohol in the part devoted to health.

The chapter on Digestion, and of the aid that can be given to digestion by cooking, when properly performed, is good, as might be expected, and so much to the point, that the reader must not have in any *résumé* here an excuse for neglecting the perusal of the chapter in its entirety. These practical applications of knowledge to the dietetic matters of common life form a strong point in Dr. Chambers's book, and the sum total of impressions produced is the well grounded impression that the author must be a very agreeable person to dine with. Not only would the food and wines be all that could be desired, but

the pleasant conversation, which he insists upon as desirable for perfect digestion, would also not be wanting.

In the second part, the special dietetics of health are reviewed. The importance and value of milk, both for children and adults, receives due recognition. Some very practical remarks as to the choice of a wet nurse precede an account of how she should be fed in order to secure the best nutrition for the child she suckles. "The time for weaning should be fixed, partly by the almanac, partly by the growth of the teeth." In the dietary of young persons, stress is laid upon the necessity for plenty of puddings, bread, butter, fruit, etc.—sugar is not mentioned, all reference being superfluous—as the staple of the nursery commissariat. Meat once, or, at most, twice a day only should be the rule; while in health, no wine or beer, except as a festive treat, no coffee, or other exciting drink should be given. "Between puberty and full growth, the principal thing we have to guard against is overloading the stomach", consequently, the writer infers, the necessity for plain food, so as not to be too tempting for young people. "A diet which in an old man may be wasted for lack of solution, and which would therefore be a starvation diet to him, may in a young person be richly ample. On the other hand, the easily soluble but scanty diet on which the old man might flourish, would not suffice for his active, growing grandson." "Young people, too, should not be brought up to the habit of taking physic", is a rule which should be written up over the door of every nursery.

A new feature in Dr. Chambers's book is the consideration of the dietary suitable to various forms of life-occupation, each with its own requirements. Thus we find a chapter on the Diet in Commercial Life. The principal meals should be breakfast and dinner; breakfast before, and dinner after, the work of the day. But a break in the middle of the day for luncheon is very important. The habitual use of stimulants in the middle of the day is to be deprecated. Nevertheless, where an unusual amount of cerebral exertion has been gone through, a cheerful glass of wine or beer will often prevent over-fatigue. Let not, however, the demand or the supply grow a daily habit, is the word of warning which the writer appends. For literary and professional men, the diet of youths is advised—frequent small supplies of easily soluble mixed food. There is no more fatal habit to a literary man than that of using alcohol as a stimulant betwixt meals. The temptation is greater, perhaps, to a literary man than to any other in the same social position. He writes; and not only is such a man tempted to take stimulants, as is said here, but it might have been added that the exhaustion is ultimately all the more, and the craving to take more stimulants after work is over is still more pronounced. Then follows some account of the habits and dietary of several well known literary characters, of much interest.

The chapter on Athletic Training is one to which most readers will turn with keen interest; nor will their perusal go unrewarded. They will find there the rules of training, both as to exercise, to diet, and to fluids. The systems of Oxford and Cambridge for the training of their crews are both given, in the winter and summer training. No fairly representative abstract is possible; the chapter must be perused as a whole.

Then follows a chapter on Hints for Healthy Travellers, in which the ripe experience of the writer reveals itself in directions not only of rational, but of the most practical character, the outcomes of acquaintance with the subject treated of. Doubtful water is one of the things against which a warning is given. Garlic is a constituent of foreign dishes apt to offend the bowels of a Briton. Olive-oil is better than butter in hot climates; and milk that has been boiled is less likely to originate typhoid fever than unboiled milk. The suggestion that travellers should provide a store of captains' biscuits, in order to render them independent of the bread of the aborigines, is doubtless a sound one. A hint how to avoid the pestiferous places of retirement in continental hotels will be grateful to many; viz., to coax the landlady into the loan of the key of her private establishment. In the country, the worship of *Cloacina sub Jove* is advised. If the tourist ride much, a warm bath betwixt leaving the saddle and sitting down to table is recommended. There are other remarks one would wish to quote if the space permitted. The chapter on Climate must be left unquoted for this reason.

The effects of starvation, poverty, and fasting, must be left out of this notice, in order to admit some allusion to Dietetics in Sickness, which subject forms Part III. This section is especially valuable to the professional reader, while it gives much that is instructive to the well-informed lay reader, and of which a more general knowledge in the abstract would serve greatly to facilitate the medical attendant's remarks being attended to when given in the concrete. In the treatment of acute fevers, Dr. Chambers follows Hippocrates in thinking the matter of food of such importance, that he gives formulæ for many preparations. Some of them are real additions to the means of meeting disease, for

which every reader will feel personally grateful. It is, indeed, in this division, that the merits of this work are so conspicuous, and which give it such a high practical value. "The great art of duly nourishing fever-patients consists in giving a frequent, almost continuous, supply of liquid food." The feeder and spouted cup, for cases of great prostration, are recommended. The directions as to the kind of food, its preparation, etc., are excellent; and the directions for the cookery for fever-patients will probably be copied into countless household recipe-books. The dietary for sickness and for indigestion is very sensible; and the latter is, of course, very perfect. There is much, too, that is valuable in the chapter on diet in gout and in rheumatism; though here, as also in the remarks on diet in albuminuria, the absence of the physiological consideration of food leaves the matter unsatisfactory. The practical advice is just as sound in most cases, however, as if this omission had been, as it doubtless in future editions will be, attended to. The diminution of azotised food, the adoption of mineral waters, the avoidance of rich generous wines, are all duly insisted upon. The children of the gouty must attempt at least to escape their inheritance by "a life of strict abstemiousness and muscular activity; 'to scorn delights, and live laborious days'. They must not compound for temperance in alcohol by indulgence in dainty meats, sweet pastry, soft beds, or idleness."

"Would you enjoy soft beds and solid dinner,
Then, gallants, board with saunts and lads with sinners."

is advice the direct antithesis of which should be given to those in whom gout is an inheritance.

The recommendations as to diet in gravel, stone, and diabetes are good and trustworthy. But the advice to give albuminous material freely in albuminuria is of very questionable character. In some cases, it may be indicated; in most, it is best to give it in but limited quantity.

Then follow chapters on diet in deficient evacuation, in hysteria, in alcoholism, in insanity, in consumption, and in diseases of the circulatory organs. In the first are recipes for suitable food. In consumption, the dietary is directed to be liberal, and to contain large quantities of the most easily digestible forms of fat; and many forms of such food are given. There are, too, valuable remarks as to how fish-oils may be taken so as not to be intolerably nauseous. The great benefit of climate upon assimilation is insisted upon. In affections of the circulatory organs, diet is of much importance. The avoidance of soups is recommended, if they are followed by flatulence. The necessity for a nitrogenised diet in those who are likely to have atrophic degeneration of the heart is thus put:—"Atrophic degeneration is warded off by keeping up the redness and fluidity of arterial blood." This may be so; but it is matter for question. Alcohol in diseases of the heart is condemned. It quickens the beat, causes capillary congestion and irregular circulation, and mechanically dilates the cavities. Indeed, the remarks of Dr. Chambers on the subject of alcohol, in its use and its abuse, are about the fairest, the justest, and most impartial it has fallen to our lot to be acquainted with. Its use is advocated in distinct and forcible utterances, while the prejudicial results of indulgence in it are demonstrated with equal distinctness. The unfitness of the drunkard for the duties of the *prolétaire* is clearly and uncompromisingly asserted. Two of the rules given for the use of alcohol may be quoted. (a) Let it never be taken as a stimulant or preparative for work, but as a defence against injury done by work, whether of body or mind. For example, it is best taken with the evening meal or after toil. (b) Let the increase in the desire for and power of digesting food, be the guide and limit to the consumption of all alcoholic liquids.

We have criticised this book very openly, perhaps chiefly because its general excellence is such that small blemishes become very apparent, and form blots where ordinarily they would be but slight stains. In the plan of the work, in its execution, and in its pleasing literary garb, Dr. Chambers's manual deserves to take its place amidst our standard treatises, and will be welcomed by the profession; while, with lay readers, it ought to be, and is likely to be, an universal favourite. No more trustworthy and welcome book has been issued from the press for several years. The profession may congratulate itself as well as Dr. Chambers on the success of his rather difficult achievement.

A CLINICAL CONTRIBUTION TO THE TREATMENT OF TURAL PREGNANCY. By T. GAILLARD THOMAS, M.D. New York: Appleton and Co.

EVERYONE who is called upon to deal with cases of extrauterine foetation will feel personally indebted to Dr. THOMAS, for this graphic description of a case in which he succeeded perfectly in removing the foetus with safety to the mother. The author justly observes that

"No condition which develops itself in connection with gestation is attended by greater or more inevitable dangers than that in which the impregnated ovum attaches itself to tissues outside of the uterus". Any contribution from such an authority is, therefore, well worthy of consideration. Few cases of extrauterine foetation have, during their early and progressive stages, been brought to a favourable conclusion by surgical means. After alluding briefly to the various means resorted to for this object, he describes minutely the process adopted in the case under consideration. The attempted removal of the placenta gave rise to severe hæmorrhage, necessitating the injection into the sac of a solution of persulphate of iron. A discussion upon the advantages or otherwise of leaving the placenta to come away subsequently is recorded in the fourteenth volume of the *Transactions of the Obstetrical Society of London*, many of the Fellows advocating non-interference with the placenta. It would have been exceedingly interesting to test this practically in the present case: still *finis coronat opus*—the case recovered: "the remaining portion of the placenta came away spontaneously on the fifteenth day". Dr. Thomas lays great stress upon the recognition of *ballottement*, as aiding materially in forming a positive diagnosis, he having observed this in no fewer than three out of four cases. Every practitioner should read this pamphlet.

ON PARALYSIS FROM BRAIN-DISEASE IN ITS COMMON FORMS. By H. CHARLTON BASTIAN, M.A., M.D., F.R.S., Physician to University College Hospital, etc. London: Macmillan. 1875.

In this little volume by Dr. BASTIAN we have, collected and arranged, his series of lectures delivered last year on the above subject in University College Hospital, and which have already received publication in the pages of a contemporary; and it is with considerable pleasure that we see thus placed in a convenient form the observations and experience of one specially able to deal with so complex and important a subject.

The lectures are eight in number. The first five are devoted chiefly to the consideration of the hemiplegic state, and other symptoms, both primary and secondary, attending rupture of intracranial vessels, their occlusion by embolism and thrombosis, and the pathological results entailed by these lesions. In the sixth, the differential diagnosis of brain-lesions is discussed. In the seventh, the function of the cerebellum is considered, and the symptoms induced by apoplexy of the various parts of the organ; and, lastly, in the eighth lecture, the prognosis and treatment of paralysis from brain-disease in its different forms are discussed. It is expressly stated by the author, in his preface to these lectures, that it has been his object to deal with the subject as succinctly as possible, and thereby promote the usefulness of his work for students and "busy practitioners". With this object in view, we think that he has acted wisely. It is a difficult matter to curtail observations, and more especially difficult in considering diseases of the nervous system, the symptoms of which are too often almost bewildering in their complexity. While thinking, therefore, that, in some instances, and more especially on the subject of differential diagnosis, a somewhat more extensive consideration might with advantage have been afforded, and more reference made to the results of recent experiments on animals, we nevertheless think that the observations of Dr. Bastian are sound and well selected, and that his work will recommend itself to very many. Dr. Bastian deserves credit for the candour and care with which he never fails to impress the possibility of error in diagnosis, the sources of fallacy which are continually present from complexity of symptoms, and from the fact that, with regard to the function of many portions of the brain, we are still in a state of doubt and uncertainty. How often does it happen to many besides students to see their diagnosis, which ought to have been correct according to the rules laid down by systematic writers, completely set aside by *post mortem* examination!

With regard to the functions of the different parts of the cerebral hemispheres, however, we are sorry to see advanced the doctrine that the posterior lobes are more especially concerned with the manifestation of the higher intellectual faculties, and to find that Dr. Bastian should give the weight of his opinion in favour of a doctrine the fallacy of which we consider fully demonstrated.

The remarks on treatment are, we think, practical, sagacious, and clinically useful. With regard to medicines, in the premonitory stage of apoplexy, bromide of camphor and ergot are recommended. In the apoplectic condition, reliance is placed on bromide of potassium, and, in the outbursts of convulsions arising from the presence of organic lesions, chloroform-inhalation is recommended. Several plates, illustrating the anatomy of the convolutions of the brain and the vascular supply to the various parts, add additional value to these lectures, the style of which throughout is clear and forcible. We are glad to welcome Dr. Bastian in the field of clinical work; it is hardly to be

doubted that the habit of research and the dialectical skill which he has shown in the investigation of his subjects, which lie at the base of medical science, and progress with his work as a practical physician, long and steadily pursued as it has been in excellent fields of study, fertile in good results in the advancement of the pathology, diagnosis, and treatment of the classes of disease to which he is devoting particular attention.

REPORTS AND ANALYSES

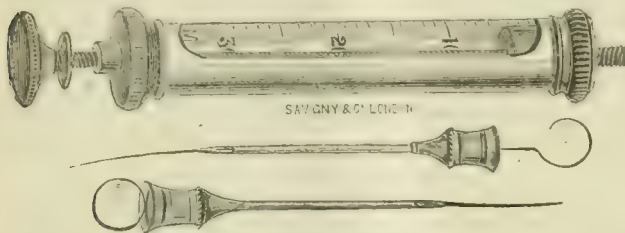
AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

IMPROVED HYPODERMIC SYRINGE.

MESSRS. L. BLAISE and Co. (late Savigny and Co) of St. James's Street, London, have brought under our notice an improved hypodermic syringe. The advantages claimed for this instrument over others hitherto made consist, for the most part, in its peculiar construction, which allows of its being kept clean with very little trouble, and its improbability of getting out of order, and its non-liability to breakage.

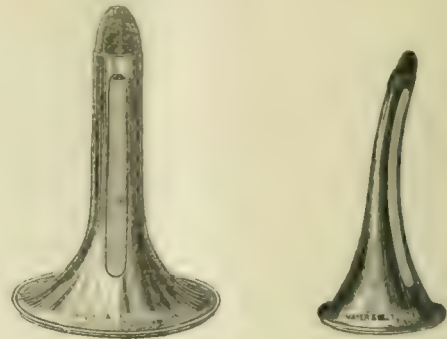


As represented in the above illustration, the glass-cylinder is encased in a metal mounting or jacket, fenestrated to show the graduation for minims. No cement is used to fasten the parts to each other, but in its stead there are washers at each extremity of the cylinder, which not only secure the exclusion of air, but effectually prevent the annoyance of the glass becoming loose. Should, however, by accident, the glass cylinder be broken, an extra one is supplied with each instrument, which may be replaced by any one. The instrument can be taken apart for cleaning by simply unscrewing the nut through which the piston plays. The piston is made longer than the cylinder to allow of the washer being pushed through far enough to be oiled, etc., without the trouble of getting at it in the old way. The needles or cannulated points are made much finer than those usually employed, an advantage in lessening pain on their introduction. The superiority of this instrument has been pronounced by the leading members of the medical profession. It is made either with sterling silver mountings or of plated metal with gold or steel needles, and is fitted into a case with a small vial. The instrument is so constructed that the piston may be worked with a screw or plain action. It is most suitable for hospital use. After employing this instrument, and testing the extent to which it is really an improvement, we should be disposed to prefer it to any other.

CYSTO-URETHROSCOPE.

THE larger of the instruments figured here was devised by Mr. Reeves to aid in the diagnosis and treatment of vesical and urethral affections in females. Their simplicity and the ease with which they can be used are naturally strong recommendations. The cysto-urethroscope—the larger figure—is merely a large silver aural speculum, with a wide lateral opening, and is applied in the following way. An ordinary surgical probe being passed into the bladder, the little finger, well oiled, is insinuated along it with a gentle rotatory motion; and, on its entering the bladder, the probe is withdrawn, and the finger rotated to stretch the parts; it is then withdrawn to just within the meatus, and the instrument, provided with its guide, well oiled, is easily introduced, as the little finger is taken away. When the guide is withdrawn, urine will escape, and that which remains in the bladder must be mopped out with small pieces of sponge on long holders. Ordinary daylight or a reflecting mirror will give a good view of the parts. By rotating the instrument, the whole of the urethra can be inspected, and any fissure or ulcer either incised or cauterised; and by raising, depressing, or inclining laterally its end, nearly the whole of the surface of the bladder

can be plainly seen, and treatment carried out. The largest size that Mr. Reeves has at present used will admit the little finger; but larger ones may be applied, if needed, without damage. Sometimes the fibrous ring surrounding the external urethral orifice will require to be notched before introducing the finger. Incontinence need not be feared, as it has not resulted in the cases in which Mr. Reeves has had occasion to explore the bladder and urethra.



The smaller instrument is for daily use in the out-patient room or in the wards, and will demonstrate the existence of mischief in the urethral mucous lining. Both instruments have been in use since January, and many continental, American, and English practitioners have expressed their satisfaction with them.

THE FLEXIBLE CLINICAL STETHOSCOPE.

THE many difficulties that attend the use of the ordinary stethoscope in dispensary practice, and especially the inconvenience and dangers connected with its application in some of the most urgent cases among the lower classes, would seem to have suggested to the inventors of this instrument the idea of lengthening the tube indefinitely, while they



secured the proper application of the chest and ear-pieces by various ingenious modifications. The result is, that they have produced a stethoscope which promises to be not only convenient, agreeable, and safe, but superior to the common instrument, under ordinary circumstances, in several important respects. The principle on which it has been constructed is, that air is the conducting medium in all tubular stethoscopes, and that the law of acoustics, that the intensity of sound varies inversely as the square of the distance, does not apply to tubes. The stethoscope accordingly consists of a piece of silk-covered tubing two feet in length, of nearly uniform calibre, this being provided at the one end with an ear-peg, and at the other with a chest-piece. The ear-peg is made of a well polished piece of vulcanite, which may accurately fit the external opening of any ear without entering it and causing tinnitus; it presents a minute lateral perforation, which is intended to prevent the air from impinging unpleasantly upon the membrane when the chest-piece is moved, and so relieve the confusing noise produced on its application. By leaving the perforation uncovered, the observer avoids these inconveniences; and, when the instrument is applied, and he is about to listen, he closes the aperture with the finger, and the sounds are transmitted to the ear. The chest-piece is screwed to the tube, and so its shape and size may be varied at pleasure. The same may be said of the length of the tube. Besides the advantages already mentioned, the following may be fairly claimed for this stethoscope; viz.: 1. The ease with which patients may be auscultated in otherwise inaccessible positions; 2. The comparative safety from infection; 3. The possibility of carefully regulating the pressure on the chest-pieces, especially in the case of aneurism, blood-vessels, etc., and in children and sensitive patients; 4. The construction of the ear-peg; 5. The ease with which the observer may use his eye and ear at the same time. The stethoscope has been designed by Drs. Reid and Morison of Canonbury, and constructed by Messrs. Arnold and Sons, Smithfield.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st, Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, SEPTEMBER 4TH, 1875.

MURDEROUS LUNATICS.

RECENT occurrences have again called attention very forcibly to those difficult considerations which arise whenever criminal responsibility and mental disease are viewed in their mutual relations, and have also brought to light some altogether unlooked-for combinations. The singular spectacle has been lately seen, of juries acquitting prisoners as insane in deference to common sense and medical testimony, and in defiance of the plainest and most emphatic judicial directions; and the not less unusual exhibition has been witnessed, of medical men specially skilled in insanity calling for increased stringency in the application of the law to lunatics. Dr. Manley, the Medical Superintendent of the Hants County Asylum, following the lead of Dr. Kirkman of the Kent County Asylum, has, in a letter to the *Times*, fairly raised the question whether recognised lunatics should be absolutely exempt from punishment for crime, and has not hesitated to show his own strong inclination to return an answer to the inquiry the reverse of that which it has hitherto practically received.

The fact that a man is an inmate of a lunatic asylum does not of itself totally incapacitate him for the performance of civil acts. He can still, under certain circumstances, make a will and enter upon a contract. Does, then, the same fact, taken alone, render him altogether irresponsible for criminal conduct? Can he not, under any circumstances, commit a murder or perpetrate a fraud? Theoretically, it is held that he can transgress the law, and that the mental aberration which has justified the deprivation of his liberty is not necessarily of such a nature as to place him beyond the reach of punishment; for inmates of asylums who have committed murder are brought to trial for their offences. But, practically, to all intents and purposes, it is held that a certified lunatic residing in an asylum is legally irresponsible. No instance can be recalled in which such a lunatic has been convicted and subjected to punishment; and no difficulty has ever been experienced in securing the acquittal of such a lunatic, when arraigned for crime. While copious and conclusive evidence of mental aberration has been demanded whenever the defence of insanity has been set up in the case of an uncertified lunatic accused of crime, little or no evidence, beyond the fact of confinement in an asylum, has been required when the same defence has been advanced on behalf of a certified lunatic similarly accused; and no doubt, as a general rule, it is well that an entirely different weight of testimony should be deemed necessary to establish the irresponsibility of a presumptive and of an accredited lunatic. When a person charged with violation of the law has, prior to that violation, been formally pronounced insane, and has had his liberty restricted, there can be no suspicion that the plea of insanity is resorted to as a mere cloak for vice, or a shield from penalties. Then experience has clearly established that, in a vast majority of instances, the crimes committed by lunatics in asylums are the direct offspring of their lunacy, and are symptoms of disease, and not manifestations of depravity. They result from blind exuberant violence, from hallucinations of the senses, from definite delusions, or from a morbid impulse, the veritable character of which is shown by its mode of development and by collateral indications of mental derangement. So frequently is this the case, so generally has it been observed that lunatics in asylums

are irresponsible for their actions, that the principle has been extended and made universal, and all lunatics in asylums have come to be regarded as unaccountable agents.

We are now told, however, that this generalisation, which predicates irresponsibility of all asylum lunatics, is too wide; and that there are many of them who, although of unsound mind, are yet regulated by rational motives, and are as capable as sane men of appreciating the nature of an illegal act, of foreseeing its consequences, and of exercising self-control. We are told that insanity may be partial, and may be confined to certain regions of the mind, leaving those who suffer from it free from durance, and of vigorous will in all the ordinary relations of life. We are told that the insane may be deterred from crime by the dread of punishment; and that they are now presuming upon the immunity from punishment which they have hitherto enjoyed, and are giving license to their evil passions—to jealousy, rage, and revenge—safe in the knowledge that they are insane.

No doubt there is much truth in all this. There are but few lunatics who are always and altogether irresponsible. It is a trite observation, that the present humane administration of our lunatic hospitals is only possible because their inmates can apprehend the meaning of rewards and punishments, and can deliberately choose between them, preferring, as a rule, tobacco, beer, associated amusements, and smiles of approval purchased by good conduct, to the withdrawal of privileges and closer seclusion as the results of recalcitrant behaviour. It is well known, also, that some lunatics are vicious as well as mad, and that these sometimes basely take advantage of their situation, and exhibit cool and calculating villany. There is, perhaps, scarcely an asylum medical superintendent in England who has not been menaced by some lunatic under his care, who has not had to reflect upon the cogent reasoning contained in some such statement as the following. "If you do not liberate me, I shall kill you; and of course I shall be none the worse for so doing. I am a lunatic, and am not answerable for what I do; and the only consequence which can follow a murder committed by me is a change of residence from my present domicile to Broadmoor, which is, I am told, a much better place than this." We give our asylum medical officers credit for courage enough to make them indifferent to such threats even in the mouths of reckless, determined, crafty men; but at the same time we are bound to admit that it is scarcely fair that they should be deprived of any legitimate protection when beset with such dangers, and that it is not conducive to public safety that they should be submitted to the temptations connected with such a situation. The lunatics who employ such threats are almost invariably monomaniacs, who are shrewd and cunning, but who harbour in some corner of the mind dark vindictive feelings, probably directed against persons in prominent positions. The liberation of these lunatics is practically in the hands of the asylum medical officer; and it is not an impossible thing that such an officer, in a moment of weakness or panic, might avoid an ever-present personal risk by incurring a remote hazard for some one else. It is not an impossible thing that a point might be stretched, and a lunatic entrusted with freedom when incapable of rightly using it.

One of the most convincing arguments against the abolition of capital punishment was, that such a step would expose the officers of justice to inordinate and unsupportable danger; for it is clear that, in the absence of the penalty of death, criminals of the worst type, whose misdeeds already merited the highest terms of penal servitude, could incur no worse fate than that in store for them by resisting, and even slaying, those charged with their arrest; and that it would often be worth the while of more trivial offenders to run the risks connected with killing those in whose custody they were. The fear of death has a deterrent fascination upon debased minds which, in justice to our policemen and detectives, to say nothing of other considerations, we cannot dispense with. We are assured that, even upon diseased minds, it has a similar inhibitory influence; and we are asked whether we are warranted in withholding from our asylum officers the security which the maintenance of that fear would confer upon them. In prisons

in which comparatively rational beings are confined for stated times, with every conceivable inducement to good conduct, it is found necessary to resort to the lash, to strait-waistcoats, to dark cells, to penitential dietary, and to the punishment of death, in order to preserve discipline and ensure safety. In asylums, on the other hand, in which the most turbulent and explosive specimens of humanity are incarcerated for indefinite periods, under the most aggravating circumstances, no punitive measures are permitted more impressive than a siesta in a rather luxurious bed. We confess we have often marvelled at the success which has attended the reign of the law of kindness in such institutions, and we should be the first to deplore any alteration in the policy which has converted them from dens of terror and brutality into homes of beneficence and gentleness. But the question is not whether any departure should take place from the present code of internal management of these establishments, but whether their inmates should remain beyond the pale of law, and the reach of retributive justice. It is found expedient occasionally to expel somewhat precipitately from the community at large an intractable and blood-stained member. Might it not be advisable, from time to time, to deal similarly with a rational madman who has presumed too far upon the privileges of his class? If it can be shown conclusively that a lunatic confined in an asylum, who is in possession of adequate powers of self-control, has committed a premeditated murder, instigated by some rational motive altogether independent of his particular mental aberration, there can be no good reason why that lunatic should not be treated like any ordinary criminal. But the difficulty of fulfilling the conditions enumerated in the foregoing paragraph of proving adequate self-control, of demonstrating a rational motive, and of showing the absence of connection between the criminal act and the mental disease, must always be enormous. It would seem to be almost impossible satisfactorily to bring home a crime to an acknowledged lunatic. Even in the case of the man McKaye, who killed the late Mr. Lutwidge, with the avowed intention of being removed to Broadmoor, after the flesh-pots of which he hankered, and who was pronounced responsible for his actions by two of the Commissioners in Lunacy, not a moment's hesitation was felt in returning a verdict of not guilty. Public sympathy will always, in some measure, set towards a man, even although a criminal, who has been visited with the direst of human calamities, and no good result could follow the execution of a person regarded with more of pity than condemnation. Then, if we are to punish lunatics by death, why should we not punish them also in other ways? If they can be guilty of murder, they can be guilty also of assaults, larcenies, and minor offences; and it would come to this: that every lunatic asylum would require to have a stipendiary magistrate attached to its staff.

But, if murderous lunatics are not to be executed—and we confess we see almost insuperable obstacles in the way of such a consummation, however devoutly it might be wished for on some grounds—neither need they be encouraged to give way to homicidal violence. We would suggest that the dietary at Broadmoor Asylum, which is said to be unusually liberal, should be reduced to a level with that in use in pauper asylums, and that never again should batches of evangelists be sent forth from Broadmoor with tidings of its sumptuousness into all our county asylums. Grub is a paramount consideration in the lunatic as in the school-boy mind, and it is surely not advisable that an improved *menu* should be held out as a premium upon murder. Then convicts who have become insane during their term of punishment are known to be the most dangerous, insubordinate, and treacherous of criminal lunatics, and it is surely not advisable that they, at the expiration of their sentences, should be sent to carry corruption and all ill-feeling into our county asylums, where no special provision for dealing with them exists, while the more tractable and harmless criminal lunatics detained during Her Majesty's pleasure are accommodated at Broadmoor, which is essentially a criminal asylum.

THE library of the Obstetrical Society will be closed from September 6th to September 18th, both days inclusive.

It has been decided to hold the next annual meeting of the British Association for the Advancement of Science in Glasgow, under the presidency of Sir Robert Christison.

SEVERAL cases of sunstroke, of various degrees of intensity, occurred in Berlin towards the end of the week terminating on August 14th—the weather being at the time remarkably warm.

SIR DUNCAN GIBB has, we regret to learn, resigned the office of Physician to Westminster Hospital, in consequence of the state of his health.

THE library and museum of the Royal College of Surgeons were closed on Wednesday last for one month, for the purpose of repairs, cleaning, dusting, etc.

A SOMEWHAT serious outbreak of scarlatina is reported to have occurred at the School of Military Engineering, at Chatham, amongst the children.

THERE is, we hear, an erroneous impression that the intended testimonial to Mr. Prescott Hewett is limited to old St. George's students. There is, however, no such limitation; Mr. Rouse of St. George's Hospital is acting as Honorary Secretary to the Fund.

THE *Gazette* announces that the Queen has appointed Sir James Alderson, Knt., M.D., and Arthur Farre, M.D., to be two of Her Majesty's Physicians Extraordinary. The eminent position of the two physicians named in the *Gazette* is fitly recognised by this mark of royal favour.

The Twelfth Annual Meeting of the British Pharmaceutical Conference has just been concluded at Bristol, having been held simultaneously with the meeting of the British Association, and appears to have been very successful and useful.

AMONG the leading papers read at the meeting enumerated by the *Pharmaceutical Journal*, was an account of a successful attempt by Mr. Symons to accomplish the hitherto unsolved problem how to prepare a more homogeneous liniment than the ordinary liniment of turpentine with acetic acid. Mr. Symons uses castor-oil for the purpose.

DR. TILDEN read a paper on the crystalline constituents of Barbadoes and Socotrine aloes. Dr. Tilden disagrees with Rochleder's suggestion that the aloins form a homologous series, but believes zanoloin to be identical with socaloin, and barbaloin (in the anhydrous state) isomeric with it, whilst nataloin is widely separated from the other crystalline principles. The possible application of salicylic acid in pharmacy was the subject of a paper by Mr. Bengier. A number of pharmaceutical preparations were exhibited, all of them more or less prone to decomposition. Many of them which contained from a quarter to half a grain of salicylic acid to the ounce appeared perfectly good, although they had been prepared about four months. The freshly expressed juice of conium, hyoscyamus, and taraxacum, proved to be exceptional in this respect. Some experiments with albumen had shown that salicylic acid does not prevent, and only slightly retards, the action of pepsine. In the discussion which followed, the antiseptic properties of boracic and benzoic acids were referred to. Finally, a report was made by Dr. Wright on new derivatives from the opium alkaloids, a subject that seems to be practically inexhaustible.

REFERRING to these and other researches, Mr. Groves, in the President's address, took occasion to say that it is, he supposed, hopeless to expect to find in the ranks of hard-worked medical men experimenters able and willing to cope with the great amount of this kind of work which may be said to be daily and hourly accumulating. Take such a series of investigations as those of Wright on the Alkaloids, where, in a single page, we may find described perhaps half a dozen bodies of de-

finite composition, distinctive crystalline form, and endowed with potencies differing both in kind and degree each from the others. What proportion of substances such as these are adequately tested, how many are not tested at all, possibly to the great loss of medical science? Parliament has more than once voted £2,000 to defray the cost of investigating the sources of certain diseases of an infectious character; and it would, Mr. Groves thinks, not be amiss to ask it to supplement the grant in future years with another £2,000 to defray the cost of the physiological testing of new remedies proposed for the treatment of disease generally.

THE *Edinburgh Medical Journal*, referring to the recent meeting of the British Medical Association, says:

The Edinburgh meeting of the British Medical Association in 1875 has come and gone; and in looking back upon it, we believe it must be considered a most successful one. It was very largely attended; the weather was most favourable; there was a plethora of excellent papers in all the sections; the arrangements for entertaining as well as instructing the visitors were most complete. Everybody seemed anxious to please and be pleased; in short, it was not only a most agreeable holiday, but also an excellent opportunity for comparing notes as to medical and surgical progress. However much Edinburgh men may regret that our visitors came at a time when the New Infirmary is only half finished, and the new University buildings not begun, we would fain hope that they still saw enough to teach them that Edinburgh, as a medical school, is second to none. In the addresses, at least, no falling short of its ancient power could be noticed. Sir Robert Christison, bearing his weight of years and honours lightly, poured forth his stores of experience on the subject of medical education. Dr. Begbie, in his thoughtful, scholarly, and polished oration, showed that the school of educated physicians, of which Britain has always been proud—from Sydenham and Graves, Latham, Alison, Watson, and Stokes—has young men to trust to in the future. Mr. Spence gave us the outcome of his great experience and thoughtful conservatism in his review of the progress of surgery. Dr. Matthews Duncan was as plain-spoken, clear, and incisive as ever; while Rutherford and Lister, M'Kendrick and Dewar, in their lectures and demonstrations, showed that the spirit of true scientific work, which seeks for truth for its own sake, is still active and fruitful. We may seem to speak chiefly of our own men—for on them, of course, lay the burden and heat of the day—but the excellence of the papers, and spirit of the discussions, showed that our visitors were in no way behind their hosts. There were almost too many claims on the time. Each evening had its entertainment; and with the President's reception on Tuesday, the *conversazione* of the Royal College of Physicians on Wednesday, the dinner on Thursday, and the garden party on Friday, it was high time that the Saturday should be devoted to sea-breezes and out-door amusement; thus ending a pleasant and successful week.

CURIOSLY enough, as the proceedings of the Association increase in importance and scientific value, so do they seem to lose interest in the eyes of our oldest metropolitan medical contemporary. The Edinburgh meeting was the largest medical gathering ever assembled in this kingdom, with the single exception of our last London meeting; and it was, without any exception, the most important meeting of the Association yet held in respect to the number and value of the papers read, of the demonstrations given, and of the proceedings in the sections. The report published, however, in our excellent contemporary, is the scantiest which it has furnished for many years, while of the sectional proceedings it gives none at all. However, the most useful friends of any prosperous and rapidly growing institution are those who regard it with disfavour, and treat it to jealous criticism. No armour can be considered trustworthy which is not subject to the constant searching out of its weak points. It is in the cold atmosphere of keen hostility that a hardy tree, such as this Association, will flourish best.

To be really useful or creditable, however, criticism should be based upon some broadly correct knowledge of elementary facts. It cannot really serve any honest purpose, for instance, to decry the Council of the Association as "self-elective". Any one who knows anything at all about the matter knows that the Council consists of a total number of nearly three

hundred members, elected annually by the branches at their general meetings, the elections being independent, local, and wholly made by the branches themselves. The constitution of the Council is largely changed every year. The Committee of the Council consists of the leading officials of the Association, of the honorary secretaries elected by the branches, of the past presidents of the Association, who have from time to time been selected by the profession in the locality which invites the Association, and of twenty members added by the General Council just mentioned. Upon what does our well meaning critic, therefore, rest, when he describes the Council of the British Medical Association as "self-elective"? It may have many faults, but certainly no wilder invention could have been devised with which to reproach it than this.

THE debate which occurred at the recent meeting of the Association as to the selection of next year's place of meeting has had an echo in letters which we have received from two respected members of the profession. The general meeting having, however, arrived at a conclusion, and remitted the execution of it to the Committee of Council, it has seemed to us that any further communications on the subject should, in the first instance, be addressed to the President of Council, to whom we have accordingly forwarded them. A letter which appeared last week in a contemporary on the subject had, he informs us, been recalled by telegram on the previous Wednesday, and was published notwithstanding its recall.

WE very much regret to hear that Dr. Spencer of Clifton has been disabled by illness from fulfilling the duties of Secretary to the Physiological Section of the Meeting of the British Association, for which post his medical and scientific accomplishments and culture had marked him out. Dr. Spencer contracted fever in the course of his hospital duties; with a characteristic courage and sense of social duty, he had himself removed to the Fever Hospital, where he has been successfully treated, and is, we are glad to hear, now convalescent. Dr. Martyn of Bristol, whose interesting research on "Prickle Cells" we lately published, acted as one of the Secretaries of the Physiological Section in substitution of Dr. Spencer.

THE parliamentary return of the names, ages, and nationalities of persons who have served in the British Merchant Service during the last two years as surgeons, whose names do not appear in the *Medical Register*, and which has just been published, contains the names of 224; and, amongst some respectable and duly qualified members of the profession, are others who are a disgrace to it, one of whom is particularly *wanted* by the police authorities.

MEDICAL CERTIFICATES AND INQUESTS.

THE recent "Births and Deaths Registration Act, 1874" requires that "in the case of any person who has been attended during his last illness by a registered medical practitioner, that practitioner shall sign a certificate stating, to the best of his knowledge and belief, the cause of death". Notwithstanding this general enactment, it appears clearly desirable that medical practitioners should refuse to sign such certificates in cases of death from violence, or even of suspected violence, until the case has been referred to the coroner, and that officer has notified his decision that an inquest is unnecessary. We have every reason to believe that this would be the course of action observed in such cases by nineteen out of every twenty medical practitioners. Circumstances connected with a recent inquest held at Brislington, in Somersetshire, on the body of a man who died from injuries received through being knocked down by a train in a tunnel, show, however, that misconceptions exist as to the duty of practitioners to give medical certificates in cases of death from violence. It may be useful, therefore, briefly to note the circumstances of the case. The deceased was knocked down on the night of the 12th ultimo, and the next day Mr. Lodge, a local practitioner, was called in, only an hour or two, however, before the man died. On the request of a neighbour or relation of the deceased, Mr. Lodge gave a certificate to the effect that death was caused by "injuries

in the abdomen". If this certificate had followed the usual course, it would have been taken to the local registrar, who, had he done his duty, would have reported the circumstances of the death to the coroner, and have delayed the registration of the death until the coroner's decision as to holding an inquest was known. As a matter of fact, through a succession of blunders, the body of this man was buried before either the registrar or the coroner heard of the death; and the body had eventually to be disinterred by order of the coroner before the inquest could be held. At the inquest, the coroner, very naturally, blamed Mr. Lodge for having given a medical certificate in such a case, and expressed great surprise when this practitioner, in answer to a question, stated that if a man were brought to his surgery with a bullet wound through his head, he did not see why he should not give a certificate of the cause of death. It is to be hoped that very few medical practitioners hold the same opinion on this point as Mr. Lodge expressed, or else the security of life from wilful injury, which depends in great measure upon the efficient performance of the duties of coroner, would soon become endangered through the want of co-operation on the part of the medical profession in using their influence to encourage the holding of inquests in all cases of death from violence, as well as in all cases of sudden death in which the real cause of death can only be conjectured. In the case of which we are speaking, Mr. Lodge, in giving a certificate to the effect that the deceased died from "injuries to the abdomen", was stating an absolute fact, but, in so doing, he committed two serious faults. In the first place, he usurped the functions of the coroner, in assuming that the death was the result of pure accident and not of manslaughter, or of attempted suicide; and, secondly, his certificate as to the cause of death was for the purpose of the death-register lamentably incomplete, as it failed to give any information as to the cause of the injuries to the abdomen. The Registrar-General instructs all his registrars to inform the coroner of all deaths from violence, previously to their registration, in order that an inquest may be held, or that the coroner may decide that it is unnecessary to hold one. If medical practitioners, however, give certificates of the cause of death in such cases, facilities are thus afforded for the registration of deaths from violence, without reference to the coroner, which would soon become highly dangerous to society.

MIDWIVES IN FRANCE.

MIDWIVES in France can only practise in the departments for which they are specially licensed. The tribunal of Brive (Corrèze) lately decided that a prefect could provisionally license a midwife to practice in another department than that in which she had been examined. The court of appeal at Limoges, however, quashed the decision, and declared, in the case under consideration, that the authorisation given by the prefect was of no force, and that the midwife had transgressed the law.

LEPROSY.

PUBLIC interests seem to require increased attention to the circumstances under which leprosy is being imported into this country. The number of cases of that most horrible disease under observation by British physicians in this country is apparently increasing. Dr. Laycock, the eminent professor of medicine in the University of Edinburgh has, in a recent report in the *Edinburgh Medical Journal*, pronounced the opinion that facts indicate that it is a communicable disease; but that the specific poison has evidently a long period of latency, and requires special conditions of health for its manifest activity. The number of cases reported is such that, as Dr. Laycock emphatically points out, it is hardly possible to exaggerate the importance of the question of communicability. Professor Laycock adds: "If our returned leprosy countrymen can be foci of contagion, and spread a disease the most incurable, most prolonged, and most distressing of any known, what an infliction upon our country will follow upon their unguarded intercourse with the healthy. The more frequent occurrence of leprosy in Great Britain will afford our experimental physiologists opportunities

of determining whether the disease can be communicated to lower animals or not. It is, however, an inquiry, the cost of which should be borne by government or the public. Domestic animals, like swine and cattle, would be the proper subjects of experiments, and not small animals like guineapigs and rabbits. As the animals infected by leprosy products would necessarily have to be numerous, and have to be watched over a series of years, it is plain, private effort cannot be available."

PATENT MEDICINES.

WE entirely agree with the President of the Pharmaceutical Conference as to the propriety of grappling with that monster evil, the unrestricted sale of the so-called patent medicines. With him, we would make them in fact what they are in name; and their composition should be divulged to the commission, and some control thereupon exercised upon the publication of advertisements respecting them. It would not, of course, do to license puffs of any kind, but the power of preventing the more scandalous and destructive of the lies from being obtruded on one's attention from every hoarding and almost every publication should be vested in some one. Care for the public health demands some interference; for example, with the sale of certain hair-restorers, which, vaunted as not being dyes and uninjurious, are found when chemically examined to contain poisonous combinations of lead. Indeed, there is, he says truly, scarcely a chemist or a doctor who could not adduce from his own experience instances of their injurious action on the persons of their customers or patients. Another glaring instance which he mentions is that of the "sure cure for the opium habit": it was found to contain per dose two grains of sulphate of morphia, to be taken three times a day.

HYDROPHOBIA.

TWO cases of hydrophobia are related to have occurred last week. The first took place near Accrington, where a child, aged two years, was bitten three months ago by a dog, which subsequently became mad, and was destroyed. The wound soon healed, and the child's health was not affected until it was seized with hydrophobia, from which it died. The next case was that of a collier at Burslem, who was bitten about seven months ago, while giving some medicine to a dog. The wound was cauterised, and quickly healed. He was lately seized with all the symptoms of hydrophobia, and died in great agony in two days. Large doses of chloroform which were administered appeared to produce little effect.

THE WORCESTER INFIRMARY.

THE Executive Committee have reported that there is no reason for any alteration of the rules, "feeling confident that no unfair pressure will ever be put upon any member of the honorary medical staff in consequence of unavoidable absence from duty." The medical staff, however, have intimated their intention of bringing the subject before a general meeting of governors. In the meantime, the election of a successor to Dr. Inglis is to be proceeded with. We are glad to learn that the medical staff are determined, as far as it is in their power, to prevent the matter from being left in the present uncertain and unsatisfactory footing, with no guarantee against the recurrence of such proceedings as those lately instituted against Dr. Inglis. We trust that, while the settlement is pending, the good taste and loyalty of other medical men will prevent them from coming forward as candidates for the vacant post.

MORTUARIES.

IN view of the great want of mortuaries which exists in the metropolis, and the legal difficulties which arise in the removal of a dead body from one parish into another, Dr. Joseph Rogers, Vice-President of the Poor-Law Medical Officers' Association, has suggested a plan which will, by legalising the union of parishes for mortuary purposes, remedy the evils. To call upon every parish to erect a mortuary would, in certain cases it is stated, entail a needless burthen; but there can be no

reason, unless there be legal difficulties, why a number of small parishes should not be incorporated so as to obtain jointly the benefits of these necessary buildings. As a preliminary step, Dr. Rogers has placed the following notice on the minute book of the Strand District Board of Works. "That, with the view to the more effectually and economically securing the establishment of mortuaries in the different parishes of the metropolis, this Board do memorialise the Metropolitan Board of Works, urging that Board to apply for powers in the next session of Parliament, authorising that body to undertake their erection in such parts of the metropolis as may be considered necessary."

A NEW HOSPITAL IN PARIS.

A NEW hospital, to be named the Ménéilmontant Hospital, is to be opened towards the end of the year in the part of Paris from which it derives its name—one of the poorest quarters. It is situated between the Lariboisière and Saint-Antoine Hospitals, and will contain 150 beds. It consists of isolated pavilions. The wards are large, and none will contain more than twenty-two beds; there are numerous rooms with one, two, three, or four beds. Each ward has its own staircase; and in the centre of each pavilion is a separate staircase for conveying provisions. The pavilions are surrounded with open galleries, for the use of convalescents in fine weather. Independent of the hospital, there is a lying-in institution consisting of isolated wards.

NORMAL OVARIOTOMY.

A THIRD case of normal ovariectomy, and the second in this city, is reported to have been performed by Dr. T. T. Sabin, at St. Luke's Hospital (*New York Journal*). The patient, an unmarried girl, twenty-five years of age, had suffered for eight years from the most intense dysmenorrhœa and ovarian neuralgia, for which numerous operative and other measures had been tried in vain; the left leg, (the left ovary was the one affected) was unable to bear the weight of the body, and the patient finally became so anxious for relief from the constantly returning harassing ovarian, uterine, and pelvic pains, as to earnestly desire the removal of the ovary, which operation was performed August 8th, 1874, in the usual manner. The patient recovered without difficulty. One month after the operation, all ovarian pains had left her; she could walk easily, and the second menstruation since the operation was entirely normal and painless. The ovary was found to be perfectly normal.

THE BRITISH ASSOCIATION.

WE publish in another column the valuable address delivered by Professor Cleland in the department of Physiology and Anatomy at the meeting of the British Association in Bristol. We give also a compiled abstract report of the proceedings of that section. We should much have wished, had space allowed, to print Professor Rolleston's very able address in the anthropological department. It was full of varied interest, and had the mingled charm of erudition, scientific acuteness, and modern ethical application, which pervades most of his writings. Professor Rolleston dealt largely with craniology, and he prefaced his remarks with these words: "The largest result which craniometry and cubage of skulls have attained is, to my thinking, the demonstration of the following facts; viz., first, that the cubical contents of many skulls from the earliest sepulchres from which we have any skulls at all, are larger considerably than the average cubical contents of modern European skulls; and, secondly, that the female skulls of those times did not contrast to that disadvantage with the skulls of their male contemporaries, which the average female skulls of modern days do, when subjected to a similar comparison."

ANTIVACCINATORS AT MONTREAL.

MONTREAL has been recently the scene of some disgraceful rioting on the part of the antivaccinators. It appears that, of late years, small-pox has been very prevalent in the city, especially amongst the French Canadians; and, in consequence, the provincial government passed an act to empower the municipalities to enforce vaccination. This, how-

ever, has been strenuously resisted by the French section of the community, under the leadership of Dr. Codene and other *savans*; and a mob of 7,000 roughs assembled a few Sundays since, who stoned the aldermen and gutted the house of one of the vaccination supporters, and in other ways conducted themselves in an irrational manner. The police were utterly powerless against the rioters, whilst, as a natural collateral incident, a severe small-pox epidemic still prevails.

THE INUNDATIONS IN THE SOUTH OF FRANCE.

By a decree of the President of the French Republic, dated April 7th, the following nominations to the Legion of Honour have been made, in recognition of services rendered during the late inundations of the Garonne. 1. Madame Sister Pénin, *supérieure* of the hospital de la Grave at Toulouse. She gave proof of the most rare devotion during the inundation. It was in great part due to her intelligent superintendence, her calmness and firmness, that the numerous inmates of the hospital could be rescued from the dangers which threatened them. 2. Dr. Bonnemaïson, chief physician of the Hôtel-Dieu at Toulouse. He displayed courage in personally taking part in, as well as superintending, the removal of the patients from the wards. Eighteen years of professional service. 3. Dr. Goujon, mayor of Vaudreuil and member of council of the *arrondissement* of Louviers (Eure). Has been in medical practice thirty-six years. He obtained a medal of honour for his conduct during the cholera epidemic of 1849; and distinguished himself during the inundations of the Seine in 1873. 4. Dr. Menot, promoter of the societies for the protection of infants, medical inspector of the canton of Montsauche (Allier); twenty-two years of useful and disinterested professional service; has distinguished himself during epidemics; has obtained numerous medals through his works, the principal object of which has been to diminish mortality in early life. 5. Dr. Colson, chief physician of the hospitals at Beauvais; thirty-two years of public service. Gold medals have also been awarded to: 1. Dr. Basset, 2. Dr. Labede, 3. Dr. Rippoli, professors in the school of medicine at Toulouse; and 4. Dr. André, assistant-surgeon of the Hôtel-Dieu—all of whom bestowed their care on the victims of the inundation. Silver medals have been awarded to M. Sabady, *interne* of the hospital de la Grave, and MM. Bonneau, Labat, Alibert, and Albert, *internes* of the Hôtel-Dieu; who watched over the evacuation of the wards and the placing of the patients in safety. Honourable mention for having taken an active part in the organisation of assistance has been recorded in favour of the medical profession in general in Toulouse, and MM. Bezy, Robes d'Orbecastel, Bret, and Chevalier, students of the school of medicine.

RECENT URBAN MORTALITY.

DURING last week, 5,353 births and 3,647 deaths were registered in London and 20 other large towns of the United Kingdom, and the average rate of mortality was 25 deaths annually in every 1,000 persons living. In Oldham, the rate was 16; Bristol and Bradford 21; London, 22; Edinburgh and Portsmouth, 23; Glasgow, Dublin, Sunderland, and Manchester, 25; Liverpool, Nottingham, Wolverhampton, and Norwich, 26; Leeds, 29; Salford and Birmingham, 30; Hull and Sheffield, 32; Newcastle-upon-Tyne, 35; and Leicester, 40. The annual zymotic rate ranged from 3.0 and 4.7 in Oldham and Portsmouth, to 15.0 and 18.5 in Salford and Leicester. Scarlet fever prevailed in Bristol. The death-rate from diarrhœa rose last week, and ranged from 0.8 in Bristol, to 13.8 and 16.6 in Wolverhampton and Leicester; in the latter town, the death-rate from this disease during the past five weeks has averaged 14.4 per 1,000. In London, the births exceeded by 66, whereas the deaths were 45 below, the average for the week. The annual death-rate was 21.8 per 1,000 persons living. The 1,440 deaths included 1 from small-pox, 22 from measles, 71 from scarlet fever, 10 from diphtheria, 53 from whooping-cough, 24 from different forms of fever, and 215 from diarrhœa; or 396 deaths altogether. During the twenty-two days ending on August 27th, the mean temperature of the air at Greenwich exceeded the average by 3.6 degrees; and the deaths from diarrhœa rose con-

tinuously week by week during that period. In outer London last week, the general and zymotic death-rates were 17.9 and 4.9 per 1,000 respectively, against 21.8 and 6.0 in inner London. Rain fell on Saturday to the extent of 0.34 of an inch.

SELF-HELP.

A MOVEMENT has been set on foot at Ashburton for the purpose of establishing a cottage hospital for that town. In the course of some excellent remarks, Sir R. Torrens said, he thought that "Every endeavour should be made to enlist the sympathies of those most to be benefited, viz., the working classes. He was sorry there were not more of these present, and he felt they should not succeed unless they could enlist their sympathies. He would like to see the working classes of this country much more independent and self-reliant, and out of their earnings—which were much greater now than formerly—make provision for sickness while in health."

A NEW CONVALESCENT HOME AT MARGATE.

THE new seaside convalescent branch of the Orphan Working School at Margate was formally opened on Monday by Her Royal Highness Princess Mary and the Duke of Teck, and a large gathering of local and other celebrities. This branch building, which is handsomely constructed, is owing to the exertions of the late active secretary, Mr. Joseph Soul, and is intended as a sanatorium for the benefit of invalids from the parent institution. The need of such an adjunct was well expressed by Earl Granville, when he stated that "It was a melancholy fact the extent to which these orphans inherited the tendency to disease of their parents, which rendered them more liable to weaker systems than those whose parents lived to a longer age; and the fact that they belonged to the poorer classes, who were unable to secure for them the advantages enjoyed by the rich, rendered it more necessary that the philanthropically disposed should look after them."

EXTREME DOSES.

It is just as well to hear what our pharmaceutical friends have to say from time to time on this subject, if only as a reminder to the careless. Mr. Groves, in his address at Bristol, briefly observed that it is much to be regretted that the action taken in the matter by the Conference last year towards rendering the indication of extreme doses compulsory on the prescriber, as is done in Germany and elsewhere, has hitherto been fruitless, much to the annoyance and discomfort of both dispensers and prescribers, and also, it is to be feared, to the danger of patients—not so much of their getting a poisonous dose as of their getting a safe one, and less than the prescriber intended. We must not give up the idea, however, but, when the time comes for the revision of the *Pharmacopœia*, urge it forcibly upon the General Medical Council, and upon the Government if necessary. The latter suggestion is rather a strong one, and possibly constituents might think two or three times before acting on it. Mr. C. Boorne, however, in commenting on the address, said:

"There is a point touched upon in the address which I should like to refer to; the importance of it was impressed upon me as a young man by an incident which occurred in my apprenticeship. I am referring to what the President said about prescriptions of extreme doses. When I was an apprentice, I was required to dispense prescriptions, and those of some careless prescribers. One day I was called upon to dispense three drachms of potassio-tartrate of antimony; and, on reference to the prescriber, it turned out that it should be the liquor. Some time afterwards, while yet a raw recruit, I was left in charge of a business while the master took an excursion into the country. I remember being called up at three o'clock one morning, when a prescription was brought to me to dispense. It included three grains of hydrochlorate of morphia. I felt great difficulty about it. The prescription was brought to me by a gentleman's servant; he could tell me nothing more than that his master was ill; he could not tell me who wrote the prescription. After some consideration, I did what I do not mean to justify: I put in two grains. I went to bed, but not to sleep, with lively apprehensions of a coroner's inquest; for I might have killed the gentleman by giving him too much, or I might have defeated an effort to save his life by not giving him enough. I afterwards learned that

the medical man intended it to be three grains, because it happened to be a case of delirium tremens. If there had been opposite to the doubtful line a note of admiration, or something to indicate that the apparently extreme dose of three grains was really meant, it would have been a great relief to my own mind as a young dispenser. In the absence of any such assurance, the pharmacist is often placed on the horns of a dilemma."

We have already, in discussing this subject, indicated the advisability of prescribers specially indicating, by writing the words instead of a symbol, by an evident underline, or by some similarly distinct means, that any extreme dose which they may have reason to order is advisedly and intentionally prescribed. It would be useful in many cases in saving anxiety and possible injury to the patient, the dispenser, and the prescriber. The precaution is, we believe, becoming frequent.

SCOTLAND.

THE new asylum at Riccarton, near Paisley, for the accommodation of the lunatic poor, will be shortly ready for occupancy. The building is situated on an eminence commanding extensive views of the surrounding country. The estimated cost is about £12,000.

PAISLEY.

WE understand that Dr. Alexander, who was recently appointed House-Surgeon to the Paisley Infirmary, has resigned his appointment. During his brief official life of six months, he has gained the confidence and esteem of all with whom he has been brought into contact. It is unfortunate for the infirmary that, from various reasons, it has had, during the past three years, no less than five house-surgeons.

THE REGISTRAR-GENERAL'S RETURNS.

IN the second quarter of 1875, the births, deaths, and marriages in Scotland differed little in number from the last ten years' average for that quarter. The estimated population in the middle of this year being 3,495,214, the 32,294 births represent an annual birth-rate of 3.70 per cent.; the 19,518 deaths, an annual death-rate of 2.23 per cent.; the 6,638 marriages, an annual ratio of 0.76 per cent. The death-rate is the lowest observed in the quarter since 1871. The excess of births over deaths was 12,776; but there were 5,234 Scotch people among the known emigrants from the principal ports of the United Kingdom, and there are no means of ascertaining how many other persons found their way from Scotland to England, Ireland, and the Continent. A registrar in Linlithgow county notices a marked decrease of marriages, in consequence of the depressed state of trade among the mining population; but a Banffshire registrar observes a considerable increase of marriages among farm servants, and says that the high rate of wages, and in many cases the comfortable dwellings now given on farms, lead to a settling down early in life. The registrar of Aberdeen, Aberdeen County, says:—"The only marriage he registered in May was arranged for the 15th of that month; but, on that morning, the bridegroom attempted to commit suicide by shooting himself. He recovered so far as to wish the marriage solemnised on the 16th, and this was done accordingly; but he died on the 18th. Two of the births registered in April were twins; one, a boy, born on Lady-day, and the other, a girl, on April 16th; but this last died on June 12th. The registrar of Kirkcudbright does not forget that the census showed the large disproportion of 1,858 females and only 1,488 males in his district, and he sees little chance of a change in its luck when he finds that he registered nineteen births in the last quarter, and that thirteen of the new-comers were girls."

THE ROYAL INFIRMARY AND HEALTH COMMITTEE OF GLASGOW.

OUR Glasgow correspondent writes:—"There is at present a dispute between these bodies, which has unfortunately assumed something of a personal tinge. The discussion, as it appears in the public prints, seems to be between Dr. Russell, acting through the Committee of

Health, and Dr. Thomas, the Superintendent of the Royal Infirmary. The principal matter in dispute is briefly this. It has been discovered by Dr. Russell, that the local authority of Partick has been sending cases of enteric fever into the Royal Infirmary. It is hardly necessary to remind our readers, that the country is divided for sanitary purposes into a number of districts, each of which is governed by a local authority. The local authorities have the power of compulsorily removing cases of infectious disease and isolating them in hospitals. They have power to erect hospitals for their reception, and two or more neighbouring districts may combine to erect a common hospital; or they may take advantage of an existing hospital for the isolation of their cases. Partick is engaged in erecting such a hospital; but, in the meantime, without consulting the local authority of Glasgow, it has sent a number of cases into the Royal Infirmary, which is built in one of the most thickly populated parts of the city. That is to say, while the local authority of the city is taking its cases of typhoid fever out of the city to Belvidere, and keeping the excrement out of the city sewers, a contumacious local authority is busy importing into the city cases of this disease, and treating them in a hospital where drains are connected with sewers which pass through the heart of the city. This is what the Royal Infirmary directors have allowed, and this is what Dr. Russell through his committee has protested against. The superintendent of the infirmary endeavours to divert attention from the point at issue by a variety of pleas. He makes much of the position of the infirmary as a hospital supported by subscribers outside the city as well as inside; but we fail to see that this applies to cases sent by a public body outside the city. It may be a matter for discussion whether the infirmary is bound to receive cases of typhoid fever sent in by subscribers from outside the city or inside it. But a local authority outside the city stands in no such relation, and ought not to have been allowed to interfere with the district of a neighbouring local authority without communicating with it. Another plea set up by the infirmary is, that the patients in the city fever hospitals are not so well treated as in the infirmary. To this the crushing reply is made, that since these hospitals have been opened, the mortality at Belvidere has been every year considerably less than that of the infirmary for the same diseases. The sums total show a mortality for Belvidere of 12 for typhus and 11.3 for typhoid, while that of the infirmary is 17 and 15.6 respectively. The infirmary directors do not appear so much to deny these facts as rather to assert that, from the principle on which the medical attendance is conducted at the two places, the results ought to be in favour of the infirmary. It is as if they were determined that, if the facts did not agree with the principle, it was so much the worse for the facts. And so we find the superintendent, even after the publication of these statistics, in a patronising tone advising the committee to give it up and adopt the infirmary style of proceeding. Dr. Russell also maintains his principle of attendance to be the best, and adduces statistics in support of his position. Meanwhile, the question has been referred to the Board of Supervision, whether one local authority is at liberty to import into the district of another such authority cases of infectious disease, without in any way communicating with the said authority. It ought to be added, that the local authority of Glasgow have been quite prepared to treat the Partick cases as they have been treating cases from Maryhill and Hillhead, provided that these districts were erecting suitable accommodation within their own limits. They are actually in combination engaged in erecting a hospital for these three districts, so that, this condition being complied with, Partick would have found no difficulty in sending its cases to Belvidere.

IRELAND.

SIR DOMINIC CORRIGAN, Bart., has been appointed President, and Dr. Aquilla Smith Vice-President, of the Council of the newly formed Pharmaceutical Society of Ireland.

DR. CHARLES H. LEET has been reappointed Medical Representative of the Apothecaries' Hall of Ireland, in the General Medical Council.

A RUMOUR was extensively circulated that scarlatina had broken out among the children in Birr Barracks, King's County, and that the arrival of the 50th Regiment had been indefinitely postponed owing to this cause. The report, however, has been contradicted, there not being a vestige of any epidemic disease in or near the barracks.

BELFAST ROYAL HOSPITAL.

AT a quarterly meeting of the committee of this institution held last week, Dr. Ross was re-elected physician, and Dr. J. Walton Browne visiting-surgeon, in the room of Dr. Samuel Browne, J.P., resigned. Not more than one-half the sum required to complete the Convalescent Home has yet been subscribed; but, as a suitable site, free of all expense, has been obtained, it is hoped that the amount still required (about £3,000) will soon be forthcoming. In reference to Dr. Browne's resignation, the following resolution was unanimously adopted by the Board of Management:—"That this Board cannot accept Dr. Browne's resignation as visiting-surgeon to the hospital, after a connection with this institution of twenty-five years as surgeon and clinical instructor, without expressing their sense of the great loss it will sustain by his retirement; and they beg to tender him their best thanks for his unremitting energy and unwearied attention at all times to the interest of this charity; and also that he be placed on the consulting staff of the hospital."

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

MEETING IN BRISTOL, AUGUST, 1875.

SECTION D.—DEPARTMENT OF ANATOMY AND PHYSIOLOGY.

President: JOHN CLELAND, M.D., F.R.S.

Physiological Action of Light.—The report of a committee appointed at the meeting at Bradford in 1873 to investigate the physiological action of light, was read by Dr. J. G. MCKENDRICK. The members of the committee were Professor Balfour (Edinburgh), Professor Dewar (Cambridge), and Dr. McKendrick (Edinburgh). The investigation was begun by Professor Dewar and Dr. McKendrick about three years ago, and a paper on the subject was read at the Bradford meeting, when the committee was appointed, and a grant of £25 made to assist in carrying on the investigations. The results arrived at by the committee are as follows. 1. The impact of light on the eyes of mammalia, birds, reptiles, amphibians, fishes, and crustaceans, produces a variation amounting to from 3 to 10 per cent. of the normal electro-motive force existing between the surface of the cornea and the transverse section of the optic nerve. 2. This electrical variation may be traced into the brain. 3. Those rays that are regarded as most luminous produce the largest variation. 4. The electrical alteration is due to the action of light on the retinal structure itself, as it is independent of the anterior portion, eliminating, therefore, the natural supposition that the contraction of the iris might produce a similar result. It is possible by experiment to discover the physical expression of what is called in physiological language "fatigue". 5. The method employed in this research may be applied to the investigation of the special organs of the other senses. One of the principal difficulties in arriving at the exact relation between the electrical variation and lights of different luminous and colour intensity was the continually diminishing sensibility of the retina to the stimulus, owing to the abnormal condition of the eye when separated from the body and deprived of blood. This difficulty was overcome by placing the animal under the influence of woorara or hydrochlorate of chinoline, both of which substances deprived the animal of sensation and motion; thus experiments can be made upon the living eye without removing it from the body or in any way injuring the animal. It was found that, on applying the electrodes of the galvanometer to the cornea and to the surface of the skin, large deflections were obtained, sensitive to light, and showing a remarkably constant alteration. In the early part of the investigation, it was found that sometimes the initial effect of light was to produce an increase, and at other times a diminution, of the natural current circulating through the optical apparatus; but no explanation was then offered as to the

cause of this apparent anomaly. It has now, however, been demonstrated by a large number of experiments that the variation is related to the primary direction of the current. If, for instance, the cornea be positive to the surface of the brain, the initial effect of light is an increase; if, on the other hand, some portion of the brain be positive to the cornea, the initial action is a diminution of the natural current, thus showing that the current, superadded or induced by the action of light, is always in the same direction, only in one case it is added to, and in the other subtracted from, the natural current. The committee have also examined the action of polarised light and of the various coloured rays of the spectrum, with the result of showing that in all cases the yellow rays produced the greatest effect. They have also found that the extreme violet rays and the low red rays produce no alteration. The committee then attempted to measure accurately the electro-motive force of the living eye. This they did by means of Mr. Latimer Clarke's method of the comparison of electro-motive forces. From a large number of observations, it has been found that the electro-motive force of the nerve currents dealt with in these experiments on the eye of the frog amounts to about 1-350th part of a Daniell's cell. This was compared with the electro-motive force of the muscle and nerve of the frog: the muscle gave about 1-35th, while the nerve gave 1-480th part of a Daniell's cell. Lastly, the committee have recently made a series of elaborate experiments, by means of an instrument called a chronograph, devised by Regnault, as to the time required for the action of light upon the eye of the frog. It has been found to occupy about 1-10th of a second, thus remarkably agreeing with the conclusions arrived at by various Continental physiologists as to the time occupied by the action of light on the human eye. The result of this investigation shows that the electrical variation observed in the action of light is what occurs in the eyes of all members of the animal kingdom.

Micro-photography.—Mr. H. B. BRADY exhibited a series of micro-photographs, chiefly from physiological and pathological preparations, taken by a new and simple process, devised by Mr. Hugh Bowman of Newcastle. The apparatus was also shown and described. It consisted of a simple mirror of speculum metal, placed at an angle of forty-five degrees in front of the eyepiece of the microscope, and directed downwards. The image was received upon a collodium plate set in the frame of a common photographic camera, and the photograph taken in the usual way. About eleven seconds was stated to be a sufficient exposure for the purpose.—The PRESIDENT, while admitting the utility of the invention, said that some difficulty would arise in its practical application, since, in looking at a preparation, it was often necessary to move the focus from point to point in order to obtain a complete examination.

Vascular Plexuses in the Elephant and some other Animals.—A paper on this subject was read by Mr. E. C. MIALL. It related to the physiological significance of certain plexuses of vessels in the elephant, as illustrated by some dissections undertaken by Mr. Miall and Mr. Greenwood.

Protoplasm and Adipocere.—A paper was read by Dr. J. GOODMAN on Protoplasm and Adipocere, or the Origin and Ultimate Termination of Animal Structure. The author endeavoured to show that the animal body, with all its complex organs and seemingly dissimilar structures, is formed either of corpuscles or fibrinous material, which alone can be denominated the true protoplasm of the body; and that dead animal matters are capable of resuscitation by contact with water, so that they will form corpuscles. Thus, an individual suffering from disease and taking no nutrition, may be sustained for weeks by the mixing of the effete matters from the frame with the aqueous fluid drawn by the absorbents.

Intestinal Secretion.—A second report was presented by the Committee on Intestinal Secretion—Dr. LAUDER BRUNTON and Dr. PVE-SMITH. The report detailed a number of experiments, which the committee had undertaken, and which were considered to prove the absence of influence on intestinal secretion through the splanchnic nerves, the pneumogastrics, the sympathetic above the diaphragm or the spinal marrow; and the probable influence of the ganglia contained in the solar plexus, though certainly not of the two semilunar ganglia exclusively. Also the independent occurrence of hæmorrhage and of paralytic secretion appeared, in the view of the committee, to point to a separate nervous influence on the blood-vessels and the secreting structures of the intestines.

The Origin of the Lymphatics.—A paper by Dr. GEORGE and Dr. FRANCES ELIZABETH HOGGAN, on the origin of the lymphatics, was read by the latter; and a large series of camera lucida drawings illustrating the subject was subsequently described by the former. The paper was merely offered as a preliminary abstract of what could be said on this very abstruse subject; and the authors alleged that they had discovered those "ultimate radicles" of the lymphatic system which

many histologists are at present seeking with the greatest skill and patience. Special reference was made to the lymphatic radicles in voluntary muscle of mammals, in involuntary muscle of batrachians, in the skin of fishes; and to the development and condition of lymphatic radicles and of lymphatic sinuses.

The Structure of the Skin.—A paper on this subject was read by Dr. MARTYN. In a recent paper, the author had described the structure and growth of the cuticle with reference to disease, and he now had to confirm the view which those appearances led him to predict, as holding good for ordinary and healthy epithelium also. Twelve years ago, Max Schultze observed that the lowest of the cells forming, in many layers, the cuticle were often covered with spines or grooves. His brother confirmed this in fishes, and other observers had done so in many diseases of the skin. In endeavouring to make out the real nature of this structure, Dr. Martyn, by the employment of unusually thin sections, staining, and the highest available powers of the microscope, had discovered that the cells which appeared "spinous" or "echinate", when isolated from their connection, if they could be at any time seen in single layers, were simply united together by delicate bands. These were so constantly seen broken across, that they assumed the form of tubercles or "prickles". As repeated observations confirmed this, the name "conjoined epithelium" had been proposed for this form or stage in the cell-life. These observations, of which drawings were engraved in the *Microscopical Journal* for August, were made on cancer of the skin. Dr. Martyn said that the conjoint epithelium was also to be found in (1) the human skin; 2. The front of the eye in the pig; 3. The lips of at least one fish (*Zeus faber*). The difficulty of making the structure clear in a healthy animal cuticle was: 1. The intense cohesion of those very cells, so that, in trying to stretch one usually broke the uniting bands; 2. The necessity for using a high power, the one-twelfth, from 800 to 1,000 diameters being required to make sure of the nature of the bands. The interest of the subject lay in this direction. All the cells of which living things at any moment consisted were produced by division of a parent either into two equal parts (fissiparous), or by budding off a small bit (gemmiparous). Epithelial cells grew so, too, and, in "conjoined" epithelium, the division-process was lingering on. Many cells divided like an hour-glass; but here the points were very numerous. Protoplasm, of which cells at first consisted, varied constantly in form, as the amœba, or the white blood-cell. While alive, in a formative sense, it moved. The old outer firm wall, or shell of matter which formed around cells, and which was called cell-wall, had ceased to have this formative life, whatever functional powers it might have. Cells of many striking shapes were found in the organic world—star-shaped, spindle-shaped, caudate, and so on. In the early discoveries of cell-growth, innumerable mysterious vital powers were attributed to cells, amongst which was that of projecting processes: long wandering arms pervading intercellular tissue or other structures. As Dr. Martyn endeavoured to show some years ago, the form of the cell was almost invariably the result of ordinary force. It was a form which the cell was forced to take by the dragging out of the points at which it was in the act of dividing. This idea was now familiar, and the conjoined epithelium was a good illustration. A good subject for investigation would be those cases in which cells are covered with ciliary processes, probably from splitting of hardened and formed outer material.

The Physiological Action of the Cinchon and Pyridine Bases.—A paper on this subject by Dr. J. G. M'KENDRICK and Professor DEWAR, was read by the former gentleman. The following is an abstract. It is well known that quinine, cinchonine, or strychnine yield, when distilled with caustic potash, two homologous series of bases, named the pyridine and chinoline series. Bases isomeric with these may also be obtained by the destructive distillation of coal, or from Dippel's oil, got from bone. Greville Williams has pointed out that chinoline obtained from coal-tar differs in some respects from that yielded by cinchonine. In this research, the authors endeavoured to ascertain (1) the physiological action of the various members of the series; (2) whether there was any difference in this respect between the members of the series obtained from cinchonine and those got from tar; and (3) whether, and if so, how, both as regards extent and character, the physiological action of these bases differed from that of the original alkaloidal bodies. The bases in both series are difficult to separate from each other; but this has been done as far as possible by repeated fractional distillation. The salt employed was the hydrochlorate. This, dissolved in water, was introduced by a fine syringe under the skin of the animal. The action of chinoline was tested on frogs, mice, rabbits, guinea-pigs, cats, dogs, and man; but as the effects were found to be similar in all of these instances, the majority of the observations were made on rabbits. The experiments with the other substances were made on rabbits and frogs. The physiological action of hydrochlorate of chinoline was first

examined. Its action was then compared with that of the hydrochlorates of the chinoline series of bases distilling at higher temperatures, including such as lepidine, disoline, tetrahiroline, etc. In the next place, the physiological action of the pyridine series was studied, beginning with pyridine itself, and passing upwards to bases obtained at still higher boiling-points, such as picoline, lutidine, etc. Lastly, the investigation was directed to the action of condensed bases, such as dipyrindine, parapicoline, etc.; and the effects of these substances were compared with those produced by the members of the chinoline series and among themselves. The following are the general conclusions.

2. There is a marked gradation in extent of physiological action of the members of the pyridine series of bases, but it remains of the same kind. The lethal dose becomes reduced as we rise from the lower to the higher.

3. The higher members of the pyridine series resemble in physiological action the lower members of the chinoline series, except (1) that the former are more liable to cause death by asphyxia, and (2) that the lethal dose of the pyridines is less than one half that of the chinolines.

4. In proceeding from the lower to the higher members of the chinoline series, the physiological action changes in character, inasmuch as the lower members appear to act chiefly on the sensory centres of the encephalon and the reflex centres of the cord, destroying the power of voluntary or reflex movement; while the higher act less on these centres, and chiefly on the motor centres, first, as irritants, causing violent convulsions, and at length producing complete paralysis. At the same time, while the reflex activity of the centres in the spinal cord appear to be inactive, they may be readily roused to action by strychnine.

5. On comparing the action of such compounds as C^9H^9N (colidine) with $C^9H^{10}N$ (conia, from hemlock), or $C^{10}H^{11}N$ (pyridine) with C^9H^9N (nicotine, from tobacco), it is to be observed that the physiological activity of the substance is, apart from chemical structure, greatest in those bases containing the larger amount of hydrogen.

6. Those artificial bases which approximate the percentage composition of natural bases are much weaker physiologically, so far as can be estimated by amount of dose, than the natural bases; but the kind of action is the same in both cases.

7. When the bases of the pyridine series are doubled by condensation, producing dipyrindine, parapicoline, etc., they not only become more active physiologically, but the action differs in kind from that of the simple bases, and resembles the action of natural bases or alkaloids having a similar chemical constitution.

8. All the substances examined in this research are remarkable for not possessing any specific paralytic action on the heart likely to cause syncope; but they destroy life either by exhaustive convulsions, or by gradual paralysis of the centres of respiration, thus causing asphyxia.

9. There is no appreciable immediate action on the sympathetic system of nerves. There is probably a secondary action; because, after large doses, the vaso-motor centre, in common with other centres, becomes involved.

10. There is no difference, so far as could be discovered, between the physiological action of bases obtained from cinchonine and those derived from tar.

Dr. McKendrick also described the physiological effects of various methyl and ethyl compounds of chinoline. He alluded to the researches of Professor Crum Brown and Dr. Thomas R. Fraser on the action of methyl and ethyl strychnia as examples of a complete change in physiological action being produced by a change in chemical constitution. He and Professor Dewar had found the ethyl and methyl compounds of chinoline to have an action very different from chinoline alone. They were found to be much more active than chinoline alone, and to produce effects similar to those of the higher members of the chinoline series. He then indicated the important considerations suggested by this investigation; and said it was not too much to anticipate that the chemist may yet be able to build up compounds having effects resembling those of such valuable remedies as quinine, morphia, etc.—

Dr. PYE-SMITH said it was gratifying to find that so important a branch of science was being investigated by two such eminent men as Dr. McKendrick and Professor Dewar. Some of the bases to which reference had been made would, no doubt, prove useful medically and physiologically, especially in the latter capacity. With regard to cinchonine, he had made some experiments with it on the human frame; and he was led to the conclusion that the further it was kept from patients the better it would be. It was certainly cheaper than quinine, but it had many objectionable characteristics. He was glad to hear of the promised advantages of chinoline, which, if realised, would help them out of the difficulties attending the administration of woora to the mammalia.

VACCINATION.—Mr. Thomas Taylor of Bocking, Essex, has been awarded an extra vaccination gratuity, amounting to £15 17s. Mr. J. Comyns Leach of Sturminster Newton has received, for the second time, a grant of £8 16s. for efficient vaccination.

ASSOCIATION INTELLIGENCE.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

The next meeting of the above Branch will be held at the Pavilion Hotel, Folkestone, on Thursday, September 16th, 1875, at 3 o'clock; Dr. HENRY LEWIS of Folkestone in the Chair.

Dinner at 5 o'clock precisely. Charge, 6s. 6d., exclusive of wine.

Gentlemen who wish to make communications to the meeting are requested to inform me at once, in order that a notice thereof may be included in the circular convening the meeting.

EDWARD WHITEFIELD THURSTON, *Honorary Secretary*,
Ashford, August 29th, 1875.

NORTHERN COUNTIES (SCOTLAND) BRANCH.

The annual meeting of this Branch will be held at Elgin, on Saturday, September 18th, at 12.30 P.M. Dr. VASS, of Tain, President-elect. Particulars by circular.

J. W. NORRIS MACKAY, *Honorary Secretary and Treasurer*,
Elgin, September 2nd, 1875.

SOUTH MIDLAND BRANCH.

The autumnal meeting will be held at Northampton, on Wednesday, September 22nd; HENRY TERRY, Esq., President-elect.

Gentlemen intending to read papers are requested to forward their titles forthwith to Dr. Bryan.

J. M. BRYAN, M.D.,
W. MONON, Esq., *Honorary Secretaries*.

Northampton, September 1st, 1875.

MIDLAND BRANCH.

A MEETING of the above Branch will be held at Matlock Bath, on Thursday, September 23rd. Several papers have been promised. Further information in next week's JOURNAL.

F. W. WRIGHT, *Honorary Secretary*.

Derby, September 1st, 1875.

NORTH OF ENGLAND BRANCH.

The autumnal meeting of this Branch will be held at the Queen's Hotel, Sunderland, on Thursday, September 23rd, at 3 P.M.; S. E. PIPER, F.R.C.S., President.

The following papers have been promised.

1. Dr. J. W. Eastwood. The Prevalent Practice of Advertising Medical Works in the Non-Medical Press.

2. Dr. C. Gibson. Certain Forms of Blood-Diseases.

Gentlemen who are desirous of reading papers will oblige by communicating with the Secretary.

Dinner at the Queen's Hotel, at 4.45 P.M. Tickets, exclusive of wine, seven shillings and sixpence.

G. H. PHILIPSON, M.D., *Honorary Secretary*
Newcastle-upon-Tyne, September 1st, 1875.

MEMBERS PRESENT AT THE EDINBURGH MEETING.

The following names of members and visitors attending the meeting were entered in the book provided for that purpose in the Reception Room. The number of members of the Association who were present exceeded one thousand.

Action, Wm., Esq., London; Adams, T. R., M.D., Craydon; Adams, W., Esq., London; Ady, John E., Esq., Edinburgh; Ady, J. C., Esq., Burmah; Affleck, J. O., M.D., Edinburgh; Agar, S. H., L.K.Q.C.P., Henley-in-Arden; Ainslie, Wm., Esq., Edinburgh; Aitchison, J., Esq., Wall-end-on-Tyne; Aitken, J., M.D., Govan; Aitken, L., M.D., Rome; Alcock, J., Esq., Burslem; Aldred, H. A., M.D., London; Alexander, A. M. B., Caithness; Alexander, W., M.D., Dundonald; Alexander, W. B., Esq., Edinburgh; Alfred, Stephens S., Esq., London; Allan, Alexander, Esq., Jersey; Allan, D., M.D., Bonar Bridge; Allan, James, Esq., Edinburgh; Allbutt, T. Clifford, M.D., Leeds; Alsop, Thomas O. F., M.B., Royal Infirmary, Edinburgh; Althaus, Julius, M.D., London; Anderson, D. H. B., M.D., Army Medical Department; Anderson, Mrs. E. Garrett, M.D., London; Anderson, H. S., M.D., Selkirk; Anderson, James, M.D., Bridge of Allan; Anderson, James, Esq., Musselburgh; Anderson, James, Esq., Ulverstone; Anderson, J. T. W., Esq., Edinburgh; Anderson, J. W., M.D., Glasgow; Anderson, John, M.D., Ulverston; Anderson, Robert, M.D., Seaton; Anderson, Thomas, M.B., District Asylum, Edinburgh; Anderson, T. M'Call, M.D., Glasgow; Annandale, Thomas, Esq., Edinburgh; Andrew, Edwyn, M.D., Shrewsbury; Andrianaly, Madagascar; Archbuckle, Hugh W., M.D., Thorne; Archibald, D., M.D., St. Andrew's; Archibald

John, M. B., Biggar; Arlidge, J. T., M.D., Newcastle-under-Lyme; Arras, William, Esq., Wetheral; Artott, George, Esq., Lockerbie; Arthur, Hugh, M.D., Andree; Atwell, G. James, Esq., Altonham; Atthill, Londe, M.D., Dublin; Atkinson, E. T., Esq., Richmond; Atkinson, George P., Esq., Pontefract.

Baldon, H. C., Esq., Edinburgh; Baid, G. Dallas, Esq., Fimthgow; Baker, Alfred, Esq., Birmingham; Baker, James, Esq., Scotland; Baker, J. C., M.D., Liverpool; Baker, J. Wright, Esq., Derby; Balfour, A. H., Esq., Portobello; Balfour, A., M.B., Portobello; Balfour, J. H., M.D., F.R.S., Edinburgh; Balfour, Thomas A. G., M.D., Edinburgh; Ball, Alfred, Esq., York; Ballantyne, Alexander, M.D., Dalkeith; Banks, Alexander, Esq., Edinburgh; Barbour, George F., Esq., Bousked; Barety, A., Nice; Barnes, Arthur R., Esq., Faversham; Barnes, Henry, M.D., Carlisle; Barnes, Robert, M.D., London; Bartlett, H. Critchett, Esq., London; Barr, Thomas, M.D., Glasgow; Basset, John, M.D., Birmingham; Batten, Thomas, Esq., Coleford; Baxter, W., Esq., Kilmarnock; Beatson, George T., M.B., Newcastle-on-Tyne; Beddoe, John, M.D., F.R.S., Bristol; Bedford, H. C., Esq., Cape of Good Hope; Begbie, J. Warburton, M.D., Edinburgh; Beckley, W. C., M.D., London; Belcumbie, Rev. Francis F., Edinburgh; Bell, Rev. D., M.D., Goole; Bell, James M., M.D., Kettle; Bell, J. H., M.D., Bradford; Bell, Joseph, Esq., Edinburgh; Bell, Robert, M.D., Glasgow; Bennett, E. A., Esq., Nelson-in-Marsden; Bennett, E. H., M.D., Dublin; Bennett, H. N., Esq., Dublin; Bennett, J. Hughes, M.D., F.R.S.E., Edinburgh; Bennett, J. N., Esq., Mill Crux House; Bennie, Jas., Esq., Currie; Bernard, Walter, L.K.Q.C.P., London; Beveridge, Robert, M.B., Aberdeen; Berne, J. F. de, Esq., Paris; Berne, J. F., Esq., Mauritius; Bilton, Lewis, Esq., Edinburgh; Bindon, W. J., Vereker, Esq., Edinburgh; Bishop, John, M.D., Edinburgh; Bishop, Thomas, M.D., Paris; Blair, Sheriff, Inverness; Blandford, Jos. W., Esq., Durham; Blanshard, Geo., Esq., Edinburgh; Blair, Wm., M.D., Jedburgh; Blaney, Roland, Esq., India; Bleioch, A., M.B., Edinburgh; Block, Oskar, Copenhagen; Blount, John, Esq., Chesterfield; Blumer, Luke, M.D., Sunderland; Blumington, G. F., M.D., Kinross; Borthwick, Alexander, M.D., Dumfries; Bott, John, Esq., Huddersfield; Bott, Thos. B., M.D., Bury; Bouchet, George, Esq., Mauritius; Bowes, Richard, Esq., Richmond, York; Bowie, John, Esq., Edinburgh; Bradley, Charles, Esq., Nottingham; Bradwood, P. M., M.D., Bickenhead; Brakenedge, David, M.D., Edinburgh; Bramwell, B., M.B., Newcastle-on-Tyne; Bramwell, J. W., Esq., North Shields; Bramwell, J. P., M.D., Perth; Branford, W. H., Esq., Edinburgh; Bratton, James, Esq., Shrewsbury; Bremner, Bruce A., M.D., Edinburgh; Bremner, Allan S., Esq., Edinburgh; Bridger, John, Esq., Cottingham; Bridgman, I. T., Esq., Berkeley; Briggs, Henry, M.D., Burnley; Britton, Thomas, M.D., Halifax; Broadbent, Lewis G., M.D., Hamburg; Broadbent, S. W., Esq., South Hetton; Durham; Broadbent, W. H., M.D., London; Brodie, David, M.D., Liberton; Brooke, Sir William, Nice and London; Brooks, James W., M.D., New York; Brotherton, Peter, Esq., Aloa; Brown, Alexander, Esq., Coldstream; Brown, Alexander Crum, M.D., Edinburgh; Brown, Colville, M.D., Berwick-on-Tweed; Brown, Henry, Esq., Northallerton; Brown, James, Esq., Isle of Skye; Brown, Joseph J., M.B., Edinburgh; Brown, Robert, M.D., Tranent; Brown, T., Sinclair, M.B., Barbadoes; Brown, Wm., Esq., Carlisle; Browne, Lennox, Esq., London; Bruce, Robert, M.D., Edinburgh; Bruce, Wm., M.D., Dingwall; Bruce, W. T., Esq., Halifax, Nova Scotia; Brunell, Matthew, Esq., Morpeth; Brunton, T. Lauder, M.D., F.R.S., London; Bryson, Jas. M., Esq., Edinburgh; Buchan, Alex., Esq., Edinburgh; Buchanan, A. M., M.D., Glasgow; Buchanan, Andrew, M.D., Glasgow; Buchanan, George, M.D., Glasgow; Bullus, Wm., Esq., Staffordshire; Burn, John, M.D., Edinburgh; Burns, John J. D., M.D., Rochester; Burrows, Sir Cordy, Brighton; Butler, Thomas M., Esq., Guildford.

Cadell, Francis, M.B., Edinburgh; Cadell, Major T., Cockenzie House; Caldwell, John, Esq., Shotts; Cameron, Hector C., M.D., Glasgow; Cameron, John, M.B., Lochgilphead; Cameron, R. M., Esq., Edinburgh; Campbell, J., Esq., Dundee; Campbell, J. A., Esq., Garland; Campbell, Peter, M.D., Edinburgh; Campbell, Wm., Esq., Hastings; Campbell, Wm., Esq., London; Campbell, Wm. Watson, M.D., Dunse; Candy, John, M.D., Devonport; Cappie, James, M.D., Edinburgh; Carey, Ernest Gilbert, Esq., India; Carey, Wm., Esq., Edinburgh; Carlyle, W. J., M.D., Langholm; Carmichael, J., Esq., Edinburgh; Carmichael, Jas., M.D., Edinburgh; Carmichael, Wm., Esq., Edinburgh; Carmichael, W. S., M.D., Edinburgh; Carmichael, W. M., Esq., Australia; Carnegie, John, M.D., Chesterfield; Carpenter, Alfred, M.D., Croydon; Carpin, J. R., Esq., Edinburgh; Caruthers, J. B., M.D., Edinburgh; Carter, T. A., M.D., Leamington; Cash, A. M., M.B., Edinburgh; Cassels, J. P., M.D., Glasgow; Cathcart, Charles W., Esq., Edinburgh; Caton, Richard, M.D., Liverpool; Caverhill, T., Esq., Haddington; Chadwick, Charles, M.D., Leeds; Chalmers, D. Short, Esq., Edinburgh; Chambers, Thomas, M.R.C.P., London; Champey, C. Thornton, Esq., Glasgow; Championniere, J., M.D., Paris; Chapman, J., Esq., Edinburgh; Charles, J. J., M.D., Belfast; Charlesworth, James, Esq., Hanley; Charteris, M., M.D., Glasgow; Chavoin, Silmours, Esq., Edinburgh; Cheyne, W. Watson, M.B., Shetland; Chiene, John, Esq., Edinburgh; Chisholm, Wm., Esq., Edinburgh; Christie, Thomas B., M.D., Ealing; Christison, Sir Robt., Bt., M.D., D.C.L., Edinburgh; Church, H. M., M.D., Edinburgh; Church, W. J., Esq., Weymouth; Clark, Andrew, M.D., London; Clark, James, M.D., Chasetown; Clark, Robt., Esq., Edinburgh; Clarke, V. C., M.D., London; Clarke, W. M., Esq., Bristol; Clouston, T. S., M.D., Edinburgh; Clume, J. Leopold, Esq., Jamaica; Coats, Joseph, M.D., Glasgow; Cochran, John, M.D., Edinburgh; Cockroft, Wm., Esq., Middleham; Coghill, J. G. Sinclair, M.D., Edinburgh; Coldstream, John, Esq., Edinburgh; Colston, Jas., Esq., Edinburgh; Constable, John, M.D., Leuchars; Cooke, W. H., M.D., Aldridge, Walsall; Coombs, Rowland H., Esq., Bedford; Cooper, Jas., Esq., Cromer; Cooper, W. J., Esq., Richmond, Surrey; Copeman, E., M.D., Norwich; Corbin, M. A. B., Esq., Guernsey; Coimack, Sir John Rose, M.D., Paris; Cornwall, James, Esq., Fairford; Cossar, Thomas, M.D., King's Lynn; Cotton, H. J., M.B., Edinburgh; Courtenay, G. T., Esq., Tranent; Cooveny, James H., Esq., Prestwick; Cowan, Fred. S., Esq., Bath; Cowan, Samuel, Esq., Bath; Cowell, George, Esq., London; Cox, D. Charles, Esq., Penicuik; Cox, John, D., Esq., Innerleithen; Cox, Joshua J., Esq., Innerleithen; Coxe, Sir James, M.D., Kinellan; Crabb, James, M.B., Edinburgh; Craig, Archibald, M.B., Pathhead-Ford; Craig, W., M.D., Edinburgh; Crawford, D., Esq., Aberdeen; Crawford, R., Esq., London; Crease, James R., Esq., South Shields; Cresswell, Pearson R., Esq., Dowlaits; Crichton, George, M.B., Perth; Crichton, James S., M.D., Arbroath; Crickmay, Edward, Esq., Laxfield; Crichton, R. W., M.D., Tavistock; Cripps, Edward, Esq., Cirencester; Cripps, Edward C., Esq., Cirencester; Croom, J. Haliday, M.B., Edinburgh; Cullingworth, Charles J., Esq., Manchester; Cumming, Wm., M.D., Edinburgh; Cumming, James, M.D., Edinburgh; Cunningham, R. Murray, Esq., Glasgow; Cunningham, D. J., M.B., Edinburgh; Cunningham, R. J. B., M.D., Edinburgh; Currie, John, M.D., Lydney; Cuthbert, Clark, M.D., Edinburgh; Cuthbertson, David, M.D., Denny; Cuthill, James, M.D., Denny; Daldy, T. M., M.D., London; Dalgleish, W. Scott, Esq., Edinburgh; Darnley,

Clement, Esq., Mauritius; Davidson, Alexander Dyce, M.D., Aberdeen; Davies, Andrew, Esq., Swansea; Davies, David, Esq., St. Andrew's; Davies, Ebenezer, Esq., Swansea; Davies, John, M.D., Manchester; Davies, Robert, Esq., Abingdon; Davies, Collyer, T. M., Chester; Davis, F., Esq., Cymer; Davis, H., Esq., Wales; Davis, R. A., M.D., Lichfield; Dawson, Adam, Esq., Edinburgh; Day, W. H., M.D., London; Deas, Peter Maxwell, M.B., Manchester; Deacon, Gustavus, M.D., Clapham; Decham, J. S., M.D., South Shields; Denton, J. E., Esq., Leicester; De-nord, J. E., M.D., Liverpool; Dewar, Alexander, M.D., Melrose; Dewar, James A., M.D., Arbroath; Dick, John, Esq., London; Dickson, M. H., London; M.D., Glasgow; Di-En, Rev. T. Milton, Clapham; Dickson, Walter, M. H., London; Dickson, Wm. James, M.D., Falkland; Dick, John, Esq., Hull; Doonan, A. H., Esq., Derby; Dougal, Joseph, Esq., Edinburgh; Douglas, Captain C., Edinburgh; Douglas, Henry, M.D., Paris; Douglie, Douglas, M.D., Esq., Sunderland; Douglas, R. Green, Esq., Leamington; Dow, Wm. B., M.D., Duxford; Downie, R. M., M.D., Bengal, India; Downie, Thomas, M.D., Blantyre; Dowse, Thomas S., M.D., London; Drew, John, M.B., Stirling; Drummond, F. Dowse, M.D., Royston; Drysdale, John, M.B., Uphall; Dunbar, Henry, M.D., Kirkcaldie; Duncan, Alexander George, M.B., Cromond; Duncan, A. Jas., M.D., Dundee; Duncan, J. Matthew, M.D., Edinburgh; Duncan, John, M.D., Edinburgh; Duncanson, J. J. Kirk, M.D., Edinburgh; Dunsop, John, M.D., Edinburgh; Dunn, Robert, Esq., London; Dunsunure, James, M.D., Edinburgh; Dunsunure, James, jun., M.D., Edinburgh; Dupuy, M. E., Paris; Durand, Rudolphe, Esq., Mauritius; Durham, James, Esq., J.P., Mayfield; Durrant, Christopher M., M., Ipswich.

Eagle, Woodfield, Esq., Aylesbury; Eames, J. Alex., M.D., Cork; Eames, J. C., M.B., Manchester; Eassie, Wm., Esq., London; Elliott, Robert, M.D., Carlisle; Ellison, W. A., M.D., Ipswich; Evans, Charles, Esq., Eskewell; Evans, John, M.D., Sunderland; Evans, Thomas, Esq., M.R.C., Leamington; Evans, Thomas, M.D., Newquay; Everett, D., Esq., Worcester; Ewart, T. C., Esq., London; Faircloth, Richard, Esq., Newark; Fairless, W. D., M.D., Gt. Bowtell; Falconer, R. Wilbraham, M.D., Bath; Farquharson, John, Esq., Stockton-on-Tees; Farquharson, Robert, M.D., London; Fasson, C. H., Esq., Edinburgh; Favell, Wm. F., Esq., Sheffield; Fergus, Andrew, M.D., Glasgow; Ferguson, F., Esq., London; Ferguson, John, Esq., London; Ferguson, Sir William, Bart., London; Field, George, Esq., London; Finlay, Wm., M.D., Edinburgh; Finlay, W. A., M.D., Edinburgh; Finlayson, Jas., M.D., Glasgow; Finlayson, M. B., Esq., Leith; Finlayson, Thomas, Esq., Leith; Finzi, J. M., Esq., London; Fisher, S. Wm., M.D., London; Fleming, Andrew, Esq., Edinburgh; Fleming, J. N., M.D., Newcastle-on-Tyne; Fleming, Wm. Jas., M.B., Glasgow; Fletcher, Adam, M.D., Bury; Fletcher, Bell, M.D., Birmingham; Fletcher, J. Shepherd, M.D., Manchester; Folker, W. H., Esq., Hanley; Folson, Charles F., Esq., Boston, U.S.; Forbes, M., Esq., London; Forbes, Walter, M.D., Edinburgh; Foster, Ealhazar, Esq., Birmingham; Fothergill, J. Milner, M.D., London; Fothergill, J. R., M.D., Darlington; Foyles, M.D., Edinburgh; Fowler, W. C., M.D., Chelmsford; Fox, Charles, Henry, M.D., Brislington, Bristol; Fox, Cornelius, M.D., Chelmsford; Fox, Edward L., M.D., Clifton; Frain, Joseph, M.D., South Shields; Fraser, Donald, M.D., Paisley; Fraser, John, Esq., Edinburgh; Fraser, Roderick, Esq., Edinburgh; Fraser, Thomas, Esq., Arbroath; Fraser, T. R., M.D., Knutsford; Freer, Alfred, Esq., Stourbridge; Freer, Frederick A., Esq., Govan; Frew, Wm., M.B., Newmilns; Fry, Charles D., M.D., Fernane, Ireland; Furley, R. C., Esq., Edinburgh; Furley, W. Grant, Esq., Edinburgh.

Gairdner, M. B., M.D., Grief; Gairdner, W. T., M.D., Glasgow; Galt, John, Esq., Ashton-under-Lyne; Garland, Onrad H., M.B., Leith; Garman, J. C., Esq., W. Chesbury; Garner, J., Esq., Birmingham; Garner, John E., Esq., Preston; Garthside, James, Esq., Liverpool; Gentle, David, Esq., British Honduras; Gibb, C. J., M.D., Newcastle-on-Tyne; Gibbons, R. H., Esq., Edinburgh; Gibbons, Charles, M.D., Newcastle-on-Tyne; Gibbs, Charles Henry, Esq., Leventry; Gill, H. Clifford, Esq., York; Gillespie, James D., M.D., Edinburgh; Gilrush, G. R., Esq., Edinburgh; Girvan, Robert, Esq., Maybole; Glendinning, Geo., Esq., Edinburgh Royal Infirmary; Goldie, George, Esq., Leeds; Goldie, R. W., Esq., London; Goodall, W. P., Esq., Birmingham; Goodchild, John A., Esq., Easton; Goodeve, K. C., Esq., Bristol; Gordon, D. M.D., Edinburgh; Gordon, H. M. B., Kirkcaldie; Gordon, J. M. B., East Linton; Gordon, P., Esq., Edinburgh; Gordon, W. M.D., Edinburgh; Gorman, J., Esq., Rutherglen; Gonnall, J. H., Esq., Warrington; Graham, A. F., M.D., Liverpool; Graham, B. M.B., Honours; Graham, J., Esq., London; Grainger, J. R., Esq., Kilmarnock; Grance, W. D'Oyly, M.B., Edinburgh; Grant, David, Esq., Edinburgh; Grant, Jas., M.D., Longton; Grant, Rev. James, Edinburgh; Grant, John, Esq., Penicuik; Grassie, Frederick L. M., Esq., Edinburgh; Gravely, Richard, Esq., Newark; Gray, James, M.D., Glasgow; Gray, Thomas, Esq., Dumfries; Greaves, John B., Esq., Edinburgh; Green, Ed. F. S., M.B., Glasgow; Gregory, George, M.D., Bolton; Greig, David, Esq., Edinburgh; Greison, S., Esq., Melrose; Griffiths, T. D., M.D., Swansea; Grigor, John, M.D., Rome; Grosche, Herman J., M.D., Cincinnati, Ohio; Grosvenor, Wm., Esq., London; Groves, Charles H., M.D., Edinburgh; Gueman de Mussy, Noel, M.D., Paris; Gunn, R. Marcus, M.B., Golspe; Gunn, Wm., Esq., Edinburgh; Guthrie, David, K., Esq., Liberton; Gyergyai, Arpad, M.D., Klausenburg, Hungary.

Hales-shen, S. O., M.D., London; Hadden, John, M.D., Horncastle; Haddon, John, M.D., Manchester; Hadfield, James, Esq., Howdon-on-Tyne; Haining, William, M.D., Chester; Haldan, Bernard, Esq., Preston; Hall, C. Radclyffe, M.D., Torquay; Hall, J. G., Esq., Swansea; Hall, J. Lewis, Esq., Edinburgh; Hall, William, Esq., Salford; Hallett, Alexander G., Esq., Antigua; Hamilton, Alexander, Esq., Ashton-under-Lyne; Hamilton, Archibald, M.D., Windermere; Hamilton, Thomas, M.D., Kello; Hardesty, J. J., Esq., Galashiels; Hardie, James, M.D., Manchester; Hardie, R. M.B., Edinburgh; Barker, Thomas, M.B., Yorkshire; Harcourt, Isaac, Esq., Reading; Harris, Alexander, Esq., Edinburgh; Harris, Henry, M.D., Redruth; Harrison, A. J. M. B., Walsall; Hart, Archibald, Esq., London; Hart, Ernest, Esq., London; Harvey, Alexander, M.D., Aberdeen; Harvey, Alexander, jun., Esq., China; Harvey, Charles A., M.D., Carl. Hawkward, Edwin, M.D., London; Hawkins, Clement, Esq., Cheltenham; Hayward, James, Esq., London; Heath, Christopher, Esq., London; Heaton, J. D., M.D., Leeds; Heffernan, Alexander, Esq., Speenymoor; Henning, J. Hughes, Esq., Kinslayton; Hemming, W. B., Esq., London; Henderson, Alexander, Esq., Partick, Glasgow; Henry, Alexander, M.D., Edinburgh; Henderson, Henry, M.D., Bath; Hepburn, David, Esq., Edinburgh; Heppner, Captain, Edinburgh; Herlertson, Richard G., Esq., Cummock, Ayrshire; Hill, Charles, M.D., Liverpool; Hill, Matthew, Esq., Bristol; Liverpool; Higginson, J. R., Esq., Clifton, York; Hissfeld, John C., M.B., Banff; Hoare, Wm. P., Esq., Darford; Hoggan, George, M.D., London; Hoggan, Frances Elizabeth, M.D., London; Holdsworth, Samuel, M.D., Wakefield; Holland, E., M.D., London; Holmes, James, M.B., Warwick; Home, A.

Thomas, Esq., Edinburgh; Hooper, W. D., M.D., Lynchburg, U.S.; Hopwood, S. Henry, F. Esq., Sunderland; Houston, Patrick C., M.D., Kirkcaldy; Howell, D. De Berd, Esq., Clapton, London; Howat, Rev. H. T., Liverpool; Hume, George H., M.D., Newcastle-on-Tyne; Humphreys, J. R., Esq., Shrewsbury; Hunt, W. A., Esq., Yeovil; Hunter, Alexander, Esq., Edinburgh; Hunter, George, M.D., Linlithgow; Hunter, Thomas, Esq., Amoy, China; Hunter, William B., M.D., Jedburgh; Hunter, W. M. D., Edington; Huntley, Robert E., M.D., Jarroo-on-Tyne; Husband, W. D., Esq., York; Hutchison, J. C., M.D., America; Imlach, Francis, M. B., Liverpool; Imlach, Francis B., Esq., Edinburgh; Inglis, Archibald, M.D., Edinburgh; Irvine, M. S., Esq., Edinburgh; Irvine, W. Stewart, M.D., Pitlochry.

Jackson, J., Esq., Birmingham; Jackson, J., Esq., Bradford; Jackson, J. B., Esq., Birmingham; Jackson, R. A., Esq., Lancaster; Jagielski, V. A., M.D., London; James, Alexander, M.B., Liverpool; Jamieson, James, Esq., Edinburgh; Jansz, Stephen P., Esq., Ceylon; Jefferson, C. S., Esq., Newcastle-on-Tyne; Jeffers, Robert R., Esq., Dalketh; Jefferson, T. J., Esq., Market Weighton; Jeffreys, Richard, Esq., Clifton; Jepson, Edward, Esq., Durham; Jepson, J., Esq., Durham; Johnson, Christopher, Esq., Lancaster; Johnson, John, Esq., London; Johnson, Z., L.K.Q.C.P., Kilkenny; Johnston, James, M.B., Birmingham; Johnston, R. C., Esq., Edinburgh; Johnson, Rev. W. Vienna; Johnston, William, M.D., Stirling; Johnstone, John, Esq., Birmingham; Jolly, Robert, M.D., Birmingham; Jones, A. E., M.B., Edinburgh; Jones, Evan, Esq., Aberdeen; Jones, P. S., M.D., Sydney; Jones, Talfourd, M.B., Brecon; Jones, T. Wharton, Esq., F.R.S., London; Jones, William, Esq., Ruabon; Jordan, Furneaux, Esq., Birmingham.

Kealy, J. R., M.D., Gosport; Keetley, Thomas B., Esq., Grimsby; Keiller, Alexander, M.D., Edinburgh; Keith, George, Esq., Edinburgh; Keith, Thomas, M.D., Edinburgh; Kemp, W. E., Esq., Castleford; Kennedy, John, M.D., Elie; Kennedy, R., Esq., Edinburgh; Kennedy, R., M.D., London; Kennedy, W. J., M.D., Dalketh; Kerr, William D., Esq., Edinburgh; Kershaw, John, Esq., King; Kerswill, Robert, Esq., St. Germans; Key, A. Cooper, Esq., London; Key, Kelburne, M.D., Hull; Kirk, J. Balfour, M.D., Bathgate; Kirk, Robert, M.D., Glasgow; Kirkwood, James, Esq., Edinburgh; Knox, John, M.D., Bakewell; Knott, Thomas, Esq., Edinburgh.

Laidlaw, R., Esq., Glasgow; Laing, George, Esq., Ferryport-on-Craig; Laing, James, M.D., Bridge-of-Fern; Lane, W. L., M.B., Crossgates, Dunfermline; Latimer, H. A., Esq., Swansea; Lawrence, J., M.D., Cumnook; Lawson, W. C., Esq., Armagh; Leak, F. M., Esq., Hemsworth; Leak, T. M., Esq., Hemsworth; Lee, Edmund, Esq., Manchester; Leech, D. J., M.B., Manchester; Leeming, Robert T., Esq., Kendal; Legat, Andrew, M.D., South Shields; Leitch, J. M., Esq., Edinburgh; Leitich, Robert, Esq., Edinburgh; Leslie, Louis, M.D., Alton; Hants; Lewis, David, Esq., Edinburgh; Lewis, Thomas, M.D., Thornhill; Llanelly, Liddle, John, Esq., London; Liebman, M. Charles, Trieste; Liebreich, R., Esq., London; Lindsay, John, M.D., Lesmahagow; Lindsay, J. Murray, M.D., Perth; Linton, John, M.D., Edinburgh; Lister, Joseph, Esq., F.R.S.S., Edinburgh; Little, S. A., Esq., Edinburgh; Little, W. J., M.D., London; Littlejohn, Henry D., M.D., Edinburgh; Livesay, William, M.D., Sudbury; Livy, John, M.D., Bolton; Lockie, S., M.D., Carlisle; Locking, J. A., Esq., Hull; Lodge, L., Esq., St. Asaph; Logan, Thomas, M.D., Penpont, Dumfriesshire; Logie, James S., M.D., Kirkwall; Longbotham, George, Esq., Middleborough; Longmuir, James, M.D., Bathgate; Lord, Charles F. J., Esq., Hampstead; Lorimer, George, M.D., Buxton; Lothian, John A., M.D., Glasgow; Low, Robert Bruce, M.D., Helmsley; Lowe, George, Esq., Burton-on-Trent; Lowe, John, Esq., Edinburgh; Lowe, W. G., M.B., Burton-on-Trent; Lowe, W. H., M.D., Edinburgh; Lowrie, Thompson, M.D., Edinburgh; Lowther, Richard, M.D., Carlisle; Lucas, Robert, M.D., Dalketh; Lucas, Thomas P., Esq., London; Lund, Edward, Esq., Manchester; Lyall, Andrew, Esq., Leven; Lyne, Edward, M.D., Coventry; Lyon, James G., M.D., Glasgow; Lyster, C. E., M.D., Liverpool.

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O'Brien, Richard, M.D., Tipperary; Odell, William, Esq., Hertford; Ogg, George W., Esq., Edinburgh; Ogston, F., jun., M.D., Aberdeen; Oliver, George, M.D., Harrogate; Osburn, C., Esq., Cork; Otis, F. N., M.D., New York; Owen, Harvey, K. D., M.D., Clapham.

Pacchioti, Professor, Italy; Page, David, M.D., Kendal; Page, Frederick, M.D., Newcastle-on-Tyne; Pantou, George H., Esq., Edinburgh; Parsey, W. H., M.D., Hatton; Parsons, Charles, M.D., Dover; Parsons, F. W., Esq., Wimbleton; Paterson, Alexander, Bridge of Allan; Paterson, C., M.D., Edinburgh; Paterson, John, Esq., Cornwall; Paton, J., Esq., Edinburgh; Paul, J. B., Esq., Edinburgh; Paxton, John, Esq., Norham; Pearce, W. E. Grindlay, Esq., London; Pearson, William, Esq., Glasgow; Peck, Robert, M.D., Glasgow; Peterson, Peter, Esq., Oxford; Philipson, G. H., M.D., Newcastle-on-Tyne; Phin, K. M., Esq., Edinburgh; Pickles, John J., Esq., Leeds; Piper, S. E., Esq., Darlington; Pirie, John, M.D., Glasgow; Pirrie, William, M.D., Aberdeen; Pitt, Thomas S., Esq., Pudsey, Leeds; Platt, Thomas, Esq., Oldham; Playfair, John, M.B., Edinburgh; Playfair, Right Hon. Lyon, M.P., London; Pope, Edmund, Esq., London; Potter, J. W., Esq., Yorkshire; Pottinger, J. G., Esq., Edinburgh; Prichard, Augustin, Esq., Bristol; Prustley, W. D., M.D., London; Procter, William, M.D., York; Prust, Rev. Mr., Edinburgh; Purnell, J. J., Esq., London; Purves, A. P., Esq., Edinburgh; Purves, W. Laidlaw, M.D., London.

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Sandeman, Alfred, Esq., Aberdeen; Sanderson, Alfred, Esq., Edinburgh; Sanderson, A. M., Esq., Musselburgh; Sanderson, Charles E., Esq., Edinburgh; Sanderson, J., Esq., Edinburgh; Sanderson, J. Burdon, M.D., F.R.S., London; Sandby, Robert, M.B., Edinburgh; Saunders, George, C. B., M.D., London; Savage, James, Esq., Bridlington; Schenck, P. L., Esq., New York; Scott, John H., M.B., Edinburgh; Scott, Thomas K., jun., M.B., Musselburgh; Sealy, George J., Esq., Weybridge; Shann, George, M.D., York; Shapter, Thomas, M.D., Exeter; Sherburn, John, Esq., Yorkshire; Sheriff, Thomas, Esq., Ratho; Shettle, Richard C., M.D., Reading; Shiell, W. R., Esq., Melrose; Shuttleworth, G. E., M.D., Lancaster; Sibbald, John, M.D., Edinburgh; Sibson, Francis, M.D., F.R.S., London; Silver, Alexander, M.D., London; Simpson, A. R., M.D., Edinburgh; Simpson, James, Esq., Eastwood; Simpson, W. R., Esq., Edinburgh;

Sinclair, A. W., M.D., Edinburgh; Sinclair, Alexander J., M.D., Edinburgh; Sinclair, D. L., Esq., Halstead; Sinclair, James L., Esq., Edinburgh; Sinclair, Veitch, Esq., Edinburgh; Skeate, Edwin, Esq., Bath; Skinner, N. Esq., Keith; Skinner, William, Esq., Edinburgh; Sloan, George, M.D., Glasgow; Smart, W. R. L., M.D. Hasar, Suddie, R. Esq., South; Smith, A. H. B., Esq., London; Smith, Andrew, Esq., Devon; Smith, George, Esq., Edinburgh; Smith, G. W., Esq., Edinburgh; Smith, John, M.D., Dundee; Smith, John, M.D., Edinburgh; Smith, John, M.D., Edinburgh; Smith, John, M.D., Edinburgh; Smith, J. G. Macdonald, Esq., London; Smith, John, Esq., Edinburgh; Smith, John, Esq., Edinburgh; Smith, M. D., London; Smith, Thomas, Esq., London; Smith, Thomas, M.D., Cheltenham; Smith, William, Esq., London; Manchester, South, Warrington, Esq., Amberg; Smith, Samuel, J. W. L., M.D., Aberdeen; Smythe, Robert, Esq., Edinburgh; Spence, G. H., Esq., Liverpool; Spence, John, Esq., Edinburgh; Somerville, A. T., Esq., New Brunswick; Somerville, Robert, M.D., Galahiel; Spalding, William, M.D., Glasgow; Spence, A. B., Esq., Dundee; Spence, James, Esq., Edinburgh; Spence, Robert, M.P., Buntingford; Spence, R. D., M.D. Indian Army, London; Sproun, W. H., Esq., Buntingford; Standring, Thomas, M.D., Hexham; Stark, B. S., Esq., Barrow-in-Furness; Steele, A. B., L.K.C.C.P., Liverpool; Steer, Henry, M.D., Montrose; Steel, G., Esq., Glasgow; London; Stephen, William, M.D., Currie; Stephenson, G. Skelton, Esq., Grimsby; Stephenson, William, M.D., Edinburgh; Stephenson, W. H., M.D., B. K. M.; Stevens, James, Esq., Ardrossan; Stevens, W. Goldie, Esq., Renfrew; Stewart, A. P., M.D., London; Stewart, Peter, M.B., Durham; Stewart, R. F., Esq., Edinburgh; Stewart, T. Grainger, M.D., Edinburgh; Stewart, Walter C., Esq., Leith; Stewart, William, M.B., Kirkwall; Stewart, William, Esq., Dalkeith; Stirling, D. H., M.D., Perth; Stirling, W. M., Esq., Edinburgh; Stocks, A. W., Esq., Salford; Stockwell, James, Esq., Ormskirk; Stockwell, T. G., Esq., Fife; Stodart, S. T., Esq., Edinburgh; Stone, Herbert S., Esq., New Brunswick; Stone, T. Macdonald, Esq., London; Strachan, John, M.D., D. D. H.; Strachan, W. H., M.D., London; Struthers, John, M.D., Aberdeen; Stuart, Thomas R., Esq., Edinburgh; Summers, T. O., Esq., Nashville; Sutherland, Daniel, Esq., Edinburgh; Sutherland, Henry, M.D., London; Swain, Paul W., Esq., Devonport; Swan, William, Esq., St. Andrew's; Swanzy, H. R., M.B., Dublin; Swayne, J. C. M.D., Clifton; Symons, Mark S., Esq., Dumfries; Symson, F., Esq., Lincoln.

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Wade, W. F., M.B., Birmingham; Waldron, Derwent, Esq., Jamaica; Walker, Hunter W., Esq., Edinburgh; Walker, George, Esq., Birkenhead; Walker, J. B., M.D., Huddersfield; Walker, Robert, M.D., Wooler; Walker, T. Shadford, Esq., Liverpool; Wall, A. B., Esq., Bayswater; Wallace, A., Esq., Glasgow; Wallace, —, Esq., Kinsale; Wallace, John, Esq., Leith; Walley, Thomas, Esq., Edinburgh; Walsh, John, L.K.C.C.P., Stonehurst; Walton, John, Esq., Birmingham; Waters, A. T. H., M.D., Liverpool; Waters, Edward, M.D., Chester; Watson, M., Esq., Lancaster; Watson, Patrick Heron, M.D., Edinburgh; Watson, T. Boswall, Esq., New Brighton; Watson, Thomas H., M.B., Edinburgh; Watson, W. F., Esq., Edinburgh; Watson, W. Tyndall, M.D., Tottenham; Way, John, M.D., London; Webb, Charles, Esq., Basingstoke; Webb, William, M.D., Worksworth; Webster, Henry, Esq., London; Webster, Thomas, Esq., Bristol; Weir, J. W., M.D., Glasgow; Weller, George, Esq., Wanstead; Wells, T. Spencer, Esq., London; Welsh, J. T., Esq., Bombay; Wemyss, A. W., M.D., St. Andrew's; Wemyss, John W., M.D., Broughty-Ferry; West, E. L., Esq., Launceston; Wharton, J., L.K.C.C.P., Oldham; Wheatley, Thomas D., M.D., Oporto; Wheeler, D., Esq., Chelmsford; White, Surgeon-Major, Edinburgh; White, C. L., Esq., Aberdeen; White, James, Esq., Wigan; White, John, Esq., Edinburgh; White, Joseph, Esq., Nottingham; White, T. Charters, Esq., London; Whitelaw, William, M.D., Kirkintilloch; Whiteley, John, Esq., Wakefield; Whitaker, James Travis, M.B., Glasgow; White, John, M.D., Aberdeen; Wight, John, Esq., Edinburgh; Wilkinson, Auburn, Esq., Tynemouth; Will, J. C. Ogilvie, M.D., Aberdeen; Williams, J. M.D., Pontypool; Williams, W., Esq., Edinburgh; Williams, W. Rhys, M.D., London; Williamson, Thomas, M.D., Leith; Willis, G., Esq., Baillieston, Glasgow; Willmore, F. W., Esq., Walsall; Wilson, Alexander, M.B., Motherwell; Wilson, Alexander, M.D., Mid-Caldor; Wilson, David, M.D., Edinburgh; Wilson, F. W., M.B., London; Wilson, George, M.D., Leamington; Wilson, H., Esq., Coatbridge; Wilson, John, M.D., Inverness; Wilson, John, Esq., Kirkcubright; Wilson, Robert, M.D., Alnwick; Wilson, Thomas, Esq., Walsend-on-Tyne; Wilson, William, M.D., Florence; Winchester, J. W., Esq., Edinburgh; Wise, R. Stanton, M.D., Banbury; Wolfe, J. R., M.D., Glasgow; Wolston, Walter I. P., M.B., Edinburgh; Wood, Miles A., Esq., Leckbury; Woodcock, Alex., Esq., Anstruther; Worley, W. C., Esq., London; Wortabet, H. G. L., Syria; Wright, J. B., M.D., Wellingborough; Wright, Matthew Hall, Esq., Birmingham; Wylie, James, Esq., Errol.

Yeld, Henry John, M.D., Sunderland; Yellowlees, D., M.D., Glasgow; Young, David, M.D., Florence, Italy; Young, James, M.D., Edinburgh; Young, James William, M.D., Dublin; Young, P. A., M.D., Portobello; Young, Thomas, Esq., South Shields; Young, W. Butler, Esq., Reading.

Zeigler, W., M.D., Edinburgh

REPORTS OF SOCIETIES.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

July 7th, 1875.

RUTHERFORD HALL, M.D., President, in the Chair.

Case of Paralysis.—Dr. GRANTER STEWART showed: 1. A sailor who had been paralytic since the commencement of spinal curvature, had improved under treatment so as to return to sea, but, after long exertion in bad weather, had again become paraplegic. He was again much improved by treatment. 2. He also showed a man suffering from sclerosis of the posterior columns of the cord. The muscular sense, which gives the power of appreciating weight, was lost in the limbs, and the cutaneous sensibility nearly gone. 3. He also showed a case of muscular atrophy in a blacksmith, chiefly confined to his forearms and legs. It had been progressing slowly for twenty years. 4. He also exhibited a case of bronchiectasis, which illustrated the symptoms well, especially the peculiar factor of the sputum; and 5. A young girl who appeared in tolerable health, but who was suffering from advanced disease of the kidney.

Exhibition of Specimens.—Dr. HALDANE exhibited the parts removed from a very remarkable case, which he had seen once only before death. The history was briefly as follows. A healthy militia sergeant had had diarrhoea, etc., and had been sent in from the regimental hospital. He was jaundiced, and vomited dark matter, stained with blood. The urine, which was exceeding scanty, was highly albuminous. The liver was not diminished in size. The symptoms were those of acute yellow atrophy of the liver. No treatment could be of use, and he died a few hours after admission, with his mind clear to the last. The necropsy showed the liver to be 4lbs. in weight, not much altered. The kidneys were enlarged and contained tubercular abscesses. There was no ulcer of the stomach, but the pancreas was enlarged, softened, and infiltrated with blood. He believed the case was one of great rarity and obscurity.

Mr. ANNANDALE showed a good specimen of cartilaginous tumour of the tibia, treated by amputation; a case of necrosis of the tibia; two-thirds of a cancerous tongue, along with diseased submaxillary glands, which he had recently removed; an epithelial growth on the penis, in a man aged 32, which he had recently removed without removing the whole organ; and a head of a femur excised in early hip-disease.

Mr. J. CHIENE showed a loose cartilage excised from a knee-joint, under carbolic spray.

Dr. ANGUS MACDONALD showed an intestinal concretion removed by Dr. TURNER of Keith, from the rectum. It was a gall-stone incrustated with hairs from a caryopsis, mixed with saline matter.

History of a Cystic Ovarian Tumour.—By JAMES SPENCE, Esq.—This paper was a most careful and complete account of a case of extreme rarity. The facts were briefly as follows. Mrs. E. consulted the late Dr. MacLagan in 1832. She was then twenty-two years of age, and showed a tumour of three years' standing in the left loin; firm, elastic, and as large as a jargonelle pear. This tumour was removed. In 1834, and again in 1836, other tumours, similar in character, appeared in the scar, and were removed by Dr. Douglas MacLagan. Not till 1857 was she again under treatment, when Professor Syme was asked by Dr. Douglas MacLagan to see her, with a view to the removal of another tumour which had made its appearance in the scar about a year before. It was now about the size of half an orange, elastic, irregular, and, on its most prominent part, presented a pink transparent appearance. The tumour and scar were now again widely removed, along with a portion of lumbar fascia. Her general health was excellent; nor was there a symptom of cachexia. The wound healed well, and the tumours never returned. Sir James Paget and Dr. Haldane, who at the time examined the tumour, described its structure as fibrous tissue, containing nucleated cells of an elongated oval form. In November 1868, the patient returned with a tumour of the size of half a small melon on the right mamma, the nipple of which was retracted. There was no glandular involvement. Her health was good, and she looked well. In August 1870, she returned with a tumour in the vicinity of the scar of the last operation, but not in it. This tumour was as large as a small lemon. This was removed, and, on her convalescence from the operation, she had symptoms of stricture of the œsophagus, which, however, seemed to pass off, and were supposed to be nervous in origin. In June 1871, after a visit in the country, she caught cold, had bronchopneumonia and pericarditis, was unable to swallow, had an ulcerated tumour in the axilla, and died exhausted very rapidly. The *post mortem* examination was made by Dr. Wyllie. The body was somewhat emaciated; face pale and sallow.

Over the right mammary region there was a linear curved cicatrix, five inches long, extending from the junction of the third costal cartilage with the sternum to the inferior margin of the pectoralis major in the axilla. An inch and a half lower down was a second curved cicatrix, two and a half inches in length. From the outer end of the longer cicatrix a gaping wound extended into the axilla, measuring three inches in length, and two inches in breadth at its widest part. The bottom and edges of the wound presented a gray phagedenic appearance, and were coated with a dirty greyish green discharge, which, under the microscope, was seen to be made up of a large amount of fatty *débris*, mixed with degenerated granular pus-cells. The tissue forming the base of this wound was tough and fibrous, being composed for the most part of connective tissue, which, under microscopical examination, appeared very abundantly nucleated, much more so than ordinary connective tissue; this was especially noticeable after treatment with acetic acid. The nuclei were small and oval in shape. Above the wound, the lymphatics along the course of the axillary artery were slightly enlarged. On the skin of the back, over the inferior angle of the left scapula, there was a small pedunculated tumour about the size of a filbert. This tumour was simply a hypertrophy of the cutaneous structures, especially the *cutis vera*. The outer surface of the pericardium was loaded with a deposit of fat. The parietal layer of the pericardium was everywhere adherent to the visceral layer, the adhesions being recent. The heart was quite healthy. The left pleural sac contained three pints of clear yellow serum. The pleura itself was dotted all over with numerous small white nodules of a fibrous consistence, varying in size from a millet-seed up to a pea. The microscope showed these to be formed of fibrous tissue very abundantly nucleated, similar to that forming the base of the axillary wound. The left lung was much diminished in size from compression. At the root of the lung, the walls of the greater bronchial tubes were much thickened, and the tissue around indurated, this being due to the presence of an excess of connective tissue. The right lung and pleura were healthy; at the root, however, the larger bronchial tubes presented the same thickening and induration noticed in the left lung. The tracheal and bronchial mucous membrane were congested. About two inches above the cardiac orifices of the stomach was a stricture of the œsophagus with indurated and thickened walls, firm and fibrous on section. The length of the stricture was one inch and a half, the indurated wall was half an inch in thickness, reducing the lumen of the passage to half its natural size. Opposite this stricture, the œsophagus and the aorta were bound together by very dense fibrous adhesions. The thickening of the œsophageal wall at the point of stricture showed nothing but the elements of ordinary connective tissue. In the uterus were three tumours, which microscopical examination showed to be simple fibrous growths. Mr. Spence then quoted briefly, and commented on, two other cases under his observation along with the late Professors Goodsir and Syme respectively, but showed that they in their termination as malignant growths really seemed to have been mere modifications of medullary sarcoma, while in looking back on his own, he summed up thus: "In conclusion, taking into account all the vital manifestations, I cannot classify this case as malignant; whilst, conversely, some of the circumstances, such, for instance, as the development of secondary growths in the mamma, axilla, and pleura, and the superabundant development of connective tissue, nucleated in greatly larger amount than usual in various organs, seem to withdraw it from the simple class. I am, therefore, strongly inclined to consider it a tumour *sui generis*, the type of a class whose peculiarity is the tendency to recurrence without constitutional degeneration."—An interesting discussion ensued, in which Messrs. Annandale and Bell, and Drs. Matthews Duncan and Wyllie, took part. Mr. Spence replied.

Contribution to the Pathology of the Ovary. By J. FOULIS, M.D.—The author gave a short statement of the views of Waldeyer on the development of the Graafian follicles and cells of the *membrana granulosa*, in which he laid stress on the fact that, whereas Waldeyer's investigations showed that both the cells of the *membrana granulosa* and eggs were derived from the germ epithelium on the surface of the ovary, his own investigations appeared to show that the eggs alone were derived from the germ epithelium, and the cells of the *membrana granulosa* were derived from connective tissue corpuscles of the stroma of the ovary. Having this fact as a basis for investigating the origin of cystic tumours of the ovary, Dr. Foulis stated that, as the result of numerous observations on the origin of cysts in the diseased ovary, he was able to demonstrate that, though many of the cysts of an ordinary cystic tumour of the ovary were simply over-distended Graafian follicles, in the walls separating these there was a growth of new cysts quite unconnected with presenting Graafian follicles, which might go on to an unlimited extent, and that the epithelium of these was produced from connective tissue corpuscles. He then drew attention to the very interesting fact that, in addition to the production of the epithelium of the cysts, the connective

tissue corpuscle of the stroma, by general and excessive proliferation, might give rise to sarcomatous growths in the ovary; and that, through the escape of epithelial elements from the diseased stroma and cysts into the peritoneal cavity, secondary sarcomatous growths might arise on the peritoneum, which, by constant irritation, resulting in the pouring out of ascitic fluid, ultimately exhausted the patient. Dr. Foulis showed drawings of the little masses of sprouting cells which he had discovered in ascitic fluids surrounding ovarian tumours, and by the presence of which he had diagnosed malignant ovarian tumour and peritonitis in two cases whose histories had already been given to the Society; and he now gave short notes of three additional cases in which he had discovered the same little masses of sprouting cells in ascitic fluid, and in two of these cases a *post mortem* examination verified the diagnosis made during life, viz., malignant ovarian tumour and peritonitis. The third case was that of a woman still alive, and in the ascitic fluid present an enormous quantity of the little masses of the sprouting cells were found. He then laid great stress upon the importance of a careful examination of ascitic fluids in cases where ascites complicated ovarian disease, and pointed out how rarely it was possible to get fluid by tapping from malignant tumours themselves, which were generally semi-solid. He ended by saying that it remained for future observation, to settle the question whether little masses of sprouting cells are ever found in ascitic fluids surrounding other malignant tumours of the omentum, peritoneum, etc., structures in which fibrous connective tissue exists in quantity.

The Society had the opportunity, through the kindness of Professor Laycock, who was unavoidably absent, of examining a most interesting case of tubercular leprosy in a young man of European extraction. The peculiar character of the voice was well marked.

CORRESPONDENCE.

THE LATE DR. MAUNSELL.

SIR,—The premature death of Dr. Maunsell of Dublin, announced in your last week's issue, is the heaviest blow and greatest discouragement which the cause of Poor-law medical reform has sustained since the day when poor Richard Griffin broke down. To me, Dr. Maunsell's death is especially unfortunate; for he constantly afforded me most valuable aid in procuring statistics, notably as regards the administration of dispensary medical relief.

On my first visit to Ireland six years since, undertaken for the purpose of studying the working of the system followed in that country, Dr. Maunsell was my companion and guide; indeed, without his assistance, it would have been well-nigh impossible for me to succeed in obtaining any information. He was the originator of the Irish Poor-law Medical Officers' Association, and, in his capacity of honorary secretary, devoted himself with untiring energy to the realisation of its objects; viz., the improvement of the status and emolument of his colleagues, and their superannuation.

I doubt not that some effort will be made in the sister isle to show how much his great services have been appreciated; but, in this country, I feel we owe him something also: there can be no doubt that, to his writings, much of the success which has attended the efforts made to ameliorate the position of the Poor-law medical service is justly due, notably as regards superannuation allowance. That he has left his wife and young family in very indifferent circumstances, there can be no doubt; and I, therefore, do hope that members of the profession in the United Kingdom will evince their sense of his public work in their behalf by contributing to a fund for their benefit. For this purpose, I shall be most pleased to receive any sum that may be forwarded to me.—I am, sir, yours obediently, JOSEPH ROGERS.

33, Dean Street, Soho, August 30th, 1875.

THE RECENT CHARGE OF MANSLAUGHTER AT BOSTON.

SIR,—In common, no doubt, with other members of the profession, I have anxiously awaited your publication of some farther particulars of the above case, and more especially of an account of the *post mortem* examination of the deceased. The latter appears in your issue of the 21st instant. Having compared it with the evidence previously published, I desire to make an inquiry of the professional witness for the prosecution in your columns.

I wish to make this inquiry publicly, because I conceive the matter to be of public interest. A laceration of the uterus during labour which terminates fatally, is almost always likely to lay the accoucheur in at-

tendance under some suspicion of malpraxis. Most often such a suspicion originates with ignorant or uninstructed persons; but, although the attendant may demand an inquiry in self-defence, that cannot be carried beyond its first stage of investigation, unless the charges brought be supported by expert evidence. Laceration of the uterus is an accident which occurs during labour not so unfrequently but that every accoucheur may justly apprehend it; it most often occurs spontaneously; it will, nevertheless, most likely lay him under suspicions which may perhaps be publicly avowed; and in that case he may be called upon to defend himself under the disadvantage of the adverse evidence of an accoucheur at least as competent as himself, and less directly interested in the issue. It, therefore, becomes a duty to criticise any evidence which has been given in a court of law in a case which it seems probable may at any moment become one's own.

In the instance to which I am now referring, Dr. G. M. Lowe, who was entrusted with the dissection of the deceased, and who was called by the prosecution, is reported to have given evidence on two occasions. I refer to the *Lincolnshire Chronicle*, in which paper the only detailed account has, so far as I am aware, been published. At the preliminary examination before the magistrates, Dr. Lowe is reported to have said that he did not consider the rupture existed before delivery; and, in his cross-examination, that the rupture took place during delivery, and that he believed this from the appearances found on dissection of the body. Upon this evidence, the accused was committed for trial. Dr. Lowe is said to have deposed that, in this instance, the position of the rupture was remarkable, and that it was not the result of natural causes, because it was situated below the position of the fetus *in utero*, and must have been caused by it in its exit from that organ.

Now, if there be one fact which is better ascertained of rupture of the uterus than others, I believe it to be this: that the laceration, whether the result of violence used to deliver, or of spontaneous causes, may occupy any position; but that the lower part of the uterus is the more usual position in the latter case. The most trifling reflection, indeed, serves to show that the lower part—the cervix—must be the seat of injury in a certain number of cases arising spontaneously; for one cause of laceration—and not a very uncommon one—is the nipping of a part of the cervix between the foetal head and the pelvis, either from some deformity of the latter, or an undue magnitude of the former. But the opinion above repeated may be gathered from the text-books or any monograph on the subject; and Dr. Leishman, in his recently published work, assigns to the various positions of laceration their proper order of frequency, in the sentence appositely quoted by you a week or two since.

Considering that it is perfectly well known that laceration of the uterus does frequently occur spontaneously about its neck, and that it must occur there in some instances, I supposed—and, no doubt it is so—that the evidence to which I have referred was not given but upon some very good grounds; the results involved were too serious, and the time available for consultation and research was too long, for it to be otherwise. Nevertheless, I have had the curiosity to analyse about twenty cases of rupture of the uterus during pregnancy or labour, reported to the journals during the last few years; and, though hastily gathered by running through the index of each volume, and forming but a rough test, after all, I think your readers may be interested in the result of their examination. In three cases, the position of the rupture is not noted; in one, it is left doubtful. Of sixteen remaining, the cause was traumatic in five:—1. By fall before labour; from fundus to cervix; 2. During version; posterior wall; 3. During version; anterior superior wall perforated by a foetal extremity; 4. During craniotomy; by spicula of bone; 5. During version; transverse at cervix, and a perforation by finger of midwife. In eleven cases, the rupture was spontaneous:—1. Perpendicular, several inches; 2. Transverse at neck; 3. By fright before labour; several inches long; above the os; 4. Transverse at neck; 5. Perpendicular, involving the vagina; 6. Posterior wall; fundus to cervix; 7. Middle line, involving cervix and vagina; 8. Posterior wall, to right side; 9. From a diseased patch; 10. Posterior wall, perpendicular upwards from cervix; 11. Perpendicular, anterior wall. Of three instances of laceration during version, then, in only one was the cervix involved; and then the rupture was transverse, and not, as in the unfortunate case under consideration, vertical; while, in the list of spontaneous ruptures, in six the rupture was vertical (as in the present case), and in two the vagina is said to have been implicated.

For the reasons already given, I desire to ask Dr. Lowe to afford the profession generally an opportunity of consulting the same authorities or experience which enabled him to state that a rupture, perpendicular in direction, and involving the cervix of the uterus and the vagina, occupies a remarkable position; and to share the knowledge which

enabled him to speak confidently of the cause of this laceration from its position, or from its appearance, or both, as the case may be. As I said above, these opinions, delivered after two months or more of deliberation, in a case so serious to the accused, and of so much interest to the profession in general, are, no doubt, based upon grounds, at all events, apparently sufficient. Perhaps I ought already to be acquainted with them. I am, etc.,

J. ASHBURTON THOMPSON.
Islington, August 24th, 1875.

THE PENGE MURDERS.

SIR,—On July 23rd, I visited Frederick Hunt, the Penge murderer at the request of Dr. Ferguson, his medical attendant, with the view of ascertaining the condition of his mind.

The facts of the case have already been reported in the daily papers. The prisoner had been for some time owing to the commission of the murders in a depressed state of mind, before to his having resigned an appointment as a clerk, and having entered upon more precarious employment as an accountant.

On the morning of March 23rd, the prisoner awoke at about three o'clock, and at about five o'clock cut the throats of his wife and child, and administered doses of laudanum and brown sugar to two other children; failing, however, to persuade his fourth child, the eldest boy, to take any of the poisonous mixture.

I examined the prisoner very carefully, with the object of testing his state of mind; and I could arrive at no other conclusion than that he was insane both at the time he committed the act and also at the time he was under my observation. I arrived at these conclusions from the following facts, which, though apparently but feeble indications of insanity when taken singly, are nevertheless very convincing proofs of mental aberration when taken altogether. Hunt stated that on March 21st he awoke at three in the morning, which had happened every morning for two or three weeks previously, and which was not his usual habit; and heard voices talking to him. He was distinctly awake at the time when these hallucinations were manifested. He denied altogether that he dreamt he heard these voices. As I had no reason to doubt that he conscientiously spoke the truth throughout the whole of our conversation, and as I do not believe that he knew how his answers to my questions would or would not tell in his favour, I can only conclude that these hallucinations and other symptoms noticed were genuine symptoms of insanity. When the idea of killing his wife presented itself to him, he was utterly unable to shake it off.

Hunt was very much attached to his wife and children, and they had never offended him in any way. There was apparently no motive whatever for the commission of the crime. At the time of the murder, he stated that he did not in any way realise the extent of the crime he was committing. He did not perceive that he was doing wrong. It appeared to him that he must murder his wife and children for their good. The idea of killing his wife made him weary of life. He could not shake it off; and, to use his own words, "the wind howled; the earth looked black: everything his children said to him seemed to be quarrelsome; and his wife would not speak to him."

He seriously contemplated committing suicide for some days before the act of murder; for he carried a bottle of laudanum about with him, with the intention of taking it, which intention was subsequently carried into effect.

He had no suspicion nor jealousy of his wife, nor of any other person. The idea of killing his wife and children came upon him suddenly upon waking. He fancied that the deed must be done, and that he could not bear to see them living before him another day.

After committing the murder, he made no attempt to escape. He was perfectly indifferent as to what would be done to him. He acknowledged covering up the bodies after the act, but denied that he was afraid of being discovered, or that he did it in any way to conceal what was done.

His memory was much affected. He could not remember what he did with the razor he used at the time of the commission of the murder; he did not remember whether or not there was a light in the room at the time of the act; whether or not there was any blood on his clothes; nor how long before the act he bought the laudanum; nor whether he had walked or ridden in a cab to the shop; nor in what part of Oxford Street the shop was situated in which he bought the laudanum.

He committed the act of murder at about 5 A.M., and left the house at 7.30; but he was unable to remember what he did in the meantime. There was no reason for believing that this defect of memory was assumed, as Hunt appeared anxious to answer all my questions conscientiously. He exhibited no remorse for what he had done, and stated that he did not at the time realise the enormity of the crime he was committing.

In addition to these facts, the family history of the prisoner indicated a strong hereditary tendency to insanity. Hunt's brother died insane, having been confined more than once in Bethlem Hospital; his sister committed suicide; and his father is considered to be an eccentric man.

Other minor circumstances in the case pointed to the same conclusion. His appetite had been uncertain for some days before the murder. At one time, he was ravenous; at another time, he abstained from food, under the delusion that he was unable to pay for a dinner. He had also suffered from a sensation in his head, as if, he said, his brain had not proper scope. His manner and aspect were those of a person about to suffer from an attack of acute mania. He had a peculiar twitching of the side of the face; and the cross wrinkles on the forehead, often noticed in the insane, were well marked.

It appeared, on inquiry, that the prisoner had always been a steady religious man, and had always held a high character amongst his neighbours and employers.

Under these circumstances, the jury without any hesitation found the prisoner not guilty on the ground of insanity, and the usual order was made as to his custody.—I am, etc., H. SUTHERLAND, M.D.

PUERPERAL FEVER.

SIR,—Following very closely, and with the greatest interest, the reports of the late discussion at the Obstetrical Society, on the Relation of Puerperal Fever to the Infective Diseases and to Pyæmia, I must confess myself still partially unsatisfied with the outcome of the same, at least, in so far as it affects the practical question between attendant and parturient. The closing epitome of Mr. Spencer Wells: "For a time, I will give up practice; I will not run the risk of damaging the patient who has entrusted her life to my care", might, at first sight, appear to be unnecessary, and as almost implying a reflection on the good sense and professional honesty of our body, were it not for the great divergencies of opinion as to pathological etiology which undoubtedly exist.

To be on the safe side, we may premise, however, that if only a large majority of those practising midwifery would, even before this discussion, have admitted the advisability of the course suggested by Mr. Wells, still the difficulty of following this course will appear to many to lie in the vagueness of the expression "For a time". What we who practise midwifery, year in and year out, wish to be assured of is not so much the advisability of abstaining "for a time", but how long a time is to be accepted as reasonably and practically satisfying the condition. It will be quite evident to all that, whether or not we grant the issue which has been raised as to what I may, perhaps, call the correlative interchangeability of the various infective diseases in the puerperal state, we must at the same time stipulate for the recognition of periods likely to be safe for the life of the patient and the honesty of the practitioner in the constantly varying round of his daily cases. In short, How long is "for a time" to be? This may involve the whole question of the life and duration of infective particles; but every day we act upon the assumption that, as regards a given individual, generator or carrier, this is limited. And I suppose there is very little reason for assuming that this limitation need to be extended as regards the puerperal woman.

When we find that medical officers of health are inclined, as I think rightly, to advise on this as on other points concerning the *salus populi*, we have a presumptive right to demand that they do not shelter themselves behind a certain ignorance lurking in the expression "for a time"; not that I wish to cavil, but where facts are found partly wanting, opinion may sometimes take their place as representing, at least, the outcome of the empirical experience of the individual or the community. Therefore, I ask through your pages that those, and they are many, eminent men who are competent to express an opinion, may come to the rescue of those "lesser lights" who have to bear the anxiety of practice and the "bitter cruelty" of reflections on their professional *bona fides* after an untoward issue.

This "bitter cruelty" is no fancy of mine, but an expression of experience, if not personal, at least nearly so. When the public mind first became exercised on this question by the prosecution of the Coventry midwife, I endeavoured to find in the text-books some definite expression of opinion on this question of time. But I found none except in Tanner's *Practice of Medicine*, where "at least three weeks" from the date of the last attendance on a "puerperal fever" case is named. I wrote to our excellent guide at Guy's, Dr. Braxton Hicks, and he most courteously replied that Dr. Lever always considered three weeks as sufficient time, and that he himself saw no reason for doubting that that would be amply sufficient for all practical purposes. Armed with this opinion from an authority of world-wide reputation, it is, to say the least, not satisfactory to be told by a clergyman that the

opinion is iniquitous and wrong according to present knowledge, and by a noble lord that he is surprised at such a time being named, as he always had understood from a medical man, now ten years dead, that three months was the least time that he would allow to elapse before going near even a *pregnant* female professionally; and that he is given to understand that "in these cases the blood is always poisoned". I presume he means that the practitioner's blood is *always* poisoned! Now, sir, add your entreaty to mine that our elders may disabuse the public mind of such a "pestilent heresy", which affects the honour and reputation of men, to whom among men the minimum of gratitude often represents the maximum of anxious service.

Doctors grow old betimes; but, if this vague danger is to hang like another Damocles' sword over every head, I, for one, will forswear the obstetric part of my craft, and never attend another parturient woman.

Your obedient servant, FREDERICK E. MANBY, F.R.C.S. Eng.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

DIPHTHERIA IN NORTH DEVON.

THE investigation of the history of local epidemics is one of the most important functions of Medical Officers of Health. If a medical inquest were held in every case of typhoid fever and diphtheria, and other of the large class of "filth-diseases", there is reason to believe that the word "preventable" would have a living meaning in the popular mind when applied to disease, such as it has not now; and by the force of innumerable examples, having all the power of domestic proof, and personal conviction, the prevalent sources of preventable disease, now regarded with supreme indifference or regarded as belonging to the dominion and sphere of activity of the expert only, would be gradually uprooted by the common consent of individuals as well as of communities. Mr. Wynter Blyth, Medical Officer of Okehampton district, makes an interesting contribution, in his recent report to the local authority, to the history of diphtheria in North Devon.

"The North of Devon appears threatened with an invasion of diphtheria; and although I am happy to say that the Okehampton Union is, so far as I know, free from this disease, I avail myself of this opportunity of giving you a connected history of diphtheria in North Devon, which I am the better able to do through the kindness of Dr. Slade-King, of Ilfracombe, who has afforded me some valuable information. Diphtheria appeared in Ilfracombe on the 21st of April, 1873. The first case was effectually isolated, and did not spread. The second case, which is said not to have been in any way dependent upon the first, occurred on the 14th of October, 1873. No information whatever was given to the sanitary officials, and, therefore, no precautions were taken. The children at the house to which the corpse was removed were all affected more or less, and they conveyed it to the private and public elementary schools, from which almost every case could subsequently be traced. 'In one case', says Dr. Slade-King, 'a child died, the room was cleansed, but not perfectly disinfected; another child came to the same room three weeks after, contracted the disease, and died. Contact in private and public elementary schools seems to have been the great cause of the spread of the disease. No adults died, very few were attacked.' There was one very curious thing noticed in Ilfracombe, and that is, that nine-tenths of the cases occurred in the high levels. People would explain it as owing to sewer-gas floating upwards, but, as I shall shortly mention, every one of the cases in the country that I have as yet seen, also occurred on high ground. 'Isolation of the case, disinfection on a large scale, removal of delicate children to a distance from the town, and partial closure of schools, were the only precautions which seemed to reduce the spread of the disease.' 'The last death in Ilfracombe occurred on September 26th, 1874. It is at the present time, and for some time has been, perfectly free from diphtheria.' The first case of diphtheria brought under my own notice occurred at High Bickington on the 7th of April, 1873. Precautions were taken, and it did not spread. The next case I had information about was in the Bideford Union, nearly a year after, viz., at the beginning of February 1874, and on the high land around Clovelly. One or two fatal cases occurred. On April 19th, it again appeared in the Torrington Union, this time at Cott's Corner, in the parish of High Bickington, but it disappeared without spreading. On the 10th of June it was at Bickleigh, in the Bideford Union, and as no information of its presence was given to the sanitary officers until too late, it was imported from there to the new college at Westward Ho! and two or three cases occurred in the college, but the prompt action of the college authorities in separat-

ing the sick from the healthy, etc., prevented it from becoming the serious affair it would have become in any place under bad management or surrounded by unhealthy conditions. The last cases I have visited occurred in the parish of St. Giles, in the Torrington Union, where there have been one or two deaths. But whether at High Bickington, at Bickleigh, at Clovelly, or at Ilfracombe, unless it could be distinctly traced as carried by actual contact, it has occurred exclusively on lofty, airy, and open situations. I must, at the same time, say that hitherto in each case in my own district the drinking water has been undoubtedly polluted. So far, then, as I have gone, there are two fairly constant companions of diphtheria—high situations and polluted water. Subsequent observation will, perhaps show whether these are mere unimportant coincidences or not.

POOR-LAW MEDICAL APPOINTMENTS.

BAINES, FREDERICK A., M.R.C.S., appointed Medical Officer to the Nettledon District of Henley on Thames Union, *vice* W. S. J. H. Myers, M.D., resigned.
BUTLER, Edmund Fitzgerald, L.R.C.S.I., appointed Medical Officer and Public Vaccinator for the Boston District and the Workhouse of the Boston Union, *vice* W. H. Raddel, M.R.C.S. Eng., resigned.
CRAWFORD, James, M.D., appointed Medical Officer for the Manningham District of the Bradford Union, Yorkshire, *vice* E. Sugden, M.R.C.S. Eng., deceased.
CLARK, Wm. W., M.D., appointed Medical Officer to the Workhouse and the Wellingborough District of the Wellingborough Union.
DAVIS, John, M.D., appointed Medical Officer for the Ebbw Vale District of the Bedwely Union, *vice* Alexander Brewer, M.R.C.S. Eng., resigned.
DAVIS, Henry H., M.R.C.S., appointed Medical Officer for the Llandysil District of the Newcastle-in-Emlyn Union, *vice* T. Jones, M.R.C.S., deceased.
GUPPY, Thomas S., M.D., appointed Medical Officer for the Constantine District of the Falmouth Union, *vice* E. H. Eykyn, M.R.C.S., resigned.
GRIFFITHS, D., M.B., appointed Medical Officer for the Llandilolabont District of the Swansea Union, *vice* T. M. Jones, M.R.C.S., resigned.
HAIR, James, M.D., appointed Medical Officer for the Eighth District of the Lenden and Winstree Union, *vice* H. D. Palmer, M.R.C.S., resigned.
HOPKINS, John, M.D., appointed Medical Officer for the Chobham District of the Chertsey Union, *vice* S. M. Ward, M.B., resigned.
THOMAS, Richard R. G., M.D., appointed Medical Officer and Public Vaccinator for the Tiverton West District of the Tiverton Union, *vice* J. Reddrop, M.R.C.S. Eng., resigned.
WILLIAMS, David W., M.D., appointed Medical Officer to the Workhouse, Portsea Island Union, *vice* T. Diver, M.D., resigned.

OBITUARY.

EDMUND BURTON RAVENHILL, M.R.C.S., L.S.A.,
WOLVERHAMPTON.

WE regret to announce the sudden death of this young and talented practitioner. Mr. Ravenhill was the second son of the Rev. T. H. Ravenhill, M.A., Vicar of Arlingham, Gloucestershire. He received his medical education at the Queen's College and the Queen's Hospital, Birmingham. At the College, he gained several distinctions. At the Queen's Hospital, he held in succession, each for six months, the offices of Resident Surgeon's Assistant, Resident Physician's Assistant, and Resident Obstetric Assistant, to all of which appointments he was elected after competitive examination. He became a member of the Royal College of Surgeons and a Licentiate of the Society of Apothecaries in 1870, and he was shortly afterwards elected to the house-surgeoncy of the South Staffordshire General Hospital at Wolverhampton, which post he held with credit for nearly four years. About a year ago, he engaged in private practice, and he soon afterwards married. Mr. Ravenhill had lately become subject to attacks of gastrointestinal catarrh, and his health had been much impaired by his devotion to his work. For a few days before his death, he had suffered from occasional but slight vomiting and abdominal pain, but there was nothing in his condition to cause anxiety to his relatives. He died very unexpectedly, probably from syncope, on August 23rd, in the twenty-seventh year of his age. Mr. Ravenhill had a promising career before him. His kind manner and gentle disposition had endeared him to many friends.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, August 26th, 1875.

Dobbie, Robert John Algernon, Dudley, Salterton
 Laird, John, 3, Palace Street, Dublin
 Lewis, Edwin Alton, Lorne Road, Holloway
 Oldham, Samuel, Bunslem, Staffordshire
 Sargent, Arthur Francis, Lancaster Place, Belsize
 Upton, Alfred, Petworth, Sussex
 Worswick, Frederick Henry, Hulme, Manchester

The following gentlemen also on the same day passed their primary professional examination.

Archer, Robert Kerriway, Westminster Hospital
 Cox, William Earl, St. Mark's Hospital
 Crowell, William George, 17, Queen's, Birmingham

At the recent examination for the prizes in Materia Medica and Pharmaceutical Chemistry, the successful candidates were:—1. Fredk. Freer Leslie Robertson, St. Bartholomew's Hospital, the Gold Medal; 2. Neville Scott Whitney, University College, the Silver Medal and a Book.

MEDICAL VACANCIES.

The following vacancies are announced:—
BLACKBURN and EAST LANCASHIRE INFIRMARY—House-Surgeon. Salary, £40 per annum, with board, lodging, and washing. Applications on or before the 14th instant.
BOURNEMOUTH GENERAL DISPENSARY—Resident Medical Officer and Secretary. Salary, £120 per annum, with furnished apartments, coal, gas, and attendance.
BRISTOL LUNATIC ASYLUM—Assistant Medical Superintendent. Salary, £120 per annum, with furnished apartments, board, and washing. Applications on or before the 10th inst.
CARNARVON UNION—Medical Officer for the Llanddwg District. Salary, £50 per annum.
CHELSEA UNION—Medical Officer for the Second District. Salary, £75 per annum.
DISPENSARY FOR SICK CHILDREN, Manchester—Assistant Medical Officer. Salary, £40 per annum. Applications on or before September 14th.
DUNDEE ROYAL INFIRMARY—Resident Medical Assistant. Salary, £70 per annum, with board, lodging, and washing. Applications on or before the 14th instant.
HOSPITAL FOR SICK CHILDREN, Manchester—Assistant Physician. Salary, £80 per annum. Applications on or before September 14th.
INVERNESS DISTRICT ASYLUM—Assistant Medical Officer. Salary, £70 per annum, with board, lodging, and washing. Applications on or before the 14th inst.
MARTLEY UNION—Medical Officer for No. 4 District. Salary, £75 per annum, and fees. Applications on or before the 14th inst.
NORWICH DISPENSARY—Salary, £120 per annum, with unfurnished residence and apartments.
PEMBROKE UNION—Medical Officer for the First District.
QUEEN'S HOSPITAL, Birmingham—House-Physician. Salary, £50 per annum, with board, lodging, and washing. Applications on or before the 14th instant.
ROYAL SOUTH HANTS INFIRMARY—House-Surgeon. Salary, £80 per annum, with board, lodging, and washing. Applications on or before September 6th.
ROYAL UNITED HOSPITAL, Bath—House-Surgeon. Salary, £60 per annum, with board and residence. Applications on or before the 22nd instant.
ROYSTON UNION—Medical Officer for No. 3 District. Applications on or before September 6th.
ST. GILES-IN-THE-FIELDS and ST. GEORGE, BLOOMSBURY, Parishes—Medical Officer. Salary, £250 per annum.
SHEPTON MALETTS UNION—Medical Officer for the Fourth District. Salary, £50 per annum.
STAINES UNION—Medical Officer for the Shepperton Division.
STROUD GENERAL HOSPITAL, Stroud—House-Surgeon.
WARWICK COUNTY LUNATIC ASYLUM—Resident Medical Officer. Salary, £150 per annum, with board, lodging, and washing.
WIMBORNE and CRANBOKNE UNION—Medical Officer for No. 1 and 2 District and Workhouse. Salary, £45 per annum for No. 1, and £40 for No. 2, with £20 additional for the Workhouse. Applications on or before the 23rd instant.
WOLVERHAMPTON GENERAL INFIRMARY—Physician. Applications on or before the 25th instant.
YORK DISPENSARY—Resident Medical Officer. Salary, £60 per annum, with furnished apartments, coal, and gas. Applications on or before the 14th inst.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.
FOWLER, George, M.R.C.P. Ed., appointed Physician to the North London Hospital for Consumption and Diseases of the Chest.
***REID, Douglas A., M.D.**, appointed Consulting Surgeon to the Pembroke Dispensary and Infirmary.
SHERBURN, John, M.B., appointed Assistant House-Surgeon to the Hull General Infirmary.
WALTER, William, B.A., M.B., appointed House-Physician to the North Staffordshire Infirmary, Stoke-upon-Trent.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTH.

LYNES.—On August 26th, at 6, Priory Row, Coventry, the wife of *Edward Lynes, M.D., of a son.

DEATH.

HENRY, George, I. R.C.P. Ed., at the residence of his brother (Emerson W. Henry, M.D.), Lowther Street, Whitehaven, aged 26, on August 25th.

The Clayton Hospital and Wakefield General Dispensary is to be removed to a new site, and £8750 has already been subscribed towards the cost of the land and new building; for which the Committee ask of the public £15,000. Amongst the subscriptions are two of £1000, and several of £500.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAYGuy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAYSt. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.
FRIDAY.....Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.
SATURDAY ...St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M.—Royal Free, 9 A.M. and 2 P.M.

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.
PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with Duplicate Copies.
AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.
CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.
WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.
COMMUNICATIONS respecting editorial matters, should be addressed to the Editor: those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

DR. BROUGHAM (Sheffield).—The following is the by-law on the subject. "No Fellow or member of the College of Surgeons shall advertise or publish any matter or thing prejudicial to the interests or derogatory to the honour of the College, or disgraceful to the profession of surgery; and any Fellow or member who may in any manner offend herein shall be liable to be removed, by resolution of the Council, from being a Fellow and member of the College." (Section xvii, par. 2.)

DOCTORS OF EDINBURGH AND ERLANGEN.

SIR,—Adverting to the letter of "M.D. Erlangen, L.R.C.P. London", in this day's issue of your admirable JOURNAL, may I be allowed to observe, in the interests of truth and justice, that the whole question of registration or recognition of foreign degrees is still in a most unsatisfactory state, and must yet be fairly adjusted? The General Medical Council, as you are well aware, promised, at its recent session, "to take into consideration whether, with a view of furthering the desire of extended accomplishment in medicine and science among the members of the medical profession, it may be advantageous to make it lawful for the Council to insert in the Medical Register (after the name of a person registered on other qualifications, etc.) the appropriate title indicative of a degree obtained after study and examination in a foreign University". Surely it cannot be supposed, in the year 1875, that "science and medicine" are restricted to the British Isles. Erlangen is proving the contrary by her *Cyclopaedia*, etc. Why, therefore, should the M.D. of Edinburgh be inserted in the Register by the Council, and that of Erlangen be ignored or rejected, in the following circumstances? "Candidates settled in foreign parts, who have complied with all the regulations for the degree of M.D. Edin., but who cannot appear personally to receive the degree, may, on satisfying the Senatus to that effect by production of official testimonials, have the degree conferred on them *in absentia*." (Statute xvii.) Now, sir, in common with Pereira, Ashwell, Lever, Waller, Brande, Davies, and several others, the degree of M.D. was conferred upon myself "in absentia", agreeably to the enlightened recognition, as I conceive, of British diplomas and "official testimonials" from Lawrence, Brodie, Cooper, Bright, Addison, Babington, etc.—in short, the best blood of "science and medicine" in this country—together with the exhibition of half a dozen published octavo volumes pertaining to physic or physical science, more than thirty years ago; and is it just that not only the *Medical Register*, but the *Medical Directory*, should be closed against the insertion of such medical degrees, and granted long before the passing of the Medical Act, whilst, in the face of fair play, or rather with open injustice to foreign graduates, physicians' licenses, surgeons' diplomas, and honorary doctors' degrees, obtained in Great Britain and Ireland without personal examination, are recognised and registered by hundreds upon hundreds? Having subsequently graduated in "medicine and science" at a Prussian or Italian University, after residence and examination, the question at issue does not specially interest myself—a man, moreover, far advanced in the "sere and yellow leaf" from matter to spirit; but I think the editors of the BRITISH MEDICAL JOURNAL, pioneers of progress in science and medicine, ought in this, as in other subjects, to be the advocates of right rather than expediency, scientifically and ethically.—I am, etc.,

WILLIAM HITCHMAN, M.D.

Liverpool, August 1875.

MR. WILLIAMS.—Dr. Thomas Mayo, a former President of the College of Physicians, was the brother of Mr. Herbert Mayo of King's College.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W. C., and not to the Editor.

MEDICAL PRACTICE IN AMERICA.

SIR,—In reply to the inquiries of H. G. D. in your issue of July 24th, I may inform him (1) that neither legislators nor patients in the United States trouble themselves about the source of a medical man's diploma, there being no system of registration, nor any difference recognised between the degrees of regular, homoeopathic, "eclectic", or any other schools. Nothing but the title of "Dr.", however, is required to the American public; M.D. being the degree granted by all our colleges, and no lesser qualification existing. (2) The medical man's social status is second to none other; but, as I have already hinted, we have no distinction between pure physicians or pure surgeons and general practitioners, the whole profession standing on an equal "M.D." footing. (3) With thirty-odd medical schools turning out many hundred graduates *per annum*, the profession is decidedly overstocked in every section of which I have knowledge, though, of course, here as elsewhere, "there is always room high up".—Yours, etc.,

New York, August 4th, 1875.

AN AMERICAN M.D.

BETA.—We know nothing of "gnoëiss" as a remedy for cancer: but our correspondent may safely put it down as utterly useless.

ANNALS OF SPEECH IN AN INFANT AFTER A BLOW ON THE HEAD.

SIR,—A few days ago a patient consulted me for a skin-affection on her son, a fine little boy four years and a half old, and told me the following about him. When he was eighteen months old, he received a fall, from which he had a contusion of the skin and a small tumour in the temporal region (left side). He gradually recovered. Before the accident, he was just commencing to prattle a few simple monosyllables, but since then has not been able to speak, and has scarcely ever tried.

If any of your readers have met with a similar case, and can recommend anything to remedy the disability, I will be glad to know of it.—Yours truly, Brynmawr, August 18th, 1875.

B. J. GLISSAN, Physician, etc.

GEOLOGIST.—Professor Clark of Cambridge is a son of the gentleman you mention. The Bishop of Chichester, when dining one day with George IV at Brighton, was asked by his Majesty if there was not more than one of his name at the University of Cambridge. "Yes," said his Grace, "there were three—viz., Stone-Clark, Professor of Mineralogy; Tone-Clark, Professor of Music; and Bone-Clark, Professor of Anatomy."

THE PARLIAMENTARY BILLS COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.

SIR,—At my recent visit to Edinburgh, I was much pleased to see the rapid growth made by the Association during the last few years. It has become an institution of great national importance, exercising a powerful influence on the legislature of this country, which has and will hereafter be attended with the most beneficial results. There was a subject which had been taken up with advantage by the Parliamentary Bills Committee—viz., the superannuation grants to union surgeons, to which I wish to direct attention. Much good has followed their efforts in this matter: I therefore suggest that they shall carry out the good work they have begun, and get the allowances to gaol surgeons put on a more satisfactory basis. The present Prison Regulation Act acknowledges the justice of such grants being made, but does not enforce it. The section (15) states that on a recommendation of the visiting justices, a grant "may" be allowed, etc.; but when recommendations have been made by the visiting justices, the allowances have not always been granted at the sessions or by the municipal corporate bodies—indeed, in some instances they have been refused. I would suggest that in the next Prison Regulation Bill the word "shall" be substituted for "may", which will do justice to medical men who have become incapacitated by long service or confirmed sickness, and will be equally satisfactory to visiting justices.

I hope you will see the reasonableness of the above suggestion, and induce the Parliamentary Bills Committee to use their efforts in getting it carried out.—I am, etc., A GAOL SURGEON.

* * * Our correspondent's letter will be brought under the notice of the Committee. The superannuation of Poor-law medical officers is, however, at present also permissive, and not compulsory. The Parliamentary Bills Committee have under notice certain palpable grievances of the medical officers of the Convict Service.

DR. E. HOLLAND has favoured us with a smoothly written, pleasantly versified, account of a trip which he made "From Waverley to Balloch Strand" after the Edinburgh meeting of the British Medical Association.

"When Scotland's capital—their labours o'er—
 Bid Æsculapians, fatigued, explore
 The matchless beauties of her darling land."

We are much obliged to him for the opportunity of reading his MS., and if he will inform us where to send it, it shall be restored to him.

DR. E. SLADE-KING (Ilfracombe).—1. We believe that Reynolds's *System of Medicine* will be found the most useful and complete work of the kind at present available for your purpose. 2. The Cambridge Examinations in State Medicine are readily available to all persons whose names are on the *Medical Register*, and are at least twenty-four years of age. The Examination is divided into two parts. The first comprises physics; the principles of chemistry, with analysis of air and water, microscopical and chemical; the laws of heat; the principles of pneumatics, hydrostatics, and hydraulics, with especial reference to ventilation, water-supply, drainage, construction of dwellings, and sanitary engineering generally. The second part comprises the laws of the realm relating to public health; sanitary statistics; origin, propagation, pathology, and prevention of epidemic and infectious diseases; effects of overcrowding, vitiated air, impure water, and bad or insufficient food; unhealthy occupations, and the diseases to which they give rise; water-supply, and disposal of sewage and refuse nuisances injurious to health; distribution of diseases within the United Kingdom, and the effects of soil, season, and climate. We would advise our correspondent to write to Professor Living, University of Cambridge, for fuller information; but we can recommend, amongst other works, Parkes's *Manual of Hygiene*, Mr. Simon's *Reports to the Medical Department of the Privy Council*, Hart's or Wilson's *Manual of Public Health*, Eassie's *Sanitary Arrangements for Dwellings*, Professor Corfield's Lectures, and Dr. Meymott Tidy on the *Adulteration of Food*. Mr. Wanklyn's manuals of analysis are very valuable. Any bookseller can procure these works.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than *Thursday*, twelve o'clock.

OFFENSIVE DISCHARGE FROM CANCER.

SIR, In reply to **TRICEPS**, there is nothing in my experience to equal the common aqua picis, one belonging to the Dublin Dispensary. For his purpose, let him put a teaspoonful or two of good Norway tar into a large wine bottle, having previously filled it three-fourths full of boiling or very hot water. Shake well for a few minutes, and it is ready for use. When the water is exhausted, it may be renewed by adding fresh boiling or hot water, which may be repeated as often as the original tar serves to impregnate the fresh water strongly with its peculiar odour. It may be applied on pledgets of charpie or muslin—the thinner the fabric the better—and it may be renewed by means of a sponge, simply squeezing the sponge over the offensive surfaces; or, still better, diffuse it over the surface of the cloth or of the diseased structure, by means of an odorator. The patient can do this herself; all that is necessary is to attach an India-rubber tube—the same as an infant's feeding-bottle—which will reach the mouth of the patient. She will, by the use of this simple and inexpensive wash, keep herself and the atmosphere of the room perfectly sweet; indeed, the power of tar or oil of tar as a deodorant is simply next to magic, and is not to be equalled by any of the advertised specifics. It would not pay to advertise it; but I have used it now in carcinoma uteri and other external cancers for the past twelve or thirteen years, by injection or as above directed, and I pronounce it unsurpassable.

Messrs. Symes and Co., of 14, Hardman Street, in this town, have lately prepared for me a very elegant substitute; it is the best oil of tar rendered miscible in hot or cold water. Ten or fifteen drops or more to a pint of water make an excellent deodorant lotion, wash, injection, or enema. In the latter case, it is perfectly invaluable in wards of hospitals, as the stool is quite deodorised before its exit, and the ward is thereby kept sweet.

Symes and Co. prepare a deodorant powder, which some prepare; it is chiefly composed by whitening and oleum picis, very dilute.—I am, etc.,

Liverpool, August 25th, 1875.

THOMAS SKINNER, M.D.

P.S.—As a lotion or enema, it is to be used cold or tepid. If it in any way smart, dilute with water.

SIR,—In answer to your correspondent **TRICEPS**, I beg to state that I have had under my care a lady with epithelioma of the right breast for seven years, that it at one time assumed very formidable dimensions, and the odour was intolerable; but by dressing it in the following manner it has lessened in size, and, excepting when sloughing takes place, emits little or no odour. The part is washed with warm water, in which a few grains of permanganate of potash are dissolved, and dried with a soft rag. The strongest liquor carbolis detergens is applied with a camel-hair brush; it is then covered with unguentum carbolis detergens, spread upon lint.—Yours obediently,

FRANCIS TOULMIN.

Upper Clapton, August 31st, 1875.

SIR,—**TRICEPS** will find that a weak solution of sulphurous acid will effectually remove all the offensive smell from the discharge from the cancerous breast.—I am, sir, yours truly,

E. O., F.R.C.S.

DR. DAVY.—Glycerine was discovered by Scheele, and the late Mr. Startin is stated to have been the first to use it therapeutically.

K.—If you will send the MSS., we shall be enabled to give you an answer.

CAPSICUM IN DELIRIUM ET POTU.

SIR,—In answer to **DR. HADLEY'S** question as to what is the mode of administering capsicum in *delirium et potu*, I would say that I have found that the best way to do so is in the form of pills; about four grains of the best powdered capsicum made up into a pill, with extract of gentian. One pill to be taken every two hours, till quietude is obtained. The more I use this drug in such cases, the more am I impressed with its great usefulness.—I am, yours faithfully,

Buckingham, August 21st, 1875.

L'HUCURIA BLENKARNE.

SIR,—**DR. HADLEY** will find ten minims of the tincture of capsicum taken in an ounce and a half of water before meals, or whenever depression or craving for alcohol arise, very useful. The powder may also be given in twenty or thirty grain doses, made up into a bolus with honey, and the dose repeated in three hours if it fail to procure sleep.—Yours faithfully,

HENRY M. JAY.

Chippenham, August 23rd, 1875.

A METROPOLITAN TEACHER.—It is quite true that **MR. HANCOCK** has sat for the last time as a member of the Court of Examiners of the College of Surgeons. "Honest and true Hancock," says an esteemed correspondent, a teacher and surgeon to one of our large hospitals, "a man so thoroughly trustworthy." We believe he will for the present retain his seat at the Council.

THE PROBABILITY OF A SECOND ATTACK OF MEASLES.

SIR,—In your impressions of June 5th, 12th, and 19th, recently arrived here, I have read some letters pertaining to the above subject. Permit me to record a few facts which occurred in my own family, which will tend to show that a second or even third attack in life is by no means impossible. In the early part of 1867, my wife was attacked with well marked measles for the third time in my knowledge. The third attack occurred two days after her confinement. Her baby had measles sharply, as also our son, then aged about two years. At that time measles were epidemic in the town we were living in. In the early part of 1872, measles were again prevalent in the town we were living, and both my children had another well marked attack of measles. They are both at school now, my son going to a public school next year (owing to my absence from England, and the fact of their mother's death), and I shall view with anxiety the possibility of their exposure to a third attack.

One more remark with regard to the outbreak in 1867. Although, as I said, measles were prevalent in the town we were residing in, I may mention that in 1866, during the early months of her pregnancy, my wife, with a mother's care, nursed another of her children, who succumbed to measles. She was never, as far as I could ascertain, exposed to any contagion subsequently. Could the disease have lain dormant for so long a period as nearly seven months in her pregnant condition? This is a point which may be worthy of consideration.—Enclosing my card, I beg to remain, sir, yours truly,

Esquimalt, British Canada, August 5th, 1875.

F. R. C. S. Eng., R. N.

DR. O'FLAHERTY.—During the collegiate year ending 5th of April last, 45 candidates were admitted Fellows of the Irish College of Surgeons, 124 gentlemen received letters testimonial, and 22 licentiates obtained the diploma in midwifery.

NOTICES OF Births, Deaths, Marriages, and Appointments, intended for insertion in the **BRITISH MEDICAL JOURNAL**, should arrive at the Office not later than 10 A.M. on Thursday.

H. I. AND A MEMBER.—The Library and Museum of the College of Surgeons will be closed as usual during the month of September. The works of John of Arden and Gaddesden are in the Library. Write to Mr. Chatter, the obliging librarian, who will give you the information.

T. C. ADELALDI. The man is an arrant quack.
"Hold thy hand, health's dear maintainer;
Life, perchance, may burn the stronger;
Having substance to maintain her,
She, untouched, may last the longer.
When the artist goes about
To redress her flame, I doubt
Ofentimes he snuffs it out."—**QUARLES.**

QUinine AND BORAX.

SIR,—I should think the chemicals used by your correspondent in his mixture must have been impure, for, in cases of aphthæ, I am often in the habit of prescribing, with great success, borax and glycerine (5ij c. ʒj), but have never observed any such explosion whilst dispensing them.—Yours, etc.,

M. R. C. P. Edin.

August 23rd, 1875.

MR. ASHBERTON THOMPSON. We fear we should not have at command for some time the space required.

A. R. A.—Professor John Marshall, F.R.S., a member of the Council and Court of Examiners of the College of Surgeons, was elected Professor of Anatomy to the Royal Academy in 1873, in the vacancy occasioned by the death of Professor Partridge, F.R.S.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Bristol Daily Post; The Daily Bristol Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Glasgow Herald; The Sunderland Daily Echo; The Carnarvon and Denbigh Herald; The Manchester Guardian; The European Review; The Hackney and King'sland Gazette; The Worcestershire Chronicle; The Birmingham Daily Post; The Brighton Daily News; The Sussex Daily News; The Glasgow Herald; The Cork Examiner; The Scotsman; The Cork Daily Herald; The Southampton Times and Hampshire Express; The Hampshire Advertiser; The Birmingham Morning News; The Chester Courant; The Metropolitan; The Live-Stock Journal; The Shield; The Grocer; The Shipping and Mercantile Gazette; The Advertiser; The Islington Gazette; The Penrith Observer; The Hastings and St. Leonard's Gazette; The Ilkley Free Press; The Leicester Daily Post; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. George Johnson, London; Dr. Kelly, Taunton; Dr. Atkinson, Kingston-on-Thames; Mr. H. P. Leech, Woolpit; Mr. E. R. Morgan, Neath; Mr. John Buckley, R.N.; Mr. Tallack, London; Dr. Underhill, Edinburgh; Our Paris Correspondent; Dr. Griffiths, Sheffield; Mr. Taylor, Bocking; Dr. H. Swete, Droitwich; Dr. J. H. Aveling, London; Dr. E. Holland, London; Dr. Joseph Rogers, London; The Warden, Queen's College, Birmingham; The Registrar-General of Ireland; Dr. W. Kebell, Brighton; The Secretary of Apothecaries' Hall; Mr. T. M. Stone, London; The Registrar-General of England; Mr. S. W. North, York; Mr. W. E. Curtis, Canterbury; Our Glasgow Correspondent; Mr. Eassie, London; Dr. J. Milner Fothergill, London; Dr. Philipson, Newcastle-on-Tyne; Dr. Paine, Stroud; Our Dublin Correspondent; Mr. E. Chapman, Oxford; Mr. Edmund Owen, London; Mr. T. N. Lucas, London; Mr. Eastes, London; Mr. Francis Toulmin, Clapton; Mr. Lund, Manchester; Mr. J. C. Leach, Sturminster Newton; Surgeon-Major Oliver, Canada; Sir Duncan Gibb, London; Dr. J. Crichton Browne, Wakefield; Mr. F. W. Lowndes, Liverpool; Dr. A. Morison, London; Dr. Cleland, Galway; Dr. J. W. Langmore, London; Dr. Russell, Glasgow; Mr. G. H. Fosbrook, Stratford-on-Avon; Mr. R. H. S. Carpenter, London; Mr. T. Worth, Nottingham; Dr. C. Bell Taylor, Nottingham; Mr. Otho Galgey, St. Vincent; Mr. A. Thomson, London; Dr. J. C. Morgan, London; Mr. L. H. Jones, London; Mr. E. W. Thurston, Ashford; Dr. A. Collicie, Homerton; Mr. G. R. Cundall, London; Mr. T. Ramsay, Winchester; Mr. J. Garner, Birmingham; Dr. Oppenheim, London; Dr. J. Sawyer, Birmingham; Dr. W. Hitchman, Liverpool; Mr. W. B. Kendall, Kidsgrove; Mr. J. Brown, Sheffield; Mr. E. Bellamy, London; Dr. Bryant, Northampton; Mr. J. Buckenham, Cambridge; Mr. Kenworthy, Bowden; Dr. J. W. Young, Dublin; Dr. R. Liveing, London; Dr. Wallace, Turfiff; Mr. A. James, Liverpool; Mr. C. R. Roy, Arbroath; Dr. A. Sheen, Cardiff; Mr. E. G. Carey, Manchester; Dr. Beverley, Norwich; Dr. Shuttleworth, Lancaster; Dr. J. A. Angus, Newcastle-on-Tyne; Dr. C. Harrison, Lincoln; Mr. Husband, York; Mr. J. H. Stowers, Shrewsbury; Mr. R. M. Gunn, Golspie; Mr. C. H. Fasson, Edinburgh; Mr. C. Valentine, Brechin; Mr. J. Deans, Sunderland; Mr. R. M. Craven, Southport; Mr. J. Pollard, Torquay; Mr. C. R. Thomas, London; Dr. R. Collum, Surbiton; etc.

BOOKS, ETC., RECEIVED.

A Report on the Hygiene of the United States Army, with Descriptions of Military Posts. By J. S. Bullock. Washington: 1875.
A Second Report to the Chairman and Members of the Combined Sanitary Authorities of Oxfordshire on the Sanitary Condition of their Districts, from March 25th to December 31st, 1874. By G. W. Child. London: Longman, Green, and Co. 1875.
The Royal Tiger of Bengal: his Life and Death. By J. Fayer, M.D., F.G.S. London: J. and A. Churchill. 1875.
A Practical Treatise on Diseases of the Eye. By R. B. Carter, F.R.C.S. London: Macmillan and Co. 1875.

REGULATIONS

OF

THE GENERAL MEDICAL COUNCIL AND
MEDICAL LICENSING BODIES.

SESSION 1875-76.*

THE GENERAL MEDICAL COUNCIL.

Recommendations and Opinions on Preliminary Examination.—Testimonials of Proficiency granted by the National Education Bodies, according to the subjoined list, may be accepted, the Council reserving the right to add to, or take from, the list. I. *Universities of the United Kingdom.* Oxford, Cambridge, Durham, and London: Examinations for Degrees in Arts. Oxford, Cambridge, and Durham: Local Examinations (Senior); Certificates to include Latin and Mathematics. Oxford: Responsions; Moderations. Cambridge: Previous Examination. Durham: Examination for Students in their Second and First years; Registration Examination for Medical Students. London: Matriculation Examination. Aberdeen, Edinburgh, Glasgow, and St. Andrew's; Examination for a Degree in Arts; Preliminary Examination for Graduation in Medicine or Surgery. Edinburgh: Examination of (Senior) Candidates for Honorary Certificates under the Local Examinations of the University of Edinburgh. Dublin: Examination for a Degree in Arts: Entrance Examination. Queen's University (Ireland): Examination for a Degree in Arts; Entrance Examination; Examination for the Diploma of Licentiate in Arts; Previous Examination for B.A. Degree. II.—*Other bodies named in Schedule (A) to the Medical Act.* Royal College of Surgeons of England: Examination conducted, under the superintendence of the College of Surgeons, by the Board of Examiners of the Royal College of Preceptors. Society of Apothecaries of London: Examination in Arts. Royal College of Physicians and Royal College of Surgeons, Edinburgh: Preliminary Examination in General Education, conducted by a Board appointed by these two Colleges combined. Faculty of Physicians and Surgeons of Glasgow: Preliminary Examination in General Literature. Royal College of Surgeons in Ireland: Preliminary Examination; Certificate to include Mathematics. Apothecaries' Hall of Ireland; Preliminary Examination in General Education. III.—*Examining Bodies in the United Kingdom, not included in Schedule (A) to the Medical Act.* Royal College of Preceptors: Examination for a First Class Certificate. The Examiners for Commissions in the Military and Naval Services of the United Kingdom; Certificate to include all the subjects required by the General Medical Council. IV.—*Colonial and Foreign Universities and Colleges.* University of Calcutta, Madras, or Bombay: Entrance Examination; Certificate to include Latin. University of McGill College, Montreal, of Toronto, of King's College, Toronto, of Queen's College, Kingston, of Victoria College, Upper Canada, of Dalhousie College and University, Halifax, of Fredericton, New Brunswick, or of Sydney: Matriculation Examination. University of King's College, Nova Scotia: Matriculation Examination; Responsions. University of Melbourne: Matriculation Examination, Certificate to include all the subjects required by the General Medical Council. Codrington College, Barbadoes: English Certificate for Students of two years' standing, specifying the subjects of Examination; Latin Certificate, or "Testamur". Tasmanian Council of Education: Examination for the Degree of Associate of Arts, Certificate to include Latin and Mathematics. Christ's College, Canterbury, New Zealand: Voluntary Examinations, Certificate to include all the subjects required by the General Medical Council. Cape of Good Hope: Third Class Certificate in Literature and Science, granted by the Board of Public Examiners. South Australian Institute, Adelaide: Preliminary General Examination.—N.B. A Degree in Arts of any University of the United Kingdom, or of the Colonies, or of such other Universities as may be specially recognised from time to time by the Medical Council, is considered a sufficient Testimonial of Proficiency. The Licensing Boards are recommended not to accept the certificate of proficiency in general (preliminary) education from any of the Bodies, the names of which are contained in the list annually circulated, unless such certificate testify that the student to whom it has been granted has been examined in—1. English Language, including Grammar and Composition.† 2. Arithmetic, including Vulgar

and Decimal Fractions; Algebra, including Simple Equations. 3. Geometry: First Two Books of Euclid. 4. Latin, including Translation and Grammar. And in one of the following *Optional Subjects*:—Greek; French; German; Natural Philosophy, including Mechanics, Hydrostatics, and Pneumatics.—Students who cannot produce any of the testimonials referred to in the first recommendation are required to pass an Examination in Arts, established by any of the bodies named in Schedule (A) to the Medical Act, and approved by the General Medical Council.—Certificates of proficiency are received from all bodies legally authorised to examine in General Education in Great Britain and Ireland, and from the several Licensing Bodies enumerated in Schedule (A) to the Medical Act in Great Britain and Ireland, shall bear evidence that the candidates have been examined and approved in at least the above subjects.—In the case of certificates received from similar educational and licensing bodies in other parts of the empire and foreign countries, satisfactory evidence shall be given to the Medical Council, or Branch Councils, that such certificates are equivalent to those recognised in the United Kingdom.

Registration of Medical Students.—Every medical student shall be registered in the manner prescribed by the General Medical Council. No medical student shall be registered until he has passed a Preliminary Examination. The commencement of the course of Professional Study recognised by any of the qualifying bodies shall not be reckoned as dating earlier than fifteen days before the date of registration.—The registration of medical students shall be placed under the charge of the Branch Registrars. Each of the Branch Registrars shall keep a Register of medical students according to a form, containing the Date of Registration, the Name, the Preliminary Examination and Date, and the Place of Medical Study.—Every person desirous of being registered as a medical student, shall apply to the Branch Registrar of the division of the United Kingdom in which he is residing, according to the annexed form,* which may be had on application to the several qualifying bodies, medical schools, and hospitals; and shall produce or forward to the Branch Registrar a certificate of his having passed a preliminary examination, as required by the General Medical Council, and a statement of his place of medical study.—The Branch Registrar shall enter the applicant's name and other particulars in the Students' Register, and shall give him a certificate of such registration.—Each of the Branch Registrars shall supply to the several qualifying bodies, medical schools, and hospitals, in that part of the United Kingdom of which he is registrar, a sufficient number of blank forms of application for registration.—The several Branch Councils shall have power to admit special exceptions to the foregoing regulations, for reasons which shall appear to them satisfactory.—A copy of the Register of Medical Students, prepared by each of the Branch Registrars, shall be transmitted, on or before December 31st in each year, to the Registrar of the General Council, who shall, as soon as possible thereafter, prepare and print an Alphabetical List of all students registered in the preceding year.—The several qualifying bodies are recommended not to admit to the final examination any candidate (not exempted from registration) whose name had not been entered in the Medical Students' Register at least four years previously.—In the case of candidates from other than schools of the United Kingdom, the Branch Councils shall have power to admit exceptions to this recommendation.

Age for License to Practise.—The age of 21 shall be the earliest age at which a candidate for any Professional License shall be admitted to his final examination; the age shall, in all instances, be duly certified; and a return of any exceptions in this recommendation allowed by the Licensing Bodies, together with the reasons for such exceptions, shall be transmitted to the Branch Council of that part of the United Kingdom in which they have been granted.—No License shall be obtained at an earlier period than after the expiration of forty-eight months subsequent to the registration of the candidate as a medical student.

in correct English on a given theme, attention being paid to spelling and punctuation as well as to composition. 2. To write a portion of an English author to dictation. 3. To explain the grammatical construction of one or two sentences. 4. To point out the grammatical errors in a sentence ungrammatically composed, and to explain their nature. 5. To give the derivation and definition of a few English words in common use. Provided always that an examination may be accepted as satisfactory that secures, on the part of the candidate passing it, a sufficient grammatical knowledge of English.

* *Form of Application for Registration as a Medical Student.*—I hereby apply to be registered as a Student in Medicine, in conformity with the Regulations of the General Council of Medical Education and Registration of the United Kingdom, for which purpose I submit the following particulars. (Name of applicant (to be written in words at length); Surname; Christian name; Preliminary examination; Date of preliminary examination; Place of medical study; Applicant's signature; Address; and Date of Application. To the Registrar of the Branch Council for—J

N.B.—The above form of Application, duly and legibly filled up, must be forwarded to the Registrar, post free, and be accompanied by a Certificate of the applicant's having passed a Preliminary Examination, as required by the General Medical Council, and a statement of his place of Medical Study.

* To save space, we omit those portions of the Recommendations of the General Medical Council and of the Regulations of the Examining Bodies, which are not of direct importance to medical students.

† The General Medical Council will not consider any examination in English sufficient that does not fully test the ability of the candidate—1. To write a few sentences

Professional Study.—The course of Professional Study required for a License shall comprehend attendance during not less than four winter sessions, or three winter and two summer sessions, at a school recognised by any of the Licensing Bodies mentioned in Schedule (A) to the Medical Act.—The following are the subjects, without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered:—1. Anatomy; 2. General Anatomy; 3. Physiology; 4. Chemistry; 5. Materia Medica; 6. Practical Pharmacy; 7. Medicine; 8. Surgery; 9. Midwifery; 10. Forensic Medicine. "Chemistry" should include a knowledge of the principles of Chemistry, and of those details of the science which bear on the study of Medicine. "Medicine and Surgery" should include a knowledge of Systematic and Clinical Medicine and Surgery, and also of Morbid Anatomy.

Professional Examination.—It is desirable that the different Licensing Bodies should combine their examinations, when this is practicable.—The professional examination for any License should be divided into two parts; the first embracing the primary or fundamental branches directly connected with the Practice of Medicine and Surgery; the former not to be undergone till after the close of the winter session of the second year of professional study; and the latter, or final examination, not till after the close of the prescribed period of professional study.—The examination in Physics, Botany, and Natural History may be undergone at an earlier period than the first professional examination.—The professional examinations to be conducted both in writing and orally; and that they be practical in all branches in which they admit of being so.—Excellence in one or more subjects should not be allowed to compensate for failure in others.—If a candidate be rejected for failure in any one subject, he should be re-examined in all.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

MEMBERS.

ANY person who shall have satisfied the College touching his acquirements in general Science and Literature, and his knowledge of Medicine, Surgery, and Midwifery, and who shall comply with the Bye-Laws and Regulations of the College, may be proposed to the College to be admitted a Member. (For synopsis of Regulations, see page 324.)

Every candidate who has prosecuted his studies abroad, whether in part or to the full extent required (except such as shall be exempted), shall nevertheless bring proof of his having attended, during at least twelve months, the medical practice of a hospital in the United Kingdom containing at least 100 beds.

Every candidate for the Membership of the College (except such as shall be exempted) will be required to pass the following examinations.

First Examination; Monday: *Evening*, from 7 to 10, by written questions on Anatomy and Physiology. Tuesday: *Evening*, commencing at 7 o'clock, *visà à vis*, on Dissections and Preparations.

Second Examination; Monday: *Evening*, from 7 to 10, written questions on Surgical Anatomy, and on the Principles and Practice of Surgery. Tuesday: *Morning*, Practical examination, either at the College or in the surgical wards of a Hospital. *Afternoon*, from 1 to 4, on Materia Medica, and on Chemistry in its application to Pathology, Pharmacy, and Toxicology. (This examination will be partly written and partly practical.) *Evening*, commencing at 7 o'clock, by written questions on Midwifery and the Diseases peculiar to Women. Thursday: *Evening*, and oral examination, commencing at 7 o'clock.

Third or Pass Examination; Thursday: *Afternoon*, from 2 to 6, by written questions on Medical Anatomy and on the Principles of Medicine. Friday: *Afternoon*, from 2 to 6, by written questions on the Practice of Medicine, including the Principles of Public Health, and on Psychological Medicine. Saturday or Monday: Practical examination at the College or in the medical wards of a Hospital. Tuesday and Wednesday: *Evening*, and oral examination, commencing at 7 o'clock.

Every candidate must give fourteen days' notice in writing to the Registrar of the College, of his intention to present himself for examination, at the same time transmitting the following certificates. For the *Primary Examination*: Evidence of having passed an Arts Examination; and, in the case of those who shall have commenced professional studies after 1861, evidence of having previously obtained a Degree of Arts from some University of the United Kingdom, or of the Colonies, or from some other University specially recognised by the Medical Council, or that he has passed examinations equivalent to those required for a Degree in Arts; of having been duly registered as a medical student; and of having completed the second winter session of professional study at a recognised Medical School. For the *Second*

Examination: Evidence of having completed four years of professional study; of having attained the age of 21 years; of instruction and proficiency in vaccination; and of having attended not less than twenty labours. For the *Pass Examination*: Proof of having attained the age of 25 years; a testimonial from a Fellow or Member of the College; evidence of having completed the required course of professional study.

Blank forms of the required certificates of attendance on hospital practice and on lectures may be obtained on application at the College.

Third or pass examinations for the membership will be held on Thursday, October 21st, 1875, January 20th, April 20th, July 20th, and October 19th, 1876. The first and second examinations are generally held at the commencement of the same months.

LICENTIATES.

For synopsis of Regulations, see page 324.

Of the four years, one winter and two summer sessions may be passed in either of the following ways: 1. Attending the practice of a hospital or other institution recognised by the College; 2. Receiving instruction as the pupil of a legally qualified practitioner holding any public appointment which affords opportunities, satisfactory to the examiners, of imparting a practical knowledge of Medicine, Surgery, or Midwifery; 3. Attending lectures on any of the required subjects of professional study at a recognised place of instruction.

Professional studies commenced before the candidate shall have passed an examination in the subject of general education will not be recognised by the College. The course of Lectures on Botany may be attended prior to the commencement of professional studies; and any candidate producing satisfactory evidence that Botany formed one of the subjects of his preliminary examination will be exempt from attendance on this course. The Principles of Public Health must be comprised in the course of Lectures on Medicine, or in that on Forensic Medicine. The attendance on Lectures on Medicine and Surgery must not commence earlier than the second winter session; and the attendance on Lectures on Clinical Medicine and Clinical Surgery must not commence until after the first winter session.

Every candidate for the License, before he is admitted to examination, must sign a declaration, stating whether he has or has not been rejected within three months by any of the Examining Boards included in Schedule (A) to the Medical Act.

Candidates must pass the following examinations.

First Examination, on Anatomy and Physiology. First day: *Evening*, from 7 to 10, by written questions. Second day: *Evening*, commencing at 7 o'clock, *visà à vis*, on Dissections and Preparations. Second or Pass Examination. First day: *Evening*, from 7 to 10, by written questions on Surgical Anatomy, and on the Principles and Practice of Surgery. Second day: *Morning*, Practical examination at the College or in the surgical wards of a Hospital. *Afternoon*, from 1 to 4, on Materia Medica, and on Chemistry in its application to Pathology, Pharmacy, and Toxicology. (This examination will be partly written and partly practical.) *Evening*, commencing at 7 o'clock, written questions on Midwifery and the Diseases peculiar to Women. Third day: *Evening*, from 7 to 10, written questions on Medical Anatomy, and on the Principles and Practice of Medicine, including the Principles of Public Health. Fourth day: *Morning*, the candidate's practical knowledge will be tested, either at the College or in the medical wards of a Hospital. *Evening*, commencing at 7 o'clock, *visà à vis*, on Medicine, Surgery, and Midwifery.

Every candidate intending to present himself for examination is required to give fourteen days' notice in writing to the Registrar of the College, at the same time transmitting the following certificates. For the *First Examination*—Evidence of having passed an Arts examination; of having been duly registered as a medical student; and of having completed the second winter session of professional study at a recognised Medical School. For the *Second Examination*—Evidence of having completed four years of professional study; of having attained the age of 21 years; of proficiency in the practice of vaccination; and of having attended not less than twenty labours. A testimonial of moral character is required of every candidate. Blank forms of the required certificates of attendance on hospital practice and on lectures may be obtained on application at the College.

Licentiates of this College shall not compound or dispense medicines, except for patients under their own care.

Examinations of candidates for the College License will take place as follows. *First Examination*, commencing on the first Mondays of October and December, 1875, and February, April, July, October, and December, 1876. *Second or Pass Examination*, commencing on the second Mondays of the same months.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

DIPLOMA OF MEMBER.

For synopsis of Regulations, see page 324.

1. *Preliminary General Education and Examination.*—Candidates who commenced their professional education on or after the 1st of January, 1871, will be required to produce one or other of the following certificates:—1. Of graduation in Arts at an University recognised for this purpose; viz., Oxford; Cambridge; Dublin; London; Durham; Queen's University in Ireland; Edinburgh; Glasgow; Aberdeen; St. Andrew's; Calcutta; Madras; Bombay; McGill College, Montreal; and Queen's College, Kingston, Canada. 2. Of having passed an examination for Matriculation, or such other examination as shall from time to time be sanctioned by the Council of this College, at an University in the United Kingdom, or at a Colonial or Foreign University recognised by the Council of the College.* 3. Of having passed the preliminary examination for the Fellowship of this College. 4. Of having passed the preliminary examination of the Royal College of Surgeons in Ireland or of Edinburgh, or of the Faculty of Physicians and Surgeons of Glasgow. 5. Of having passed the examination in Arts of the Society of Apothecaries of London, or of the Apothecaries' Hall of Ireland. 6. Of having passed the first-class examination of the Royal College of Preceptors. 7. Testamur of the Codrington College, Barbadoes. 8. Degree of Associate of Arts granted by the Tasmanian Council of Education, with a certificate that the student has been examined in Latin and Mathematics. 9. Of having passed the voluntary examinations of Christ's College, Canterbury, New Zealand; the certificate to include all the subjects required from time to time in the Preliminary Examination of the College. Candidates who shall not be able to produce one or other of the foregoing certificates will be required to pass an examination in English, Classics, and Mathematics, conducted by the Board of Examiners of the Royal College of Preceptors, under the direction and supervision of this College.†

II. *Professional Education.*—Professional studies prior to the date at which the candidate shall have passed an examination in general know-

* The following are the Examinations at present recognised under this Clause (No. 2), viz.: Oxford—Responsions or Moderations; Local Examinations, Senior and Junior, the Certificates to include Latin and Mathematics. Cambridge—Previous Examination; Local Examinations, Senior and Junior, the Certificates to include Latin and Mathematics. Dublin—Entrance Examination. London—Matriculation Examination. Durham—Examination of Students in Arts in their second and first years; Local Examinations, Senior and Junior, the Certificates to include Latin and Mathematics; Registration Examination of Medical Students. Queen's University in Ireland—Two years' Arts Course for Diploma of Licentiate in Arts; Preliminary Examinations at end of B.A. Course; Local Examinations, the Certificates to include Latin and Mathematics; Matriculation Examinations. Edinburgh, Aberdeen, Glasgow, and St. Andrew's—Preliminary or Extra Professional Examinations for Graduation in Medicine. Calcutta, Madras, and Bombay; McGill College, Montreal; Bishop's College, Montreal; University College, Toronto; University of Trinity College, Toronto; Victoria College, Toronto; University of Laval, Quebec; King's College, Windsor, Nova Scotia; University of Fredericton, New Brunswick; Dalhousie College and University, Halifax; University of Sydney; University of the Cape of Good Hope; Bellevue Hospital Medical College, New York—Matriculation Examinations. Queen's College, Kingston—Matriculation Examination; Preliminary Examination of Students in Medicine. University of Melbourne—Matriculation Examination, with a Certificate that the Student has passed an Examination in Latin. Adelaide—South Australian Institute.

† The following are the subjects of the examination during the year; viz.—Part I. *Compulsory Subjects.* 1. Reading aloud a passage from some English author. 2. Writing from dictation. 3. English Grammar. 4. Writing a short English composition: such as a description of a place, an account of some useful or natural product, or the like. 5. Arithmetic. No candidate will be passed who does not show a competent knowledge of the first four rules, simple or compound, of Vulgar Fractions, and of Decimals. 6. Questions on the Geography of Europe, and particularly of the British Isles. 7. Questions on the outlines of English History; that is, the succession of the Sovereigns and the leading events of each reign. 8. Mathematics: Euclid, Books I and II; Algebra to Simple Equations inclusive. 9. Translation of a passage from the second Book of Cæsar's *Commentaries de Bello Gallico.*—Part II. *Optional Subjects.* Papers will be set on the following six subjects; and each candidate will be required to offer himself for examination on one subject at least, at his option; but no candidate will be allowed to offer himself for examination on more than four subjects:—1. Translation of a passage from the first Book of the *Anabasis* of Xenophon. 2. Translation of a passage from X. B. Saintine's *Picciola*. 3. Translation of a passage from Schiller's *Wilhelm Tell*. Besides these translations into English, the candidate will be required to answer questions on the grammar of each subject, whether compulsory or optional. 4. Mechanics: the questions will be chiefly of an elementary character. 5. Chemistry: the questions will be on the elementary facts of Chemistry. 6. Botany and Zoology: the questions will be on the Classification of Plants and Animals. The quality of the handwriting and the spelling will be taken into account. N.B. Each candidate (who has not already paid the amount) is required to pay a Fee of £2 on the morning of the first day of the examination, prior to his admission thereto. The next examination will be held in December. The exact dates of the examination are duly advertised when fixed in the Medical Journals; and candidates are required to send in the prescribed forms of application not less than three weeks before the commencement of each examination. A candidate, in order to qualify for the Fellowship, is required, in addition to the subjects included in Part I, to pass in Greek, French, or German; and in one, at his option, of the remaining subjects in Part II.

ledge, in conformity with the regulation in the preceding section, are not recognised.—The following will be considered as the commencement of professional education:—1. Attendance on the practice of a Hospital, or other public institution recognised by this College. 2. Instruction as the pupil of a legally qualified surgeon, holding the appointment of Surgeon to a Hospital, General Dispensary, or Union Workhouse, or where such opportunities of practical instruction are afforded as shall be satisfactory to the Council; 3. Attendance on lectures on Anatomy, Physiology, or Chemistry, by lecturers recognised by this College. *The commencement of professional study otherwise than by attendance on lectures in recognised Medical Schools, or by attendance on the practice of recognised Hospitals, will not be admitted until a certificate thereof shall be furnished to the Secretary for registration at the College, by the practitioner whose pupil the candidate shall have become, or by the medical superintendent of the Hospital or other institution to the practice of which he shall have entered, and will date only from the reception of such certificate by the Secretary; the certificate to be accompanied by proof of having passed the preliminary examination in general knowledge.*

Blank forms of the required certificates may be obtained on application to the Secretary, and all necessary certificates will be retained at the College.

III. *Certificates, &c.*—1. Certificates will not be received on more than one branch of science from one and the same lecturer; but Anatomy and Dissections will be considered as one branch of science. 2. Certificates will not be recognised from any hospital in the United Kingdom, unless the surgeons thereto be members of one of the legally constituted Colleges of Surgeons in the United Kingdom; nor from any School of Anatomy and Physiology or Midwifery, unless the teachers in such school be members of some legally constituted College of Physicians or Surgeons in the United Kingdom; nor from any School of Surgery, unless the teachers in such school be members of one of the legally constituted Colleges of Surgeons in the United Kingdom. 3. No metropolitan hospital will be recognised by this College which contains less than 150, and no provincial or colonial hospital which contains less than 100 patients. 4. The recognition of colonial hospitals and schools is governed by the same regulations, with respect to number of patients and to courses of lectures, as apply to the recognition of provincial hospitals and schools. 5. Certificates of attendance upon the practice of a recognised provincial or colonial hospital unconnected with, or not in convenient proximity to, a recognised medical school, will not be received for more than one winter and one summer session of the hospital in attendance required; in such cases, clinical lectures will not be necessary, but a certificate of having acted as dresser for the period of at least six months will be required. 6. Certificates will not be received from candidates who have studied in London, unless they shall have registered at the College their cards of admission to attendance on lectures and hospital practice within fifteen days from the commencement of the session; nor from candidates who have studied in the provincial schools in England, unless their names shall be duly returned from their respective schools.* 7. Candidates who shall have pursued the whole of their studies in Scotland or Ireland will be admitted to examination upon the production of the certificates required respectively by the College of Surgeons of Edinburgh, the Faculty of Physicians and Surgeons of Glasgow, and the College of Surgeons in Ireland, from candidates for their diploma. Candidates who shall have pursued the whole of their studies at recognised foreign or colonial universities will be admitted upon the production of the several certificates required for their degree by the authorities of such universities. 8. Members or Licentiates of any legally constituted College of Surgeons in the United Kingdom; Graduates in Surgery of any university recognised for this purpose by this College; and 9. Graduates in Medicine of any legally constituted college or university recognised for this purpose by this College, will be admitted to examination on producing their diploma, license, or degree, together with proof of being 21 years of age. In each of these cases—7, 8, and 9—the candidate will also be required to produce a certificate of instruction and proficiency in Vaccination, and satisfactory evidence of having been occupied, after having passed the preliminary examination, at least four years, or four winter and four summer sessions, in the acquirement of professional knowledge.

IV. *Professional Examinations.*—The First or Primary Examination is partly written and partly demonstrative. The Second or Pass Examination is partly written, partly oral, and partly on the practical use of surgical apparatus and the practical examination of patients. A candidate having entered his name for either the primary or the pass exami-

* At the first registration in October, candidates will be required to produce a certificate of having passed one or other of the preliminary examinations in general knowledge recognised by this College.

TABULAR VIEW OF THE REGULATIONS OF THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, AND OF THE SOCIETY OF APOTHECARIES IN LONDON.

	ROYAL COLLEGE OF PHYSICIANS OF LONDON.	ROYAL COLLEGE OF SURGEONS OF ENGLAND.	APOTHECARIES' SOCIETY.
	MEMBERS.	FELLOWS.	LICENTIATES.
AGE REQUIRED	Twenty-five.	Twenty-five.	Twenty-one.
EVIDENCE OF PRELIMINARY EDUCATION BEFORE COMMENCEMENT OF PROFESSIONAL STUDY.	A Degree in Arts of a recognised University, or evidence of having passed examinations equivalent to those for a Degree in Arts.	Degree in Arts of recognised University; or evidence of examination in Arts required for Graduation in Medicine at Universities; or to pass an examination in English, Classics, and Mathematics.	Examination in Arts by the Society's examiners; or certificate of having passed an examination in Arts recognised by the Medical Council.
DURATION OF PROFESSIONAL STUDY.	Five years, of which four must have been passed at a school or schools recognised by the College.	Six years; in the case of members of the College, two years in addition to the certificates for the diploma of member.	Three winter and two summer sessions.
COURSES OF LECTURES, ETC., REQUIRED.	Two winter sessions.	Lectures during two winters; dissections three winters.	First two winter sessions.
Anatomy and Dissections.	Two winter sessions.	Lectures one winter; and Practical Physiology another session.	First two winter sessions.
Physiology.	Six months.	One course.	First winter session.
Chemistry.	Three months.	Three months.	First summer session.
Practical Chemistry.	Three months.	Three months.	First summer session.
Practical Pharmacy.	Three months.	Three months.	Three months.
Botany.	Three months.	Not required.	First summer session.
Morbid Anatomy.	Six months; including instruction in hospital <i>post mortem</i> room.	Lectures, three months; demonstrations in <i>post mortem</i> room during attendance on surgical hos. practice.	Third winter session.
Medicine.	Two winter sessions.	One course.	Last two winter sessions.
Clinical Medicine.	Three winter and three summer sessions, after second winter session.	One winter and one summer session.	Third winter session.
Surgery.	Two winter sessions.	One winter session.	Not required.
Clinical Surgery.	Two winter and two summer sessions, after second winter session.	Two winters and two summers; after first winter of practice. Observation and examination of patients at least twice a week for 3 ms.	Not required.
Practical Surgery.	Not required.	Six months.	Not required.
Midwifery and Diseases of Women.	Three months; not less than twenty labours.	Three months; not less than ten labours.	Second summer session; twenty cases of labour.
Clinical Study of Diseases of Women.	Six months.	Not stated.	Not stated.
Forensic Medicine.	Three months.	Three months.	Second summer session.
Hospital Practice.	Medical practice, three winters and three summers; surgical, three winters and two summers.	Surgical practice, four winters and four summers; medical practice, one winter and one summer.	Medical practice, beginning with second winter session to end of period of study.
Hospital Appointments.	Clinical clerk, three months; dresser, three months.	House-surgeon or dresser, six months.	Clinical clerk, six weeks at least.
Other Certificates.	Instruction and proficiency in Vaccination. Moral character from a Fel. or Mem.	Instruction and proficiency in Vaccination. Comparative Anatomy, one course.	Having been examined at class-exam. Instruction in vaccination. Moral conduct.

NUMBER OF EXAMINATIONS; FIRST EXAMINATION; WHEN IT MAY BE PASSED; SUBJECTS; DATES WHEN EXAMINATIONS ARE HELD.	THREE.	TWO.	TWO.	TWO.	TWO.
SECOND EXAMINATION; AT WHAT PERIOD IT MAY BE PASSED; SUBJECTS; DATES WHEN EXAMINATIONS ARE HELD.	<p>After four years of professional study in Surgical Anatomy and Surgery; <i>Materia Medica</i>; Chemistry in its application to Pathology, Pharmacy, and Toxicology; Midwifery and Diseases of Women; Examination of Surgical Patients.</p> <p>Third Examination: After completion of required course of study. Subjects: Medical Anatomy, Medicine, including Public Health and Psychology; Examination of Medical Patients.</p>	<p>After four years of professional study; Medical and Surgical Anatomy, Surgery, <i>Materia Medica</i>, Chemistry applied to Pathology, Pharmacy, and Toxicology; Midwifery and Diseases of Women, Medicine, and Principles of Public Health; Examination of Medical & Surgical Patients. Second Mondays in October and December, 1875, and February, April, July, October, and November, 1876.</p>	<p>After six years of professional study; in Pathology, Therapeutics, Surgery, and Medicine (Medicine not required for candidates holding approved diplomas, degrees, or licenses, or from those intending to obtain a medical qualification; in the latter case, the diploma of the College is not issued until proof of having passed the medical examination is produced). January, April, May, and November, and such other times as Council may appoint.</p>	<p>After end of fourth year of professional education; in Surgical Anatomy, Surgery, and Medicine (Medicine not required for candidates holding approved diplomas, degrees, or licenses, or from those intending to obtain a medical qualification; in the latter case, the diploma of the College is not issued until proof of having passed the medical examination is produced). January, April, May, July, November.</p>	<p>At end of medical studies, in Medicine, Pathology, Therapeutics, Midwifery and Diseases of Women and Children, Forensic Medicine and Toxicology. Every Wednesday and Thursday.</p>
FEES PAYABLE.....	<p>£34.</p>	<p>£15 15s.; £5 5s. at first examination, not returned in case of rejection, but candidate admitted to one subsequent first examination without additional fee. After rejection at second examination, fee returned, minus £3 3s.</p>	<p>If a member, £5 5s. at each examination, retained in case of rejection. If not a member, £26 5s. (over and above charges for stamps), of which £5 5s. is retained in case of rejection.</p>	<p>£22; £5 5s. at first examination; after two failures at this examination, candidate must pay an additional £5 5s. before being again admitted to that examination. After rejection at Pass Exam., £5 5s. retained; and after two failures, an additional £5 5s.</p>	<p>Certificate of qualification to practise, £6 6s.; half retained in case of rejection and accounted for at subsequent examination. First examination, £3 3s., retained in case of rejection and accounted for subsequently.</p>
REJECTED CANDIDATES.....	<p>After first examination, not admitted within three months; at second examination, not till end of six months. In first case, certificate of professional study in interval required; in second, hospital attendance & clinical lectures. After third examination, not readmitted (except by special permission) within one year.</p>	<p>After rejection at first examination, not again admitted until end of three months; after second examination, not till end of six months. Evidence of professional study during interval required in both cases, as in membership.</p>	<p>After rejection at first examination, candidates not again admitted for six months; after second examination, not till end of one year, unless Court of Examiners shall otherwise determine.</p>	<p>After rejection at primary examination, candidate must dissect for three months; after second examination, must attend Surgical Hospital Practice and Lectures on Clinical Surgery for six months.</p>	<p>After rejection at first examination, candidate cannot be again admitted till after three months; after examination for license not till after six months.</p>
CANDIDATES EXEMPTED FROM CERTAIN PORTIONS OF THE EXAMINATIONS OR ADMITTED UNDER SPECIAL REGULATIONS.	<p>Candidates who have passed examinations in Anatomy and Physiology of other licensing body; who have obtained Degrees in Medicine, or have passed examination in Surgery of a College of Surgeons; or who have obtained degrees in Medicine; or who, above forty years of age, provided in each case that the evidence and testimonials are satisfactory to the censors.</p>	<p>Candidates who have passed in Arts of a recognised University in the United Kingdom are required to study for five years only. Members of College, after eight years, admitted to second examination, on production of certificate of fitness signed by three Fellows.</p>	<p>Candidates who have studied in Scotland or in Ireland or at recognised Foreign or Colonial Universities, members or licentiates of the other Colleges of Surgeons in the United Kingdom, and Graduates in Medicine and Surgery of a recognised University.</p>	<p>Candidates who have studied in Scotland or in Ireland or at recognised Foreign or Colonial Universities, members or licentiates of the other Colleges of Surgeons in the United Kingdom, and Graduates in Medicine and Surgery of a recognised University.</p>	<p>Graduates in Medicine of British Universities; licentiates and members of Colleges of Physicians & Surgeons in the United Kingdom or of Apothecaries Hall in Ireland; candidates who have passed the first professional examination of other boards; candidates appointed before August 1, 1858, or who commenced hospital attendance on or before October 1, 1861.</p>

nation, who shall fail to attend the meeting of the Court for which he shall have received a card, cannot present himself for examination within three months afterwards.

DIPLOMA OF FELLOW.

For synopsis of Regulations, see page 324.

SOCIETY OF APOTHECARIES, LONDON.

For synopsis of Regulations, see page 324.

No certificates of lectures or of anatomical instruction delivered in private to particular students, apart from the ordinary classes of recognised public medical schools, can be received by the Court of Examiners.—All students are required personally to register the several tickets of admission to lectures and medical practice within the first fifteen days of the months of October and May.

Examination in Arts.—Examinations in the subjects of preliminary education will be held at the Hall of the Society on Friday and Saturday, January 29th and 30th, April 23rd and 24th, September 24th and 25th, 1875.—Candidates will be examined in the following branches; and no candidate will be approved unless he show a competent knowledge of each branch:—1. The English Language; 2. The Latin Language; 3. Mathematics; 4. One of the following subjects, at the option of the candidate: (a) Greek; (b) French; (c) German; (d) Natural Philosophy.* Candidates applying to be admitted to any examination must pay the fee (One Guinea) at least one week before the examination; and must sign their names in the candidates' book between 10 A.M. and 4 P.M., not later than the previous Thursday. If a candidate fail to pass the examination, the fee will not be returned to him; but he will be admissible to either or both of the two next following examinations in Arts without the payment of an additional fee, upon giving the usual notice, and signing the candidates' book. Certificates in Arts granted by any of the bodies whose certificate is recognised by the Medical Council will be accepted as equivalent to having passed the above examination.

Professional Examinations.—The Court meets every Wednesday and Thursday; and candidates are required to attend at 4.30 P.M. each day. Every candidate intending to offer himself for examination must give notice on or before the Monday previous to the day of examination, and must at the same time deposit all the required testimonials, with the fee, at the office of the beadle, where attendance is given every day, except Sunday, from 10 to 4 o'clock; Saturdays, 10 to 2.

The examination of candidates for the License is divided into two parts, and is conducted partly in writing (on Wednesday), and partly *visà voce* (on Thursday).

Modified Examinations.—1. All Graduates in Medicine of British Universities will be admitted to a clinical and practical examination in the practice of Medicine and Midwifery. 2. Licentiates of the Royal College of Physicians of London or of Edinburgh; of the Royal Colleges of Physicians and Surgeons, Edinburgh; of the King and Queen's College of Physicians, Ireland; or of the Faculty of Physicians and Surgeons, Glasgow; and of the Apothecaries' Hall, Dublin, will be admitted to a clinical and practical examination in the Practice of Medicine, Midwifery, Forensic Medicine, and Toxicology. 3. Any candidate who has passed his first examination for the License of either of the Colleges of Physicians in the United Kingdom, or of the Colleges of Physicians and Surgeons of Edinburgh jointly, or of the Faculty of Physicians and Surgeons, Glasgow, or of the Apothecaries' Hall of Dublin; the first professional examination for the Degree of M.B., or Master in Surgery in the Universities of Oxford, Cambridge, or London; or the second part of the professional examination for the Degree of M.D., or Master in Surgery in the Universities of Edinburgh, Aberdeen, St. Andrew's, and Glasgow; or the first examination for medical and surgical degrees in the Irish Universities, will be admitted to a single examination in Anatomy and Materia Medica (to those candi-

dates who have not undergone an examination in those subjects), Practice of Medicine, Pathology, Therapeutics, Midwifery, Forensic Medicine, and Toxicology, which examination will be partly written and partly *visà voce*. 4. Members of the Royal College of Surgeons, England; Licentiates of the Royal College of Surgeons, Edinburgh; and Licentiates of the Royal College of Surgeons, Ireland; and all candidates who have passed the first Anatomical examination of the Royal College of Surgeons, London; the Royal College of Surgeons, Edinburgh; the Royal College of Surgeons, Ireland, are exempt from writing on Anatomy and Physiology only in their first examination. 5. Candidates who were apprenticed before August 1st, 1858, and those students who commenced their hospital attendance on or before October 1st, 1861, will be admitted to a *visà voce* examination on the following subjects: In translating physicians' prescriptions, in such parts of Chemistry and Materia Medica as bear upon the Practice of Medicine, and on Toxicology, in Forensic Medicine, Visceral Anatomy, the Practice of Medicine, including Diseases of Women and Children, and in Midwifery.

All candidates, unless registered, will be required to produce their diplomas.

No rejected candidate for the License can be re-examined until the expiration of six months from his former examination. A candidate rejected on his first professional examination can be admitted to re-examination after three months; and no rejected candidate as an assistant until the expiration of three months.

Prizes.—The Society of Apothecaries annually offer two prizes for proficiency in the knowledge of Botany, and two prizes for proficiency in the knowledge of Materia Medica and Pharmaceutical Chemistry. The prizes consist of a gold medal awarded to the candidate who distinguishes himself the most; and of a silver medal and a book to the candidate who does so in the next degree. The examination in Botany will be held at the Hall of the Society on the third Thursday in June, at 10 A.M., and will be conducted by printed papers and *visà voce* questions. The examinations in Materia Medica and Pharmaceutical Chemistry will be held at the Hall of the Society on the third Wednesday in August, at ten A.M., and will be conducted by printed papers and *visà voce* questions.

The Society's Botanic Garden at Chelsea is open daily (except Sundays) from 10 A.M. to 5 P.M. Tickets of Admission may be had on application at the beadle's office at the Hall.

UNIVERSITY OF OXFORD.

DEGREES IN MEDICINE.

EVERY student must reside either in one of the Colleges or Halls, or in a Licensed Lodging-House, for three years. During these three years, he has to pass two examinations in Arts and one in either Mathematics, Natural Science, or Law and Modern History; when, if he obtain a first, second, or third class, he can take his B.A. degree; if he do not gain such honours, he has to pass a third examination in *Literis Humanioribus*. A student deciding to graduate in medicine must, after passing the requisite examination for the degree of B.A., spend two years in study prior to a scientific examination for the degree of Bachelor of Medicine, unless he shall have taken a first or second class in the natural science school, when he may go in at the first opportunity for the first M.B. Examination. Two years after passing this examination, and after four years of professional and scientific study, he may go in for the second or practical examination for the M.B. degree. These four years of medical study may be spent either in or out of Oxford, in an approved medical school.

The M.B. Degree confers the License to Practise. For the Degree of Doctor in Medicine, a dissertation has to be publicly read three years after taking the M.B. Degree.

The medical examinations take place annually in Michaelmas Term. Scholarships of about the value of £75 are obtainable at Christ Church, Magdalen, and other Colleges, by competitive examination in natural science. Every year a Radcliffe Travelling Fellowship is competed for by anyone who, having taken a first-class in any of the Public Examinations of the University, or having obtained some University Prize or Scholarship open to general competition, proposes to study medicine. The Travelling Fellows receive £200 a-year for three years, half this period being spent in study abroad.

UNIVERSITY OF CAMBRIDGE.

BACHELOR OF MEDICINE.

A STUDENT proceeding to this degree must—(1) Reside in the University two-thirds of each of nine terms; (2) Pass the previous examina-

* The following is the Syllabus of Subjects for Examination in 1876:—1. The English Language: Its leading features of its History, its Structure and Grammar. English Composition. 2. The Latin Language: Junyur Examination: Virgil, *Æneid*, Book IV. April Examination: Horace, *Odes*, Book I. September Examination: Cicero, *De Senectute*. Re-translation of easy sentences. Grammatical Questions will be introduced into the Latin Paper, and each Candidate will be expected to give satisfactory answers to these.—3. Mathematics: The Ordinary Rules of Arithmetic; Vulgar and Decimal Fractions; Addition, Subtraction, Multiplication, and Division of Algebraical Quantities; Simple Equations; The First Two Books of Euclid. 4. Greek: Xenophon, *Memorabilia*, Books I and II; Grammatical Questions. 5. French: M. Lavoisier, *Leçons*; Translation from English into French; Grammatical Questions. 6. German: Lessing, *Emilia*; Translation from English into German; Grammatical Questions. (d) Natural Philosophy: Mechanics, Hydrostatics, and Pneumatics. (The Books recommended for study in this subject are Smith's *Statics* and Smith's *Hydrostatics* (Rivington and Co.), or Newton's *Principia* (Cambridge).)

tion, which may be done in the first or second term of residence; or he may pass an examination equivalent to previous examination under the Oxford and Cambridge Schools Examination Board before he comes into residence; (3) Pursue medical study for five years, unless he have obtained honours in the Mathematical, Classical, Moral Sciences, or Natural Sciences Tripos, in which case only four years are required.

There are three examinations for the degree of Bachelor of Medicine, conducted partly by written answers, and partly *visû voce*. The examinations include chemical analysis, practical histology, the recognition and description of specimens (healthy, morbid, and microscopical), dissections, and the examination of patients.

The subjects of the first examination are—1, Mechanics and Hydrostatics; 2, Chemistry, with Heat and Electricity; 3, Botany. The student may present himself for this examination at any time after passing the previous examination. He must produce certificates of having diligently attended one course of lectures on Chemistry, including manipulation and one course on Botany.

The subjects of the second examination are—1, Elements of Comparative Anatomy; 2, Human Anatomy and Physiology; 3, Pharmacology. Before presenting himself for this examination, the student must have completed two years of medical study. He must have attended hospital practice during one year, have practised dissection during one season, and must produce certificates of having diligently attended a course of lectures on each of the following subjects: 1, Elements of Comparative Anatomy; 2, Human Anatomy and Physiology; 3, Materia Medica and Pharmacy; 4, Pathology.

The subjects of the third examination are—1, Pathology and the Practice of Physic (two papers, including questions in Surgery and Midwifery); 2, Clinical Medicine; 3, Medical Jurisprudence.—Before presenting himself for this examination, the student must have completed the course of medical study, must have attended hospital practice during three years, and must produce certificates of having attended one course of lectures on each of the following subjects: 1, Principles and Practice of Physic; 2, Clinical Medicine; 3, Clinical Surgery; 4, Medical Jurisprudence; 5, Midwifery: also of having been clinical clerk for six months at least at a recognised hospital: or of having, subsequently to the completion of his attendance on hospital practice, attended to practical medicine, with special charge of patients in a hospital, dispensary, or parochial union, under superintendence of a qualified practitioner, unless he himself be duly qualified.

After these examinations have been passed, an Act must be kept in the schools. The candidate reads a thesis, composed by himself, on some subject approved by the Regius Professor of Physic; the professor brings forward arguments or objections for the candidate to answer, and examines him *visû voce* as well on questions connected with his thesis as on other subjects in the faculty of a more general nature. The exercise must continue at least one hour.

DOCTOR OF MEDICINE.

This may be taken by a Bachelor of Medicine in the ninth term after his inauguration. He is required to produce certificates of having been engaged five years in medical study, to keep an Act similar to that for M.B., and write an extempore essay. He pays ten guineas for the Act.—A Master of Arts may proceed to the degree of M.D. in the twelfth term after his inauguration as M.A., without having taken the degree of M.B. He must pass the three examinations for M.B., and keep the Act for the M.D. degree. He must produce certificates of having been engaged five years in medical study, and the same certificates of attendance on lectures and hospital practice are required as of the candidate for the degree of M.B.

MASTER OF SURGERY.

The subjects of the examination for this degree are—1, Surgical Anatomy; 2, Pathology and the Principles and Practice of Surgery; 3, Clinical Surgery; 4, Midwifery.—Before admission to his examination, the candidate must have passed all the examinations for the degree of M.B., and must produce certificates of having attended the surgical practice of a hospital for three years, of having been house-surgeon or dresser for six months, and of having attended—1, a second course of lectures on Human Anatomy; 2, one course of lectures on the Principles and Practice of Surgery; 3, lectures on Clinical Surgery during one year; 4, ten cases of Midwifery; 5, of having practised Dissection during a second season.—The examination takes place at the same time as those for M.B., and in a similar manner. The candidate is required to perform operations on the dead body, and to examine patients in the hospital.

UNIVERSITY OF LONDON.

DEGREES IN MEDICINE AND SURGERY.

THE following Examinations for Degrees in Medicine will be held in the University of London in 1876. They will commence on the following days.

Preliminary Scientific Examination: Monday, July 19th.
Bachelor of Medicine (M.B.) First Examination: Monday, July 26th.

Bachelor of Medicine (M.B.) Second Examination: Monday, November 1st.

Bachelor of Surgery (B.S.): Tuesday, November 23rd.
Master in Surgery (M.S.) and Doctor of Medicine (M.D.): Monday, November 22nd.

The certificates in each case must be transmitted to the Registrar at least fourteen days before the commencement of the examination.

The fee for each examination is Five Pounds.* If a candidate withdraw or fail to pass either of the examinations, the fee is not returned; but he is admitted without further payment to two subsequent preliminary scientific, first M.B., second M.B., or B.S. examinations, or to one subsequent M.S. or M.D. examination, provided that he give notice to the Registrar at least fourteen days before the commencement of the examination.

BACHELOR OF MEDICINE.

Every candidate for the degree of Bachelor of Medicine is required—
—1. To have passed the Matriculation Examination, or to have taken a degree in Arts in one of the Universities of Sydney, Melbourne, Calcutta, or Madras (provided that Latin has been one of the subjects in which he has passed). 2. To have passed the preliminary Scientific Examination.† 3. To have been engaged in his professional studies during four years subsequently to matriculation or graduation in Arts in one or more of the medical institutions or schools recognised by this University; one year, at least, of the four to have been spent in one or more of the recognised institutions or schools in the United Kingdom. 4. To pass two examinations in Medicine.

First M.B. Examination.—The candidate must have passed the preliminary scientific examination at least one year previously, and must produce certificates—1. Of having completed his nineteenth year. 2. Of having been a student during two years at one or more of the medical institutions or schools recognised by this University; and of having attended a course of lectures on each of the three following subjects: Descriptive and Surgical Anatomy; General Anatomy and Physiology; Comparative Anatomy; Pathological Anatomy; Materia Medica and Pharmacy; General Pathology; General Therapeutics; Forensic Medicine; Hygiene; Obstetric Medicine and Diseases peculiar to Women and Infants; Surgery; Medicine.‡ 3. Of having dissected during two winter sessions. 4. Of having attended a course of Practical Chemistry. 5. Of having attended to Practical Pharmacy, and having acquired a practical knowledge of the preparation of medicines. Candidates are examined in Anatomy; Physiology; § Materia Medica and Pharmaceutical Chemistry; Organic Chemistry. Candidates must show a competent knowledge in all the subjects. The examinations are conducted by printed papers and *visû voce* interrogation, by demonstration from preparations and specimens, and by dissections.

Examination for Honours.—Any candidate who has been placed in the first division may be examined for Honours in (1) Anatomy, (2) Physiology, Histology, and Comparative Anatomy; and (3) Materia Medica and Pharmaceutical Chemistry, and Organic Chemistry. If, in the opinion of the examiners, sufficient merit be evinced, the candidate who distinguishes himself most in each of these three divisions receives

* For the degree of Doctor of Medicine, the fee will continue to be Ten Pounds to all such as having taken their M.B. degree under the former regulations, shall not have paid the fee of Five Pounds at the Preliminary Scientific Examination.

† Candidates for the Degree of M.B. are strongly recommended by the Senate to pass the Preliminary Scientific Examination before commencing their regular medical studies. For the Preliminary Scientific Examination, candidates are examined in Mechanical and Natural Philosophy; Inorganic Chemistry; Botany and Vegetable Physiology; Zoology. They must show a competent knowledge in all the subjects of examination, and in Practical Chemistry. Candidates who matriculated previously to January 1861, are not required to pass the Preliminary Scientific Examination in any other subjects than Chemistry and Botany; and they may pass the Preliminary Scientific Examination and the First M.B. Examination in the same year, if they so prefer.

‡ The subjects numbered 2, 3, and 4, must be attended after passing the Matriculation Examination, or taking a Degree in Arts.

§ Any candidate is allowed, if he so prefer, to postpone his examination in Physiology from the First M.B. Examination at which he presents himself for examination in the remaining subjects until the First M.B. Examination in the next or any subsequent year; but such candidate is not admitted to compete for honours on either occasion; and he cannot be admitted as a candidate at the Second M.B. Examination until after the lapse of at least twelve months after having passed his examination in Physiology.

an exhibition of £40 *per annum* for the next two years, payable in quarterly instalments; provided that, on receiving each instalment, he declare his intention of presenting himself at the second M.B. examination within three years from the time of passing the first M.B. examination. Under the same circumstances, the first and second candidates in each subject receive each a Gold Medal of the value of five pounds.

*Second M.B. Examination.**—No candidate is admitted to this examination within two academic years of the time of his passing the first examination, nor without certificates:—1. Of having passed the first M.B. examination. 2. Of having subsequently attended a course of lectures on each of two of the subjects for which he had not presented certificates at the first examination. 3. Of having conducted at least twenty labours.† 4 and 5. Of having attended the Surgical and the Medical Practice of a recognised Hospital or Hospitals during two years, with Clinical Instruction and Lectures on Clinical Surgery and Clinical Medicine.‡ 6. Of having, subsequently to the completion of his attendance on surgical and medical hospital practice, attended to Practical Medicine, Surgery, and Midwifery, with special charge of patients, in a hospital, Infirmary, Dispensary, or Parochial Union, during six months. 7. Of having acquired proficiency in vaccination.§ The candidate must also produce a certificate of moral character from a teacher in the last school or institution at which he has studied, as far as the teacher's opportunity of knowledge has extended. Candidates are examined in General Pathology, General Therapeutics, and Hygiene; Surgery; Medicine; Midwifery; Forensic Medicine. The examinations include questions in Surgical and Medical Anatomy, Pathological Anatomy, and Pathological Chemistry. The examinations are conducted by printed papers and *visû voce* interrogations; by practical examinations in obstetric preparations and apparatus; by examination, and report on cases, of medical patients in the wards of a hospital; demonstrations from specimens and preparation. Candidates are expected to write prescriptions in Latin, without abbreviations.

Bachelors of Medicine of the University of London have no right, as such, to assume the title of Doctor of Medicine.

Examination for Honours.—Any candidate who has been placed in the first division may be examined for Honours in (1) Medicine, (2) Obstetric Medicine, and (3) Forensic Medicine. If, in the opinion of the examiners, sufficient merit be evinced, the candidate who distinguishes himself the most in Medicine receives £50 *per annum* for the next two years, with the style of University Scholar in Medicine; and the candidates who distinguish themselves the most in Obstetric Medicine and in Forensic Medicine receive each £30 *per annum* for the next two years, with the style of University Scholar in Obstetric Medicine and in Forensic Medicine respectively. The first and second candidates in each of the preceding subjects each receive a Gold Medal, value £5.

BACHELOR OF SURGERY.

The candidates must produce certificates—1. Of having taken the degree of Bachelor of Medicine in this University. 2. Of having attended a course of instruction in Operative Surgery, and of having operated on the dead subject. The examinations are conducted by printed papers on surgical anatomy and surgical operations; by examination and report on cases of surgical patients; by performance of operations upon the dead subject; by application of surgical apparatus; and by *visû voce* interrogation.

Examination for Honours.—Any candidate who has been placed in the first division at the examination may be examined for Honours in Surgery. If, in the opinion of the examiners, sufficient merit be evinced, the candidate who distinguishes himself the most receives £50 *per annum* for the next two years, with the style of University Scholar in Surgery; and the first and second candidates each receive a Gold Medal of the value of five pounds.

MASTER IN SURGERY.

The candidate must produce certificates—1. Of having taken the

* Any candidate for the Second M.B. Examination who has passed the First M.B. Examination under the former regulations, is required to have also passed the Examination in Pathology at some previous First M.B. Examination carried on under the present regulations, at which examination he is not allowed to compete for honours.

† Certificates will be received from any legally qualified practitioner.

‡ The student's attendance on the Surgical and on the Medical Hospital Practice specified in Regulations 4 and 5, may commence at any date after his passing the Preliminary Scientific Examination, and may be comprised either within the same or within different years; provided that in every case his attendance on Hospital Practice be continued for at least eighteen months subsequently to his passing the First M.B. Examination. Attendance during three months in the wards of a Lunatic Asylum recognised by the University, with clinical instruction, may be substituted for a like period of attendance on medical hospital practice.

§ Certificates on this subject will be received only from the authorised vaccinators appointed by the Privy Council.

degree of Bachelor of Surgery* in this University. 2. Of having attended subsequently—(a) to Clinical or Practical Surgery during two years in a hospital or medical institution recognised by this University; (b) or to Clinical or Practical Surgery during one year in a recognised hospital or medical institution, and of having been engaged during three years in the practice of his profession; (c) or of having been engaged during five years in the practice of his profession, either before or after taking the degree of Bachelor of Surgery in this University.† 3. Of moral character, signed by two persons of respectability. The examination is conducted by means of printed papers and *visû voce* interrogation; and the candidates are examined in Logic and Moral Philosophy,‡ and in Surgery. If, in the opinion of the examiners, sufficient merit be evinced, the candidate who distinguishes himself the most at this examination receives a Gold Medal of the value of twenty pounds.

DOCTOR OF MEDICINE.

The candidate must produce certificates analogous to those required for candidates for the degree of Master in Surgery, but having special relation to Medicine. The examination is conducted by printed papers and *visû voce* interrogations; and candidates are examined in Logic and Moral Philosophy, and in Medicine. If, in the opinion of the examiners, sufficient merit be evinced, the candidate who distinguishes himself the most at this examination receives a Gold Medal of the value of twenty pounds.

UNIVERSITY OF DURHAM.

EVERY student in medicine must have been registered; and no one shall be registered unless he have passed the Registration Examination or such other examination as the Warden and Senate shall deem equivalent. The Registration Examination is directed to the rudiments of Religion, Literature, and Science; and is conducted by two or more examiners nominated by the Warden. The Registration Examinations will begin on September 14th, 1875, and April 18th and September 19th, 1876.§ The following Examinations are also accepted as qualifications for registration: Durham Senior Examination of persons not members of the University of Durham;|| Durham Examination for Students of Arts in their first year. The Examinations for Licenses and Degrees in Medicine and Surgery are conducted in Newcastle. The first examination is held in April; the final examination in June.

LICENSE IN MEDICINE.

The candidate must be of the age of 21 years, and must, since his registration, have spent four years in medical study at one or more of the schools recognised by the Licensing Bodies named in Schedule (A) of the Medical Act. One at least of the four years must be spent at the College of Medicine at Newcastle-on-Tyne. There are two public examinations: the first, in Anatomy, Physiology, and Chemistry, after two years at least of medical study; the second after four years at least of medical study. Candidates must produce satisfactory testimonials of conduct, and such certificates of attendance on lectures and hospital practice as the Warden and Senate shall require.

BACHELOR OF MEDICINE.

The candidate must be of the standing of three terms at least as a Licentiate of Medicine, and of eighteen terms (six years) at least from

* Candidates who have obtained the degree of Bachelor of Medicine previously to 1866, will be admitted to the examination for the degree of Master in Surgery without having taken the degree of Bachelor of Surgery; and in the case of such candidates, the attendance on surgical practice required by regulation 2, may commence from the date of the M.B. Degree.

† One year of attendance on Clinical or Practical Surgery, or two years of practice, will be dispensed with in the case of those candidates who at the B.S. Examination have been placed in the first division.

‡ Any candidate who has taken the degree either of B.A., B.Sc., or M.D. in this University, is exempted from this part of the examination; and any candidate who has passed the Second M.B. Examination, may at any subsequent M.S. Examination present himself for Logic and Moral Philosophy alone, if he so prefer; thereby gaining exemption, if he should pass, from examination in that subject when he presents himself to be examined for the degree of Master in Surgery.—An analogous exemption is allowed in the case of candidates for the degree of M.D.

§ The following are the subjects for examination. The History contained in the Acts of the Apostles.—English Grammar and Composition.—Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations.—Euclid, Books I and II.—Latin Grammar, with—In April, Casar, *De Bello Gallico*, Lib. I and II. In September, Virgil, *Æneid*, Lib. I and II. Assumed at least of the following: Greek Grammar, with Xenophon's *Memorabilia*.—French Grammar, with Voltaire's *Charles VII.*—German Grammar, with Goethe's *Der Faust*, and *Wanderer*, Book I.—Elementary Questions in Mechanics, Hydrostatics, and Pneumatics. Candidates must specify on which of the optional subjects they intend to be examined, one month before the examination.

|| The subjects of examination are:—Latin; Algebra (including Simple Equations); Euclid (Books I and II); and one of the following subjects—Greek; French; German; and Mechanics, Hydrostatics, and Pneumatics.

the date of registration or matriculation. He must have obtained a Degree in Arts of the University of Durham, or have passed the final examination for the Degree of Bachelor of Arts, or an equivalent to it; and must have passed the examination for the Degree of Bachelor of Medicine. The candidate must write an Essay on some medical subject, selected by himself and approved by the Professor of Medicine, and pass an examination thereon, including the collateral medical branches involved in the subject of the Essay.

DOCTOR OF MEDICINE.

The candidate must be of the standing of three terms at least as a Bachelor of Medicine in the University, and of the standing of twenty-one terms (seven years) from his registration or matriculation; and must have passed the examination for the Degree of Doctor of Medicine, which is similar to that for the Degree of Bachelor.

LICENSE IN SURGERY.

The regulations are similar to those for the License in Medicine; but the second examination is directed more particularly to Surgery, and may be passed at the same time with the final examination for a License in Medicine.

MASTER IN SURGERY.

The candidate must be a Licentiate in Surgery and in Medicine, and of the standing of eighteen terms (six years) at least from the date of his registration or matriculation, and of three terms at least from the date of his admission to the License in Surgery.—[In other respects, the regulations for this degree are analogous to those for that of Bachelor of Medicine.] The examination for this degree is directed chiefly to the Practice of Surgery.

Candidates for the Degrees of Master in Surgery, Bachelor of Medicine, and Doctor of Medicine, must reside and pursue the Arts course for three terms, either in Durham or at Newcastle, in addition to the four years of medical study.

Fees for Examinations and Degrees.—Senior Middle-Class Examination, £1; Examination at the end of First Year, £1; Registration Examination, £1; Extraordinary Registration Examination, £2; Registration, 5s.; each Public Examination in Medicine and in Surgery, £1; License in Medicine or in Surgery, £3; Degree of Master in Surgery, Bachelor in Medicine, or Doctor in Medicine, each £6.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

REGULATIONS FOR THE LICENSE.

No one can obtain the License of the College under the age of 21 years. Every applicant must produce satisfactory evidence of having been engaged in the study of Medicine during at least four years subsequently to registration as a student, and of having attended the following courses at a University, or at a medical school recognised by the College:—Anatomy, Practical Anatomy, Chemistry, Practice of Medicine, Clinical Medicine, and Principles and Practice of Surgery, each a six months' course; Practical Chemistry, Materia Medica and Pharmacy, Physiology or Institutes of Medicine, Clinical Surgery, Midwifery, Medical Jurisprudence, General Pathology, or Pathological Anatomy, and Practical Pharmacy, each a three months' course. He must have attended the practice of a Public Hospital (containing not fewer than eighty beds) during not less than twenty-four months, twelve of which must have been spent in attendance on the medical wards. He must also have attended for six months the practice of a public dispensary, or have acted for six months as clinical clerk or dresser in a hospital; or have been engaged during six months as visiting assistant to a registered practitioner. He must also have attended at least six cases of labour under the superintendence of a qualified medical practitioner, and have studied vaccination under a competent and recognised teacher. He must have passed the Preliminary Examination in Literature and Science,* and had his name inscribed in the General Medical Council's Register of Medical Students, previously to the commencement of his Medical Studies. Masters and Bachelors of Arts of any British or Foreign University, whose course of study may be approved of by the College, will be exempted from the preliminary examination; also those who have passed the examination of the national educational bodies, or any of the licensing boards recognised by the Medical Act.

The Professional Examination will be divided into two parts: (1) Anatomy, Physiology, Chemistry; (2) Materia Medica and Pharmacy, Pathology and Pathological Anatomy, Practice of Medicine, Midwifery, Medical Jurisprudence, Clinical Medicine. No candidate will be admitted to the first examination until he has completed two, or to the second until he has completed four, years of professional study. The

preliminary examinations are held in April, July, and October; the professional examinations in January, April, July, and October.

Candidates who already possess a qualification from a recognised Licensing Body, or who have passed the first professional examination before a qualifying body (provided it be as extensive as that required by this College), will be at once admitted to the second examination.

No candidate is admissible to examination who has been rejected by any other licensing board within the previous three months.

The Fee payable by a Licentiate is Ten Guineas. If a candidate be unsuccessful, Two Guineas will be retained to pay expenses.

Candidates may be admitted to special examination on bringing forward satisfactory reasons and paying an extra fee.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

REGULATIONS FOR CANDIDATES FOR THE DIPLOMA.

THE regulations regarding schools of medicine, preliminary examination, and professional study and examination, are similar to those for the double qualification (see below), except that the third course of Medicine and the course of Pathological Anatomy are not required. The first professional examinations will be held on October 26th, 1875; January 25th, April 4th and 25th, and July 25th, 1876. The second examination takes place immediately after the conclusion of the first.

At the second examination, the student, in furnishing the statement of his professional study, must, if he have been an apprentice, insert the name of his master, the date of his indenture, and the length of time for which he was bound. If the candidate have been an apprentice to a Fellow of the College, he must also produce his discharged indenture.

Recent Dissections, Anatomical Specimens, and articles of the Materia Medica, are employed during the examinations; and all candidates are required to write out formulæ of prescriptions. They are also subjected to a practical clinical examination in the Surgical Hospital.

No candidate shall be admissible to examination who has been rejected by any other Licensing Board within three months preceding his application to be examined.

The Fees are: for the first examination, £4; for the second, £6; from candidates who have elsewhere passed the first professional examination, £10. In each case, £2 is retained if the candidature be unsuccessful.

Candidates desirous of special examinations on other days than those fixed by the regulations, must prepare a case to be submitted to the consideration of the authorities of the College, with evidence to show why it was and is impossible for them to avail themselves of the ordinary examinations, past or future. They must at the same time produce certificates of the whole of the prescribed course of study, and of having passed the preliminary examination, and must state the earliest and the latest days within which they can present themselves. It is very desirable that all such candidates, and especially those who are a distance from Edinburgh, should present their applications as long beforehand as possible. The fees for special examinations, which must be lodged by 10 A.M. of the day preceding the examination-day, are as follows; viz.—£20 for first and second examinations, of which £12 will be returned to candidates remitted on the first examination; but no part of the money will be repaid to candidates who, having passed the first, are unsuccessful in the second examination; £17 for second examination. Of this, no part will be returned to candidate if unsuccessful.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.

DOUBLE QUALIFICATION IN MEDICINE AND IN SURGERY.

THE Royal College of Physicians of Edinburgh and the Royal College of Surgeons of Edinburgh, while they still give their Diplomas separately, have made arrangements by which, after one series of examinations, the student may obtain the Diplomas of both Colleges. This joint examination is conducted by a Board, in which each body is represented for examination in the branches common to both Medicine and Surgery; but the College of Physicians takes exclusive charge of the examination in Medicine, and the College of Surgeons of the examination in Surgery. Students passing that examination are enabled to register two qualifications—Licentiate of the Royal College of Physicians of Edinburgh, and Licentiate of the Royal College of Surgeons of Edinburgh.

Every candidate must have followed his course of study in a University, or in an established School of Medicine, or in a Provincial

* For the subjects, see note to regulations for double qualification.

School specially recognised by the College of Physicians and Surgeons of that division of the United Kingdom in which it is situate. Under the title of *Established School of Medicine* are comprehended the medical schools of those cities of Great Britain and Ireland in which Diplomas in Medicine or Surgery are granted, and such Colonial and Foreign Schools as are similarly circumstanced in the countries in which they exist.

Professional Education. 1. Candidates must have been engaged, during four years after the examination in general education, in not less than four winter sessions*, or three winter and two summer sessions†, attendance at a recognised medical school. 2. The candidate must have attended the following courses of lectures: Anatomy, two courses† of six months each, and Practical Anatomy, twelve months; or Anatomy, one course of six months, and Practical Anatomy, eighteen months; Physiology, not less than fifty lectures; Chemistry, Practice of Medicine, Clinical Medicine,‡ Medicine (a third course, either Practice or Clinical, at option),‡ Principles and Practice of Surgery, Clinical Surgery,‡ Surgery (a third course, either Principles and Practice or Clinical Surgery, at option),‡ each six months; Practical or Analytical Chemistry, Materia Medica, Midwifery, and Diseases of Women and Children, Medical Jurisprudence, and Pathological Anatomy,§ each three months.¶ 3. He must also produce certificates:—*a.* Of having attended at least six cases of labour under the superintendence of a registered medical practitioner. *b.* Of having attended, for three months, instruction in Practical Pharmacy. The teacher signing the certificate must be a Member of the Pharmaceutical Society of Great Britain, or a chemist or druggist recognised by either College on special application, or the superintendent of the laboratory of a Public Hospital or Dispensary, or a registered practitioner who dispenses medicine to his own patients. *c.* Of having attended, for twenty-four months, a public General Hospital containing, on an average, at least eighty patients. *d.* Of having attended, for six months, the practice of a public Dispensary specially recognised by either College; or of having been engaged for six months as assistant to a registered practitioner. *e.* Of having been instructed in vaccination; the certificate to be signed by the teacher, who must be a registered practitioner.

It is strongly recommended to students to avail themselves of opportunities of attending lectures on Ophthalmic and Mental Diseases, also on Natural History and Comparative Anatomy; and of obtaining practical instruction in the use of the Microscope.

Preliminary Examination in General Education.—All candidates for the Diplomas of the Colleges must have passed the examination in General Education,¶ and have had their names inscribed in the General Medical Council's Register of Medical Students at the commencement of their Medical studies. Certificates of having passed the examinations in General Education, conducted by other bodies (viz., those recognised by the General Medical Council), will be accepted as equivalent. Students who intend to undergo the preliminary examination, must give in their names, addresses, and places of birth to the officer of either College, not later than three days before the day of examination; and must pay a fee of Ten Shillings, not to be returned in case of rejection; but they will be admissible to re-examination at a future period without paying another fee.**

Professional Examination.—1. Candidates for the double qualification are subjected to two professional examinations. 2. Opportunities for both examinations will be presented six times in each year. On each occasion, the candidates write answers to the questions proposed; and are examined orally on the days immediately succeeding. 3. Unsuccessful

* Candidates commence study prior to September 1st, and will be admitted to examination after four winter sessions, or three winter and two summer sessions, attendance on classes at a regular Medical School.

† The two courses must not be attended in the same session.

‡ Two courses of Clinical Medicine or of Clinical Surgery of three months each, if not simultaneous, will be held equivalent to one course of six months. They must be attended during the attendance at the Hospital where they are delivered.

§ A certificate of attendance at the *Post-Mortem* Examinations at a General Hospital will be accepted in lieu of this course.

¶ The six months' courses delivered in Scotland must consist of not fewer than one hundred lectures, with the exception of Clinical Medicine and Clinical Surgery. The three months' courses must consist of not fewer than fifty lectures.

‡ The examination will embrace the following subjects:—1. English language, including Grammar and Composition. 2. Arithmetic, including Vulgar and Decimal Fractions. Algebra, including Simple Equations. 3. Geometry: First Two Books of Euclid. 4. Latin: *Cæsar, De Bell. Gall.*, Book IV. *Virgil, Æn.*, Book VIII; also a passage from an unprinted author. 5. One of the following subjects at the option of the candidate:—(1) Greek: *Herodotus, History*, Book I; and *Homer, Iliad*, Book II. (2) French: *Molière, Le Malade Imaginaire*. (3) German: *Schiller's Wilhelm Tell*. (4) Natural Philosophy, including Mechanics, Hydrostatics, and Pneumatics. In Latin, Greek, French, and German, parsing of words from the passages given to be translated will be required; also, translation of short sentences from English into the respective languages.

** Candidates who commenced their professional studies before September 17th, 1866, may pass this examination at any period of their professional studies previously to the first professional examination. The fee is £1.

successful candidates are remitted to their studies for not less than three months. 4. The first examination embraces Anatomy, Physiology, and Chemistry; and takes place not sooner than the end of the second winter season. 5. Candidates must apply to the Inspector of Certificates on or before the Saturday preceding the day of examination; and must produce certificates of attendance on those courses of lectures which have reference to the subjects of the examination, and evidence of having passed the preliminary examination. 6. The sum of £6 must be paid to the Inspector of Certificates for this examination not later than 10 A.M. of the day preceding it. This sum will be considered as paid to account for the entire Fee of £16 payable for the two Diplomas. 7. In the case of a candidate being unsuccessful at this examination, £4 will be returned to him. 8. The second examination embraces Medicine, Surgery, and Surgical Anatomy, Midwifery, Pathological Anatomy, Materia Medica and Pharmacy, and Medical Jurisprudence; and takes place after the termination of the winter session of the last year of study, four years after the examination in general education. 9. Application for examination must be made to the Inspector of Certificates not later than the Monday previous to the day of examination. 10. Every candidate must produce—*a.* Satisfactory evidence of having attained the age of twenty-one years; *b.* A certificate of having passed the preliminary examination, unless this certificate have been already seen by the Inspector; *c.* A certificate of registration in the books of the General Medical Council; *d.* A certificate of having passed the first professional examination; *e.* The certificates of his classes, etc.; *f.* A tabular statement (for which a printed form will be furnished), exhibiting the whole of his professional education, and distinguishing the classes, hospitals, dispensaries, and schools, attended during each session. 11. The fee for this examination is £10, which must be lodged with the Inspector not later than 10 A.M. of the day preceding the examination day. 12. On the production of the above documents, and after receiving the fees, the Inspector gives the candidate a letter authorising the examiners to take him on trial. 13. In case of a candidate being unsuccessful at this examination, £8 will be returned to him. 14. Candidates who have passed the first professional examination in Anatomy, Physiology, and Chemistry, at any of the Licensing Boards recognised by the Medical Act, will be admissible to the second professional examination on producing certificates of the whole course of study prescribed, of having passed their preliminary and first professional examinations, and of having been registered as students. If any of the three subjects of the first examination have been omitted, the candidate will have to undergo an examination on the omitted subjects; and none of the subjects set down in § 3 will be omitted at the second examination. The fee payable by such candidates is £16, and unsuccessful candidates will receive back £14. 15. In addition to the written and oral examinations, all candidates are subjected to practical Clinical Examinations in Medicine and Surgery. 16. No candidate is admissible to examination who has been rejected by any other Licensing Board within the three preceding months.

Communications from candidates to be addressed to Dr. GAIRDNER, 45, Northumberland Street, Edinburgh.

The following will be the periods of examinations for the Double Qualification of the Royal Colleges of Physicians and Surgeons of Edinburgh, for the year 1875-76. **Preliminary Examination in General Education**, October 19th and 20th, 1875; April 18th and 19th, and July 22nd and 24th, 1876. **First Professional Examinations**.—Tuesdays, November 2nd, 1875; February 1st, April 11th, May 2nd, July 18th, and August 1st, 1876. **Second Professional Examinations**.—These will take place immediately after the conclusion of the first professional examinations. In no case will they be begun on an earlier day than the Thursday of any period.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

REGULATIONS FOR THE DIPLOMA.

The Regulations respecting the Curriculum of Professional Study, and the Fees, are similar to those of the Royal College of Surgeons of Edinburgh.

Preliminary Examinations in General Literature will be held on October 8th and 22nd, 1875; and April 21st, July 21st, September 15th, and October 20th, 1876.† The Fee is Ten Shillings. Candi-

* Candidates at a distance are requested to send their certificates much earlier, so as to give sufficient time for the exchange of one or two explanatory letters; as much disappointment has been occasioned by the discovery of defects in their course of study when it was too late to rectify them by the production of documents.

† The examination will embrace the following subjects:—1. English Language, including writing to dictation, Grammar, and Composition. 2. Latin: 1875, Translation from one of the two following Books, at the option of the candidate: *Cæsar,*

dates are requested to give in their names to the Secretary at least two days before the examination, and to give intimation of the optional subject they select.

The *First Professional Examinations* take place on the second Tuesday of every month except August. The *Second Professional Examinations* take place, the written part on the second Tuesday of every month except August, and the clinical and oral parts on the succeeding day.

The examinations are conducted partly in writing and partly orally. Recent Dissections, Anatomical Specimens, Chemical Tests, Articles of the *Materia Medica*, the Microscope, Surgical Apparatus, and Pathological Specimens are employed. Candidates are also subjected, at the second examination, to a practical Clinical Examination at the Hospital.

Candidates for the Diploma of the Faculty, who possess a qualification to practise, or who have passed the examination in Anatomy, Physiology, and Chemistry, before any of the Licensing Bodies enumerated in Schedule (A) of the Medical Act, on complying with the regulations in other respects, will be admitted to the second professional examination. In such cases, the full fee is exigible. In the case of unsuccessful candidates, £2 of the fee is retained.

A candidate, on showing a sufficient reason, may be admitted to examination on a day specially arranged, on paying an extra fee of £3.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH, AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

DOUBLE QUALIFICATION IN MEDICINE AND IN SURGERY.

THE Faculty of Physicians and Surgeons of Glasgow, and the Royal College of Physicians of Edinburgh, conjointly grant their Diplomas after one series of examinations before a Board of Examiners in which each body is represented. The regulations as to the curriculum of study, and the fees, are the same as those for the conjoined examinations of the Royal Colleges of Physicians and Surgeons of Edinburgh. The first examinations will be held on October 7th, 1875; January 12th, April 1st, May 4th, July 6th and 27th, and October 5th, 1876.

UNIVERSITIES OF EDINBURGH, GLASGOW, ABERDEEN, AND ST. ANDREW'S.

REGULATIONS RESPECTING DEGREES IN MEDICINE.

[THE Regulations of these Universities are nearly similar. We, therefore, give but one statement, noticing points of difference when necessary.]

Three Medical Degrees are conferred by each University; viz., Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.). The Degree of C.M. is not conferred on any person who does not also at the same time obtain the Degree of Bachelor of Medicine.

Preliminary Education.—The preliminary branches of extraprofessional education are English, Latin, Arithmetic, the Elements of Mathematics, and the Elements of Mechanics; and candidates must also pass a satisfactory examination in at least two of the following subjects:—Greek, French, German, Higher Mathematics, Natural Philosophy, Logic, Moral Philosophy.* The examinations on both classes of subjects take place† before the candidate has entered on his medical curriculum.‡

De Bello Gallico, Book I; and *Æneid*, Book II. 1870. *Cæsar, De Bello Gallico*, Books III and IV; an Exercise in rendering English correctly into Latin, the Latin words being supplied. 3. Arithmetic, to Vulgar and Decimal Fractions inclusive; Algebra, including Simple Equations. 4. Geometry: First two Books of Euclid (questions will be given on the third Book of Euclid, but the answering of them will be optional). 5. One of the following subjects at the option of the candidate. *a.* Natural Philosophy: Mechanics, Hydrostatics, and Pneumatics. *b.* Greek: 1875, Xenophon's *Anabasis*, Book III; or Homer's *Iliad*, Book III; 1876, Xenophon's *Anabasis*, Book II. *c.* French: 1875, Voltaire's *Histoire de Charles XII.*; 1876, Molière, *Le Médecin malgré lui.* *d.* German: Schiller's *Geschichte des dreissigjährigen Kriegs*, first two books. In the English, Latin, Greek, French, and German papers, special stress will be laid on accurate answering of the grammatical questions.

* The Universities of Glasgow, Aberdeen, and St. Andrew's, include Natural History.

† As far as possible.—*Aberdeen.*—At Glasgow, the examination in the second class must take place previously to the first professional examination.

‡ In Edinburgh, examinations on these subjects will be held on 12th and 13th October, 1875, and March 14th and 15th, 1876. 1. *English*—Writing a passage from dictation; composition, with correction of sentences of bad English; Grammar, with analysis of sentences and derivation and definition of some common English words; History and Geography. 2. *Latin*—Livy, Book xxvii; an easy passage (Latin) from a Prose Author, and a single passage of English (translated from a Latin Author) to

A Degree in Arts (not honorary) in any one of the Universities of England, Scotland, or Ireland, or in any Colonial or Foreign University specially recognised by the University Courts, exempts from all preliminary education. The Universities also recognise examination in Arts by any corporate body, whose examination has been recognised by the General Medical Council, and also approved by the University Court, so far as regards the preliminary examination in Arts on all subjects comprised in the examination of the said corporate body.

DEGREE OF BACHELOR IN MEDICINE AND MASTER IN SURGERY.

Candidates for the Degree of Bachelor in Medicine or Master in Surgery must have been engaged in medical and surgical study for four years—each *Annus Medicus* being constituted by at least two courses of not less than 100 lectures each, or by one such course, and two courses

be re-translated into Latin, the more difficult Latin words being given. 3. *Arithmetic*—The Common Rules, including Vulgar and Decimal Fractions. 4. *Elements of Mathematics*—Euclid, Books I, II, and III; and the Rudiments of Algebra, including Simple Equations. A knowledge of Euclid alone will not be sufficient. 5. *Elements of Mechanics*—Elementary Mechanics and Hydrostatics. (See Goodwin or Todhunter.)—At least two of the following subjects. 1. *Greek*—Xenophon, *Anabasis*, Book IV. 2. *French*—Molière, *Le Médecin malgré lui*. 3. *German*—Schiller, *Wilhelm Tell*. 4. *Higher Mathematics*—Euclid, Books I to VI; Algebra, Trigonometry, and Conic Sections. 5. *Natural Philosophy*—Balfour Stewart's *Elementary Physics*. 6. *Logic*—Levon, *Logic*. 7. *Moral Philosophy*—Coleridge's *Human Mind*, or (when the candidate is a Bachelor of Medicine) Laycock's *Mind and Brain*. In Latin, Greek, French, and German, questions in Grammar will be set, and passages to be translated from English.

In Glasgow, examinations will take place as follows. *First or Elementary Part; English*—Writing correctly a passage to dictation; Composition of a short Essay on a given theme; Questions in Grammar. *Latin*—Virgil, *Æneid*, Book IV; Sallust, *De Bello Jugurthino*, chap. 1–1. Translations of passages from authors not prescribed, and of English passages into Latin, the principal Latin words being supplied; Questions in Grammar and Construction. *Arithmetic*—The Common Rules, including Vulgar and Decimal Fractions. *Elements of Mathematics*—Euclid, Books I, II, and III; Algebra, as far as Simple Equations. *Elements of Mechanics*—Questions, for which the principal Latin words of the *Elements of Mathematics* may serve as text-books. *Second Part, Exercises in two of the subjects of which, to be selected by the candidate, are required.* *Greek*—*Cyropædia* of Xenophon, Book II, and the Gospel according to St. John; Translations of passages from Greek authors not prescribed, and of English passages into Greek—the principal Greek words supplied; Questions in Grammar. *French*—Cornéille's *Le Cid*; Translations and exercises as in Latin and Greek. *German*—Lessing's *Laocoon*; Translations and exercises as in the other languages. *Mathematics*—Euclid, Books I to VI; Algebra, including Quadratic Equations, and the Rudiments of Trigonometry. *Natural Philosophy*—Such a knowledge of the principles as may be obtained from the Text-books of Golding Bird and Brooke, and Ganot—*Natural History*—Geology or Zoology. Text-books—Jukes, Lyell, Dana, R. Jones, Nicholson. *Logic*—Whately's *Logic*, Books II and III. *Moral Philosophy*—The General Principles, as stated in Dugald Stewart on the Active Powers, or Dr. Fleming's Manual.

At Aberdeen, Examinations will be held on October 25th and 26th, 1875, and in April 1876. *First Part of Examination: English*—Composition, Grammar, and Writing to Dictation. *Latin*—Cæsar, *De Bello Gallico*, Book I; Virgil, *Æneid*, Book III; Grammatical Questions. *Arithmetic*—The Common Rules, Vulgar and Decimal Fractions, and Proportion. *Elements of Mathematics*—The First and Second Books of Euclid. *Algebra*—Simple Equations. *Elements of Mechanics*—Newth's *First Book of Natural Philosophy*, Chapters I, II, III. *Additional Subjects*—on two of which, at the option of candidates, a further examination has to be undergone, before admission to the First Professional Examination. *Greek*—Xenophon, *Anabasis*, Book II; Grammatical Questions. *French*—Voltaire's *Histoire de Pierre le Grand*. *German*—Schiller's *Wilhelm Tell*. *Higher Mathematics*—Plane Trigonometry, Solution of Triangles, Quadratic Equations, Binomial Theorem, Logarithms. *Natural Philosophy*—Light, Heat, Electricity (Golding Bird's *Elements of Natural Philosophy* recommended). *Natural History*—General Classification of the Animal Kingdom; Characters and Subdivisions of the Vertebrata (Nicholson's *Text-Book of Zoology* recommended). *Logic*—(Morell's *Handbook of Logic* recommended). *Moral Philosophy*—(Reid's *Active Powers*, or Wayland's *Elements of Moral Science* recommended).

At St. Andrew's, every Student in Medicine must be registered; but no one can be registered unless he has passed the Registration Examination, or an equivalent examination. The Registration Examination takes place during the first week of the session. The following are the subjects: *English*—The qualifications of candidates will be tested by the style and general character of their written translations and answers, and by their knowledge of the derivations of words employed in Medicine. *Latin*—Cicero, *De Officiis*, Book I; Virgil, *Æneid*, Book II. *Mathematics*—Elementary Rules of Arithmetic, including Vulgar and Decimal Fractions; Euclid, Books I and II; Algebra as far as Simple Equations and Proportion. *Elements of Mechanics*—Composition and Resolution of Forces; the Lever, the Wheel and Axle, the Pulley, and the Inclined Plane; and the Centre of Gravity. Candidates will find the necessary information in Snowball's *Cambridge Elementary Course of Natural Philosophy*, or in Newth's *First Book of Natural Philosophy*. *Greek*—Xenophon, *Anabasis*, Books I and II; or any one book of Herodotus, or two books of Homer. *French*—Voltaire, *Charles XII.* *German*—Schiller's *Thirty Years' War*, or any one of his dramas. *Higher Mathematics*—Euclid, Books I, II, III, IV, and V. *Algebra*, Plane Trigonometry, and the Elementary Propositions on the Straight Line, Circle, and Conic Sections, treated analytically. The Examiners recommend Potts's *Elements of Euclid*; Wood's or Todhunter's *Algebra*; Snowball's, Todhunter's, or Beasley's *Trigonometry*; and Todhunter's *Plane Co-ordinate Geometry*, with the omission of chapters iv, vii, xiv, xv, xvi. *Natural Philosophy*—Elementary Mechanics, Hydrostatics, and Optics. (A thorough knowledge of the manuals on these subjects by Galbraith and Haughton will enable candidates to pass this portion of the examination.) *Natural History*—Milne Edwards's *Elements of Zoologie*. (A translation of this work has been published by Dr. Knox.) *Logic*—Whately's *Logic*, or his *Easy Lessons on Reasoning*. *Moral Philosophy*—Paley's *Moral Philosophy*, or Macintosh's *Dissertation on the Progress of Ethical Philosophy*.

of not less than 50 lectures each; with the exception of the clinical courses, in which lectures are to be given at least twice a week.

Every candidate for the degree of M.B. and C.M. must give sufficient evidence by certificates—1. That he has studied Anatomy, Chemistry, *Materia Medica*, Institutes of Medicine or Physiology, Practice of Medicine and of Surgery, Midwifery and the Diseases of Women and Children,* General Pathology,† during courses including not less than 100 Lectures; Practical Anatomy, a course of the same duration as the preceding; Practical Chemistry, three months; Practical Midwifery, three months at a Midwifery Hospital, or attendance on six cases under a registered medical practitioner; Clinical Medicine and Clinical Surgery, each course of not less than 100 lectures, or two courses of three months; Medical Jurisprudence, Botany, Natural History, including Zoology, courses of not less than 50 lectures. 2. That he has attended for at least two years the Medical and Surgical Practice of a General Hospital with not fewer than eighty patients. 3. That he has been engaged for at least three months in compounding and dispensing drugs at the Laboratory of a Hospital or Dispensary, of a Member of a Surgical College or Faculty, Licentiate of the London or Dublin Society of Apothecaries, or a Member of the Pharmaceutical Society of Great Britain.‡ 4. That he has attended, for at least six months, the out-practice of a hospital or the practice of a dispensary, or of a registered practitioner. Evidence of a practical knowledge of vaccination is also required.

One of the four years of medical and surgical study must be in the University granting the degree sought. Another year must be either in the same University, or in some other University entitled to give the Degree of Doctor of Medicine.§ [At St. Andrew's, no one can be received as a candidate for the Degree of Bachelor of Medicine or Master in Surgery unless two years at least of his four years of medical and surgical study shall have been in one or more of the following Universities and Colleges; viz., the Universities of St. Andrew's, Glasgow, Aberdeen, Edinburgh, Oxford, or Cambridge; Trinity College, Dublin; and Queen's College, Belfast, Cork, or Galway.] Attendance during at least six winter months on the medical or surgical practice of a General Hospital which accommodates at least eighty patients, and, during the same period, on a course of Practical Anatomy; and one year's attendance, to the extent of four of the departments of medical study required, on the lectures of teachers of Medicine in the hospital schools of London, or in the school of the College of Surgeons in Dublin, or of such teachers of Medicine in Edinburgh or elsewhere as shall from time to time be recognised by the Edinburgh University Court, may be reckoned as one of the four years.|| All candidates not students of the University of Edinburgh attending the lectures of Extra-Academical Teachers in Edinburgh, must, at the commencement of each year of attendance, enrol their names in a book to be kept by the University for that purpose, paying a fee of the same amount as the Matriculation Fee.

Every candidate must deliver, at such time of the year as may be fixed by the *Senatus Academicus*—1. A declaration, in his own handwriting, that he is 21 years of age, or that he will be so on or before the day of graduation; and that he will not be, on the day of graduation, under articles of apprenticeship. 2. A statement of his studies, general and professional, accompanied with proper certificates.¶

In the University of Edinburgh, there are four professional examinations. Candidates are examined in writing and *viva voce*—1, on Chemistry, Botany, and Natural History; 2, on Anatomy, Institutes of Medicine, *Materia Medica* (including Practical Pharmacy), and Pathology; 3, on Surgery, Practice of Medicine, Midwifery, and Medical Jurisprudence; 4, Clinically on Medicine and on Surgery in a hospital. The examinations on Anatomy, Chemistry, Institutes of Medicine, Botany, Natural History, *Materia Medica*, and Pathology, are conducted, as far as possible, by demonstrations of objects. Students may be admitted to examination on the first division of these subjects at the end of their second year, and on the second division at the end of their third year. The examination on the third and fourth divisions

* Two courses of Midwifery, of three months each, are reckoned equivalent to a six months' course, provided different departments of Obstetric Medicine be taught in each of the courses.

† Or a three months' course of lectures on Morbid Anatomy, together with a supplemental course of Practice of Medicine or Clinical Medicine.

‡ In the Laboratory of an Hospital or Dispensary, of a Registered Medical Practitioner, or of a Member of the Pharmaceutical Society of Great Britain.—*Glasgow*.

§ Entitled to grant Degrees in Medicine.—*Glasgow*.

|| The other two years may be constituted by attendance upon courses in the great Hospital Medical Schools of London or Dublin; and, in default of such attendance, one of the four years may be constituted by attendance on any general Hospital containing not less than eighty beds, provided attendance has been given at the same time on a course of Practical Anatomy.—*Glasgow*.

¶ The Universities of Aberdeen and St. Andrew's require an Inaugural Dissertation to be presented previously to the final examination for M.B. In Edinburgh and Glasgow, no Thesis is required until the candidate seeks the Degree of M.D.

cannot take place until the candidate has completed his fourth *Annus Medicus*. Candidates may be admitted to examination on the first two of these divisions at the end of their third year, or to the four examinations at the end of the fourth year. If any candidate be found unqualified, he cannot be again admitted to examination unless he has studied during another year two of the prescribed subjects, either in the University or in some other school of medicine.

In the other three Universities, every candidate for the Degree of Bachelor of Medicine and Master in Surgery must undergo three professional examinations, conducted in writing and *viva voce*. The first examination (not to be taken before the end of the second year of study) includes Chemistry, Elementary Anatomy, Botany, and *Materia Medica*.* The second examination (not to be taken before the end of the third year) includes advanced Anatomy, Physiology, Zoology with Comparative Anatomy, and Surgery.† The third examination (not to be taken before the end of the fourth year) includes General Pathology, Surgery, Practice of Medicine, Midwifery, Medical Jurisprudence, Clinical Medicine, and Clinical Surgery.‡ The examinations in Anatomy, Chemistry, Physiology, Botany, Zoology, and *Materia Medica* are conducted, as far as possible, by demonstrations of objects; and those on Medicine and Surgery, in part, by clinical demonstrations. Candidates may be admitted to examination on the first two at the end of the third year, or to the three examinations at the end of the fourth year. If any candidate be found unqualified, he is not again admitted to examination unless he shall have completed another year of medical study, or such portion of another year as may be prescribed by the examiners.

DEGREE OF DOCTOR OF MEDICINE.

The Degree of Doctor of Medicine may be conferred on any candidate who has obtained the Degree of Bachelor of Medicine, and is of the age of 24 years, and has been engaged, subsequently to having received the Degree of Bachelor of Medicine, for at least two years in attendance on a Hospital, or in the Military or Naval Medical Service, or in Medical and Surgical Practice. The candidate must be a Graduate in Arts, or must, before or at the time of his obtaining the degree of Bachelor of Medicine, or within three years thereafter, have passed a satisfactory examination in Greek and in Logic, or Moral Philosophy, and in one at least of the following subjects; viz., French, German, Higher Mathematics, and Natural Philosophy.§ He must submit to the Medical Faculty a Thesis composed by himself, and which shall be approved by the Faculty, on any branch of knowledge comprised in the professional examinations for the Degree of Bachelor of Medicine, which he may have made a subject of study after having received that degree.||

Candidates who commenced their medical studies in Edinburgh before February 4th, 1861, and in Aberdeen before November 1861, are entitled to be examined for the degree of Doctor of Medicine, under the regulations then in force in each University respectively. At Edinburgh, candidates, settled for a period of years in foreign parts, who have complied with all the regulations for the degree of M.D. (under the new statutes), but who cannot appear personally to receive the degree, may, on satisfying the *Senatus* to that effect, by production of sufficient official testimonials, have the degree conferred on them in absence.

The Degree of Doctor of Medicine may be conferred by the University of St. Andrew's on any Registered Medical Practitioner above the age of 40 years, whose professional position and experience are such as, in the estimation of the University, to entitle him to that Degree, and who shall, on examination, satisfy the Medical Examiner of the sufficiency of his professional knowledge, provided always that such degrees shall not be conferred on more than ten in any one year.

The *Graduation Fees* in each of the Universities are—for the Degree of M.B., three examinations, each £5 5s. = £15 15s.; for the Degree of C.M., £5 5s. additional; for the Degree of M.D., £5 5s. additional to that for M.B., together with Government Stamp Duty (£10).

The fee for graduating under the old Regulations in Edinburgh is £25; at St. Andrew's, the fee for the Degree of M.D. under the section relative to Registered Medical Practitioners is 50 Guineas. Stamp Duty is included in both cases.

* *Materia Medica* in third examination at Glasgow.

† Surgery is deferred to the third examination at Glasgow.

‡ *Materia Medica* and Surgery. *Glasgow*.

§ In Greek and in Logic or Moral Philosophy, and in any one of the other optional subjects in the examination in General Education.—*Glasgow*. Natural History added in optional subjects.—*Aberdeen* and *St. Andrew's*.

|| No thesis will be approved by the Medical Faculty which does not contain either the results of original observations in practical medicine, surgery, midwifery, or some of the sciences embraced in the curriculum for the Bachelor's degree; or else a full digest and critical exposition of the opinions and researches of others on the subject selected by the candidate, accompanied by precise references to the publications quoted, so that due verification may be facilitated.—*Edinburgh*.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

REGULATIONS RELATIVE TO THE LICENSE OF MEDICINE.

EXAMINATIONS for the License are held on the second Tuesday and following day in each month (except August and September).

A candidate who has not previously obtained any medical or surgical qualification recognised by the College must produce certificates—1. Of having been engaged in the study of Medicine for four years. 2. Of having passed the preliminary examination of one of the recognised Licensing Corporations before the termination of the second year of medical study. 3. Of having studied at a school or schools recognised by the College the following subjects: Practical Anatomy; Anatomy and Physiology, or Institutes of Medicine; Botany; Chemistry; Practical Chemistry; Materia Medica; Practice of Medicine and Pathology; Surgery; Midwifery; Medical Jurisprudence. 4. Of having attended a Medico-Chirurgical Hospital in which regular courses of Clinical Lectures are delivered, together with clinical instruction, for twenty-seven months, or such hospital for eighteen months, with nine months at a medical hospital. 5. Of having attended Practical Midwifery for six months at a recognised Lying-in Hospital, or evidence satisfactory to the College of having attended Practical Midwifery. 6. Of character, from two registered physicians or surgeons. A candidate who has already obtained a recognised medical or surgical qualification must fill up a schedule which will be supplied on application, and produce his diploma or certificate of registration, and the certificate of Practical Midwifery, and testimonials as to character.

The examination is conducted by printed questions and *visû voce*, and consists of two parts:—1. Anatomy; Physiology; Botany; Chemistry. 2. Materia Medica; Practice of Medicine; Medical Jurisprudence; Midwifery. Candidates will also be examined at the bedside.

Candidates who have already obtained a qualification from an University or other licensing body, or who have passed the first examination after a complete curriculum, are required to undergo the *second part* of the professional examination only. Physicians or surgeons of five years' standing are exempted from the written portion of the final examination. Fee for License in Medicine, £15 15s., of which £3 3s. are retained if the candidate be unsuccessful.

LICENSE IN MIDWIFERY.

Examinations for a diploma in Midwifery are held monthly. A Candidate who is already a Licentiate of the College may present himself at any of the examinations, on giving a week's notice. Candidates not Licentiates of the College must have a degree or license in Medicine or Surgery from any University or College in the United Kingdom, and must have attended Lectures in Midwifery for six months, and also Practical Midwifery. They must also produce certificates of character. The fee is £3 3s.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

LETTERS TESTIMONIAL.

EVERY person requiring to be registered as a pupil on the College books shall, if the Council think fit, be so registered on the payment of five guineas. Registered pupils are admitted to the Preliminary Examination of the College without further fee, and are permitted to study each week day in the Museum, to read in the Library; also to attend the Lectures on Comparative Anatomy, and to obtain a certificate for such attendance, without payment of any fee. These privileges are open to the students of any school recognised by the Council, who may have enrolled themselves as registered pupils. No student can be admitted as a candidate to any of the stated examinations, or to the special examinations for the Letters Testimonial, until he has been enrolled as a registered pupil, and also passed a preliminary examination.

Registered pupils may present themselves, without payment of any further fee, for the Preliminary Examination at any period previous to their first professional examination; but are expected to do so previously to the commencement of their professional studies. Students who are not registered pupils are admitted to the Preliminary Examination upon payment of ten shillings.*

* The following are the subjects upon which each candidate for the Preliminary Examination will be examined. The English Language, including Grammar and Composition; Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations; Geometry, first two Books of Euclid; Greek and Latin, including Translation and Grammar. Greek—The Gospel of St. John, or the First Book of Xenophon's *Anabasis*, or the Dialogue of Lucian, entitled *Menippus* or the *Necromancy*. Latin—The First and Second Books of the *Aeneid* of Virgil, or the *Yugurthine War* of Sallust, or the Third Book of Livy. These examinations are held quarterly; viz., on the third Wednesday in January, April, July, and October in each year.

Students who have passed any of the Preliminary Examination Boards recognised by the General Medical Council, into the curriculum of which the Greek language enters as a compulsory subject, are exempt from any further preliminary examination, and are entitled to become registered pupils of the College.

Candidates for Letters Testimonial may present themselves either at a special or at a stated examination.

Special Examinations.—Every registered pupil shall be admitted, upon payment of a special fee of £5 5s. in addition to the ordinary fee of £21, to a special examination for Letters Testimonial, as producing evidence that he has passed a Preliminary Examination; that he has been engaged in the study of his profession for not less than four years; that he has attended during three years on a recognised Hospital where Clinical Instruction is given; that he has attended three courses each of Lectures on Anatomy and Physiology, and on the Theory and Practice of Surgery and of Dissections, accompanied by demonstrations; two courses of Lectures on Chemistry, or one course of Lectures on General and one on Practical Chemistry; one course each of Lectures on Materia Medica, Practice of Medicine, Midwifery, Medical Jurisprudence, and Botany.

The subjects for examination are the same as those hereinafter laid down for the Stated Examinations. A rejected candidate will only be entitled to receive back £15 15s.

Stated Examinations are held in April, July, and November. Candidates must be registered pupils, and are divided into two classes—Junior and Senior.

The Junior Class must produce certificates of having passed a Preliminary Examination, and of having attended three courses each of Lectures on Anatomy and Physiology, and on Practical Anatomy with Dissections; two courses of Lectures on Chemistry; one course each of Lectures on Materia Medica, Botany, and Forensic Medicine. This class is examined in Anatomy, Histology, Physiology, Materia Medica, and Chemistry.

The fee for this examination is £5 5s., in addition to the registration fee; not to be returned in case of rejection, but to be allowed the candidate in case he presents himself a second time for examination.

The Senior Class must produce certificates of having attended three courses of Lectures on the Theory and Practice of Surgery, one course each of Lectures on the Practice of Medicine, and on Midwifery; also of attendance on a recognised Hospital for three Winter and three Summer Sessions. This class is examined in Surgery, Operative Surgery and Surgical Appliances, Practice of Medicine, Medical Jurisprudence and Prescriptions.

The fee for the Senior Class Examination is £15 15s., returnable to the candidate in case of rejection.

The examinations are partly written and partly oral.

In addition to the foregoing fees, a fee of £1 1s. is to be paid to the Registrar. Every candidate rejected at a Stated Examination, on applying for re-examination, must pay £2 2s., in addition to the regular fees.

FELLOWSHIP.

Every registered pupil or licentiate may be admitted to examination for the Fellowship on producing a certificate that he is 25 years of age, and that he is a Bachelor of Arts, or has been examined with a view to ascertain that he has obtained a liberal preliminary education; also a certificate, signed by two or more Fellows of the College, of general good conduct. He must have been engaged in the acquisition of professional knowledge not less than six years (five years being required in the case of Bachelor of Arts), during three of which he must have studied in one or more of the schools and hospitals recognised by the Council. The other three years may have been passed in any approved school. He must also have acted as House-Surgeon or Dresser in a recognised hospital; and must have attended the lectures required of candidates for Letters Testimonial, together with one course of lectures on Comparative Anatomy, and one on Natural Philosophy. He must present a thesis on some medical subject, or clinical reports, with observations of six or more medical or surgical cases taken by himself.

Licentiates of the College, who cannot show that they have followed the course of study specified in the regulations, may, at the expiration of ten years from the date of their diploma, be admitted to the examination for the Fellowship, on producing satisfactory evidence that they have conducted themselves honourably in the practice of their profession.

Each candidate for the Fellowship is examined on two days. The subjects of the first examination are Anatomy and Physiology (Human and Comparative); those of the second—Pathology, Therapeutics, the Theory and Practice of Medicine and Surgery, and such other branch of medical science as the Council may direct. The examinations are

both oral and written. The candidates must perform Dissections and Operations on the dead bodies. Rejected candidates cannot present themselves a second time until after one year from the first examination.

The fee payable is £21 if the candidate be a Licentiate, or £36 15s. if he be a registered pupil; provided in either case he intends to reside beyond ten miles from Dublin. Should the candidate intend to reside in Dublin, or within ten miles thereof, he pays, if a Licentiate, £31 10s.; if a registered pupil, £47 5s. Fellows entering on the country list, who may subsequently settle as practitioners in Dublin, or within ten miles thereof, must pay £10 10s. to the College.

DIPLOMA IN MIDWIFERY.

Midwifery Examination.—An examination for a Diploma in Midwifery is held from time to time. Any Fellow or Licentiate of the College is admissible to the examination on producing certificates of having attended a course of Lectures on Midwifery, the Practice (for six months) of a Lying-in Hospital, or of a Dispensary for Women and Children, and that he has attended at least thirty labours. The candidate shall, if passed, receive the Midwifery Diploma.

Candidates are examined on the Organisation of the Female; the Growth and Peculiarities of the Fœtus; the Practice of Midwifery, and the Diseases of Women and Children; and, if approved of, receive a license or diploma.

A rejected candidate is not again admitted to examination within three months, nor unless he produces satisfactory evidence of having been engaged in the study of Midwifery subsequently to his rejection.

The fee is £1 6s. if the Midwifery Diploma be taken out within one month from the date of the Letters Testimonial; afterwards it is £2 2s.

APOTHECARIES' HALL OF IRELAND.

REGULATIONS REGARDING THE LICENSE TO PRACTISE.

EVERY candidate for the License to practise is required to undergo a Preliminary and a Professional Education and Examination.* The Arts Examination will be held on the third Thursday in January, April, July, and October, at 12 noon. Answers in writing must be given to printed questions. Unsuccessful candidates will be remitted to their studies for six months.

Professional Education and Examination.—Every candidate for the License must produce certificates: 1. Of having passed an examination in Arts previously to entering on professional study. 2. Of being at least 21 years of age, and of good moral character. 3. Of apprenticeship to a qualified apothecary, or of having been engaged at practical pharmacy with an apothecary for three years subsequently to having passed the examination in Arts. 4. Of having spent four years in professional study. 5. Of having attended the following courses; viz.: Chemistry, Principles and Practice of Medicine and Surgery, each during one winter session; Anatomy and Physiology, Demonstrations and Dissections, each during two winter sessions; Botany and Natural History, and Forensic Medicine, each during one summer session; Practical Chemistry (in a recognised Laboratory) and Materia Medica, each during three months; Midwifery and Diseases of Women and Children, during six months; Practical Midwifery at a recognised Hospital (twenty cases); instruction in Vaccination. 6. Of having attended, at a recognised Hospital or Hospitals, the Practice of Medicine and Clinical Lectures on Medicine during two winter and two summer sessions; also the Practice of Surgery and Clinical Lectures on Surgery, during one winter and one summer session. 7. Of having performed vaccination successfully under a recognised vaccinator.

The examination for the License to practise is divided into parts. The first part comprehends Chemistry, Botany, Anatomy, Physiology, Materia Medica, and Pharmacy. The second—Medicine, Surgery, Pathology, Therapeutics, Midwifery, Forensic Medicine, and Hygiene. The first part may be undergone at the close of the second winter session; and the second at the termination of the fourth winter session.

The examinations will be held on the first and second Mondays in January, April, July, and October.

* The following are the subjects of Preliminary Examination. *Compulsory.* 1. *English:* Grammar, Composition, writing from Dictation, and History. 2. *Arithmetic and Algebra:* Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations. 3. *Geometry:* First Two Books of Euclid. 4. *Latin:* The Twenty-first Book of Livy, or the First Three Books of the *Æneid* of Virgil, and Latin Prose Composition. 5. *Greek:* The First Two Books of the *Imagines* of Xenophon, or the Ninth Book of the *Iliad* of Homer. 6. *French:* *Charies XII.* *Histoire de Voltaire,* or *Voyage en Orient* of Lamartine. 7. *German:* *Wilhelm Tell* of Schiller.—Candidates will be examined in either French or German, as they may select.—*Optional.* 1. *Natural Philosophy:* Mechanics, Hydrostatics, and Pneumatics. 2. *Natural History:* The Classification, Elementary Structure, and General Physiology of Vegetables and Animals.

Candidates who fail to pass the first part of the professional examination will be remitted to their studies for three months. Unsuccessful candidates at the pass examination will not be readmitted until after six months.

Doctors of Medicine of any of the Universities of the United Kingdom, and Licentiates of a Royal College of Physicians, or Surgeons of any of the Royal Colleges of Surgeons, whose qualifications as such appear in the *Medical Register*, and who, having first passed an Examination in Arts, have also served an apprenticeship, or the required term at *practical* Pharmacy to a qualified Apothecary, may obtain the License of the Hall by undergoing an examination—the former in Pharmacy,* and the latter in Medicine and Pharmacy. Licentiates of the London Society of Apothecaries are admitted *ad eundem*, on presenting the certificate of their registration.

Candidates for the Professional Examinations must lodge their testimonials and enrol their names and addresses with the Clerk at the Hall, in Dublin, a clear week prior to the day of examination.

An *Honour* Examination for Apprentices is held at the Hall in the first week in May annually, upon some subject of Medical or Pharmaceutical Chemistry, which is announced by the Council of the Hall at the commencement of the previous Winter Session, and a Prize of Five Guineas is awarded to the successful competitor.

UNIVERSITY OF DUBLIN.

The degrees in Medicine and Surgery granted by the University are: 1. Bachelor of Medicine; 2. Doctor of Medicine; 3. Bachelor in Surgery; 4. Master in Surgery. It also grants Licenses in Medicine and Surgery.

BACHELOR IN MEDICINE.

A candidate for the Degree of Bachelor in Medicine must be a Graduate in Arts, and may obtain the Degree of Bachelor in Medicine at the same commencement as that at which he receives his Degree of B.A., or at any subsequent commencement, provided the requisite medical education shall have been completed. The medical education is of four years' duration, and comprises attendance on a course of each of the following lectures: *Winter*—Anatomy; Practical Anatomy; Theoretical and Operative Surgery; Chemistry; Practical Course of Institutes of Medicine; Practice of Medicine; Midwifery. *Summer*—Botany; Institutes of Medicine; Comparative Anatomy; Materia Medica and Pharmacy; Medical Jurisprudence. *Term Courses*—Heat (Michaelmas); Electricity and Magnetism (Hilary). Six months' dissection, and three months' laboratory instruction in Chemistry. Three courses of nine months' attendance on the clinical lectures of Sir Patrick Dun's or other metropolitan hospital recognised by the Board.† A certificate of personal attendance on fever cases, with names and dates of cases. Six months' instruction in Practical Midwifery,‡ including clinical lectures. Any of the winter or summer courses may be attended at any medical school in Dublin recognised by the Provost and Senior Fellows.§ Students who shall have diligently attended the Practice of a recognised county infirmary for two years previous to the commencement of their metropolitan medical studies, are allowed to count those two years as equivalent to one year spent in a recognised metropolitan hospital.

Candidates for the Degree of M.B. must pass two examinations; the Previous Medical Examination, and the Bachelor of Medicine examination.

The *Previous Examination* comprises Descriptive Anatomy; Botany; Materia Medica and Pharmacy; Chemistry; and Physics. The Examination in Descriptive Anatomy includes Examination on the dead subject.

It is not necessary that the Student should pass in all these subjects at the same Examination; he is allowed to present himself for Examination in as many, or as few of them, as he pleases.

There are three Previous Medical Examinations held each year,

* The examination in Pharmacy will include Practical Pharmacy, Pharmaceutical Chemistry, Toxicology, Medical Botany, and the *British Pharmacopœia*.

† The following Hospitals are recognised:—1. Sir Patrick Dun's Hospital; 2. Meath Hospital; 3. House of Industry Hospital; 4. Dr. Stevens' Hospital; 5. Jervis Street Infirmary; 6. City of Dublin Hospital; 7. Mercer's Hospital; 8. St. Vincent's Hospital; 9. Adelaide Hospital; 10. Mater Misericordie Hospital.

‡ Certificates of Practical Midwifery are received from: 1. The Rotundo Hospital; 2. The Coombe Hospital; 3. Sir P. Dun's Hospital Maternity; 4. Dr. Stevens' Hospital Maternity.

§ The following schools, in addition to the School of Physic of Trinity College, are recognised:—1. The School of the Royal College of Surgeons in Ireland; 2. The Carmichael School; 3. The School of Dr. Stevens' Hospital; 4. The St. Peter Street School; 5. The School of the Catholic University. The recognition is conditional on the students being furnished with *bona fide* certificates of regular attendance equivalent to that required by the University, i.e., three-fourths of the entire Lectures in each course.

immediately before each M.B. Examination, together with a Supplemental Examination in Botany, Chemistry, and Materia Medica, at the close of the Summer Session.

Bachelor of Medicine Examination.—The Candidate for the M.B. Examination must have previously passed the Previous Medical Examination in all the subjects; and have lodged with the Medical Registrar, on a certain day to be duly advertised, Certificates of Attendance upon all the Courses of Study above prescribed.

Candidates must pass a final Examination in the following subjects: Physiological Anatomy; Practice of Medicine; Surgery; Midwifery; Medical Jurisprudence; Institutes of Medicine. The Fee for the *Licent ad Examinandum* is £5; for the Degree of M.B., £11.

Members of the Royal Colleges of Physicians or Surgeons of Dublin, London, or Edinburgh, who are Graduates in Arts of Oxford, Cambridge, or Dublin, are admissible to the Examination for M.B.

DOCTOR IN MEDICINE.

A Doctor in Medicine must be a Bachelor in Medicine of three years' standing, or have been qualified to take the Degree of Bachelor in Medicine for three years. He must also read two Theses publicly before the Regius Professor of Physic, or must undergo an Examination before the Regius Professor of Physic, according to Regulations to be approved by the Provost and Senior Fellows. The total amount of Fees for this Degree is £13.

BACHELOR IN SURGERY.

A Bachelor in Surgery must be a Bachelor in Arts, and have spent four years in the study of Surgery and Anatomy. He must also pass a public Examination, having previously completed the prescribed Curriculum of study.* The Curriculum comprises the following, in addition to the complete Course for the Degree of Bachelor in Medicine: Theoretical and Operative Surgery and Ophthalmic Surgery, each one course; Dissections, two courses. Candidates are required to perform surgical operations on the dead subject. Candidates for the Degree of Bachelor in Surgery, who have already passed the Examination for the Degree of Bachelor in Medicine, will be examined in Anatomy and Surgery only. Fee for the *Licent ad Examinandum*, £5; for the Degree Bachelor in Surgery, £1.

MASTERY IN SURGERY.†

A Master in Surgery must be a Bachelor in Surgery of three years' standing, or have been qualified to take the Degree of Bachelor in Surgery for three years; and must read two Theses publicly before the Regius Professor of Surgery, or undergo an Examination before the Regius Professor, according to Regulations to be approved by the Provost and Senior Fellows. Fee for the Degree of Master in Surgery, £11.

UNIVERSITY LICENSES.

Candidates for the Licenses in Medicine or Surgery must be matriculated in Medicine, and must have completed two years in Arts, and four years in Medical Studies.

Licentiate in Medicine.—The Medical Course and Examination necessary for the License in Medicine are the same as for the Degree of M.B. A Licentiate in Medicine, on completing his Course in Arts, and proceeding to the Degree of B.A., may become a Bachelor in Medicine, on paying the Degree fees, without further Examination in Medicine.

Licentiate in Surgery.—The Surgical Course and Examination necessary for the License in Surgery is the same as for the Degree of Bachelor in Surgery.

Fee in each case for the *Licent ad Examinandum*, £5; for the License, £5.

QUEEN'S UNIVERSITY IN IRELAND.

DEGREES IN MEDICINE AND SURGERY.

THIS University grants the Degrees of Doctor in Medicine and Master in Surgery, and a Diploma in Midwifery. It includes three Colleges—the Queen's Colleges of Belfast, Cork, and Galway—each of which possesses a Faculty of Medicine. The curriculum of medical study extends over a period of four years, and is divided into two periods of two years each. The first period comprises attendance on Chemistry, Botany, Anatomy and Physiology, Practical Anatomy, Materia Medica and Pharmacy. The second period comprises attendance on Anatomy and Physiology, Practical Anatomy, Theory and Practice of Surgery, Midwifery, Theory and Practice of Medicine, Medical Jurisprudence.

* Students in the School of Physic who matriculated before 22nd June, 1872, may obtain the Degree of Master in Surgery, according to the regulations in force previous to the creation of the Degree of Bachelor in Surgery.

† After 1875, Masters in Surgery must be of the standing of Masters in Arts.

At least two of the above courses of lectures must be attended in some one of the Queen's Colleges; the remainder may be taken, at the option of the candidate, in any University, College, or School, recognised by the Senate of the Queen's University. Candidates are required, before graduating, to have also attended, in one of the Colleges of the Queen's University, Lectures on Experimental Physics and one Modern Continental Language, and to have passed the Matriculation Examination. They are further required to attend, during the first period, Practical Chemistry in a recognised Laboratory, and the practice during six months of a recognised Medico-Chirurgical Hospital containing at least sixty beds, together with clinical lectures delivered therein; and, during the second period, a recognised Midwifery Hospital, with clinical lectures therein delivered, for three months; or a Midwifery Dispensary for the same period; or ten cases of labour, under the superintendence of the medical officer of any hospital or dispensary where cases of labour are treated; and eighteen months' practice of a recognised Medico-Chirurgical Hospital containing at least sixty beds, with clinical instruction.

Candidates must pass three Examinations—the First University Examination, the Second University Examination, and the Degree Examination.

The First University Examination may be passed either in June or September. It comprises the following subjects: a Modern Language, Experimental Physics, Zoology, and Botany. Students may present themselves for examination in this group of subjects at any time after the close of the first Winter Session. Before being admitted to examination, each candidate must produce satisfactory evidence of having completed the prescribed course of study in the subjects of examination.

The Second University Examination may be passed either in June or September. It comprises Anatomy, Physiology, Materia Medica, and Chemistry; to which will be added Zoology and Botany in the examination of candidates who have not previously passed the First University Examination. Candidates who are in this position will be allowed either to undergo their examination in Modern Languages and Experimental Physics as a part of the Second University Examination, or may present themselves for examination in these subjects at any time between the Second University Examination and the Degree Examination. Students may present themselves for the Second University Examination at the termination of the first period of the curriculum, or at any subsequent period; but no student will be allowed to postpone his Second University Examination until he presents himself for his Degree Examination, unless the Senate shall have passed a grace permitting him to do so. Before being admitted to examination, each candidate must produce satisfactory evidence of having completed the course recommended for study during the first period.

Examinations for the Degree of M.D., M.Ch., and the Diploma in Midwifery, will be held in June and September. The Fee for each Degree is Five Pounds, and the Fee for the Diploma in Midwifery is Two Pounds. Each Fee must be lodged with the Secretary before the corresponding examination begins.

Degrees in Surgery and Diplomas in Midwifery will only be conferred on candidates who hold the Degree of Doctor in Medicine of the University. The Examination for the Degree of M.D. comprises the subjects recommended for study during the second period of medical education. The Examination for the Degree of M.Ch. comprises an examination in the Theory and Practice of Surgery, including Operative and Clinical Surgery.* The Examination for the Diploma in Midwifery comprises an examination in the Theory and Practice of Midwifery and the use of obstetrical instruments and appliances.†

Candidates who graduated with honours will be arranged in two classes. Candidates who take a First Class will receive a Medal and Prize; candidates who take a Second Class will receive a Prize. Both Honour and Pass Examinations are held in September. The Examination held in June is a Pass Examination.

Two Exhibitions, one consisting of two instalments of £20 each, and the other of two instalments of £15 each, will be awarded annually at the First University Examination in Medicine. The regulations concerning these Exhibitions, and all other information, will be found in the *Queen's University Calendar*, or may be obtained by application to the Secretary, Queen's University, Dublin Castle.

* Candidates for the Degree of Master in Surgery, who obtained the Degree of M.D. in this University before the 1st of January, 1865, will be exempted from the examination in Surgery. Candidates for the Degree in Surgery, who graduated in Medicine at a later period, will be required to undergo a paper and oral examination in the Theory and Practice of Surgery, and an examination in Operative and Clinical Surgery.

† Candidates for the Diploma in Midwifery who obtained the Degree of M.D. in the University before the 1st of January, 1872, will be exempted from this further examination.

GUIDE TO LONDON HOSPITALS AND MEDICAL SCHOOLS: 1875-6.

For further particulars regarding each Hospital and Medical School, see pp. 340, et seq.

LECTURES, ETC.	ST. BARTHOLOMEW'S HOSPITAL.	CHARING CROSS HOSPITAL.	ST. GEORGE'S HOSPITAL.	GRY'S HOSPITAL.	KING'S COLLEGE AND HOSPITAL.
WINTER SESSION.					
PHYSIOLOGY	Mr. Baker...M. Tu. Th., 2.30	Dr. Silver...M. Tu. W. F., 3	Dr. Cavafy...Tu. Th., 3; F., 11	Dr. Pavy & Dr. Pye-Smith...M. W. F., 4.15	Dr. G. F. Yeo...M. W. Th., F., 4
ANATOMY, DESCRIPTIVE AND SURGICAL	Mr. T. Smith & Mr. Langton...Tu. W. Th. F., 9	Mr. Bellamy...M. W. F., 9; Th., 3	Mr. Pick, M. W. F., 3	Mr. Howse & Mr. Davies-Colley...Tu. W. Th. F., 9	Dr. Curnow...daily, exc., M., 9
ANATOMICAL DEMONSTRATIONS	Mr. Cumberbatch, Mr. Furner, and Mr. Wulsham...daily, 10.15 to 4	Mr. R. Godlee...daily, 10 to 4; S., 10 to 1	Mr. Dunbar & Mr. Turner	Mr. Lucas, Mr. Golding Bird, & Mr. Jacobson...daily, 9 to 4	Dr. Curnow
CHEMISTRY	Dr. Russell...M. W. F., 10	Mr. Heaton...M. Th. F., 11	Dr. Noad...Tu. Th. S., 11.30	Dr. Debus & Dr. Stevenson...Tu. Th. S., 11	Mr. Bloxam...M. W. Th., 10.15
MEDICINE	Dr. Black & Dr. Andrew...M. Tu. Th., 3.30	Dr. Pollock...M. W. F., 4	Dr. Barclay...Tu. Th. S., 9	Dr. Habershon and Dr. Wilks...M. W. F., 3	Dr. Johnson...Tu., 4 P.M.; W. F., 5
SURGERY	Mr. Savory & Mr. Callender...W. F., 2.30; S., 9.30	Mr. Canton...Tu. Th. S., 9	Mr. Holmes...M. W. F., 9	Mr. Bryant and Mr. Durham...Tu. Th., 3.30; F., 10.30	Mr. J. Wood...M. Tu. Th., 5
HOSPITAL PRACTICE: Physicians	Dr. Black...M. Tu. Th., 1 Dr. Andrew...daily, exc. W., 1.30 Dr. Southey...M. W. Th. S., 1.30 Dr. Church...Tu. Th. S., 1.30	Dr. Pollock, M. W. F. Dr. Silver, Tu. Th. F. Dr. Green, M. W. S.	Dr. Barclay...M. F., 1 Dr. J. Ogilvie...M. F., 1 Dr. Wadham...Tu. S., 1 Dr. Dickinson...Tu. S., 1	Dr. Habershon...M. Th., 1.30 Dr. Wilks...M. Th. S., 1.30 Dr. Pavy...M. W. F., 1.30 Dr. Moxon...M. Th. F., 1.30	Dr. Johnson...M. Th., 2 Dr. Beale...Tu. S., 2 Dr. Duffin...W. F., 2
Obstetric Physicians	Dr. Greenhalgh (in-p.)...M. Th. S., 2	Dr. J. W. Black...Tu. Th. S., 2	Dr. Barnes...in-p., Tu., S., 1; out-p., Th., 12	Dr. Braxton Hicks...Tu. F., 1.30	Dr. Playfair...Tu. Th. S., 1.30
Assistant-Physicians	Dr. Gee...W. S., 11 Dr. Duckworth...Tu. F., 11 Dr. Hensley...M. Th., 11 Dr. Brunton	Dr. Powell, W. S. Dr. Bruce, M. Th. Dr. Irvine, W. S.	Dr. Whipham...Tu. S., 12 Dr. Cavafy...M. F., 12	Dr. Fagge...F., 12 Dr. Pye-Smith...W., 12 Dr. F. Taylor...M., 12 Dr. Galabin...M. F., 12	Dr. I. B. Yeo...Tu. F., 1; Dr. Ferrier...M. Th., 1 Dr. Baxter...W. S., 1 Dr. Curnow...W. S., 1 Dr. Hayes...Tu. Th. S., 12.30
Surgeons	Dr. Godson (obst.)...W. S., 9 Mr. Holden...Tu. F. S., 1.30 Mr. Savory...M. 1; Tu. W. Th. F. S., 1.30 Mr. Callender...daily, 1.30 Mr. T. Smith...daily, 1.30 Mr. Willett...W. S., 12.30 Mr. Langton...Tu. F., 12.30 Mr. M. Baker...M. Th., 12.30 Mr. Marsh	Mr. Canton...Tu. F. Mr. Hird, M. Th. Mr. Barwell, W. S.	Mr. Pollock...M. F., 1 Mr. H. Lee...M. F., 1 Mr. Holmes...Tu. S., 1 Mr. Rouse...M. S., 1	Mr. C. Forster...M. Th., 1.30 Mr. Bryant...M. Th., 1.30 Mr. Durham...M. Th. F., 1.30 Mr. Howse...W. S., 1.30 Mr. Davies-Colley...W. S., 12	Sir W. Ferguson, Bart...Tu. Th. S., 1.30 Mr. Wood...M. W. F., 1.30 Mr. H. Smith...M. W. F., 1
Assistant-Surgeons	Mr. Willett...W. S., 12.30 Mr. Langton...Tu. F., 12.30 Mr. M. Baker...M. Th., 12.30 Mr. Marsh	Mr. Bellamy...M. Th. Mr. Fairlie Clarke...Tu. F. Mr. Bloxam...W. S.	Mr. Pick...M. F., 12 Mr. Haward...Tu. S., 12	Mr. R. C. Lucas...Th., 12 Mr. Golding Bird...M., 12 The Physicians (Win)...M. F., 2; (Sum)...M., 2	Mr. H. R. Bell...Tu. Th. S., 1
CLINICAL MEDICINE	The Physicians...weekly	The Physicians	The Physicians (Win)...M. F., 2; (Sum)...M., 2	Mr. R. C. Lucas...Th., 12 Mr. Golding Bird...M., 12 The Physicians (Win)...M. F., 2; (Sum)...M., 2 The Assistant-Physicians (Sum)...W., 1.30 The Surgeons (Win)...W., 1.30; the Assistant-Surgeons (Sum)...F., 1.30 Dr. Hicks (Win)...W., 1.30; Dr. Galabin (Sum)...M., 3	Dr. Johnson...alt. M., 3 Dr. Beale...alt. F., 3 Dr. Duffin...alt. Tu., 3 Sir W. Ferguson...alt. Th., 3 Mr. Wood...alt. F., 3
CLINICAL SURGERY	Sir J. Paget (Consulting Surgeon), and the Surgeons...weekly	Mr. Hancock and the Surgeons	The Surgeons...Tu., 2	Dr. Barnes	Dr. Playfair...alt. Th., 3
CLINICAL MIDWIFERY AND DISEASES OF WOMEN	Dr. Greenhalgh...weekly	Dr. W. J. Black...Fortnightly	Dr. Barnes	Dr. Barnes	Dr. Playfair...alt. Th., 3
OPERATIONS	Wed. and Sat., 1.30	Saturday, 2	Thursday, 1	Tuesday and Friday, 1.30; on Eye, M. F., 1.30	Wednesday, 2; Saturday, 1.30
SUMMER SESSION.					
MATERIA MEDICA	Dr. Faure and Dr. Brunton...Tu. Th. S., 10; W., 11.30	Dr. Powell...Tu. Th. S., 10	Dr. Dickinson...M. W. F., 3	Dr. Moxon...Tu. Th. F., 3	Dr. Baxter...Tu. W. Th. F., 8.4 M.
BOTANY	Rev. G. Henslow...M. W. F., 10	Dr. Irvine...Tu. Th. S., 9	Dr. Whipham...W. Th. F., 12	Dr. Stokoe...Tu. Th. S., 11.30	Mr. Bentley...M. Tu. Th., F., 12.15
MIDWIFERY	Dr. Greenhalgh...Tu. W. F. S., 8.30 A.M.	Dr. J. W. Black, M., 4; W. Th. F., 3	Dr. Barnes...M. W. F., 9	Dr. Braxton Hicks...Tu. W. Th. F., 9	Dr. Playfair...Tu. W. Th. F., 9
FORENSIC MEDICINE	Dr. R. Southey...Tu. Th. S., 9	Vacant	Dr. Wadham...Tu. Th. S., 9	Dr. A. S. Taylor...Tu. Th. S., 10	Dr. Ferrier...Tu. W. Th. F., 9
PRACTICAL CHEMISTRY	Dr. Russell...M. Tu. F., 11	Mr. Heaton and Mr. Bolas...M. F., 10	Dr. Noad...M. W. Th. F., 10	Dr. Debus...M. W. F., 10 to 1	Mr. Bloxam...M. W. Th., 10.15
COMPARATIVE ANATOMY	Dr. N. Moore (Winter)...Th., 11	Mr. J. F. Blake (Sum.)	Dr. Brailey (Sum.)...M. F., 4.30	Mr. Jacobson (Sum.)...M. W., 1.30	Mr. Garrud (Sum.)...Tu. F. S., 10.15
PRACTICAL PHYSIOLOGY AND HISTOLOGY	Mr. Symons (Practical Phys.); Dr. Klein (Hist.)...M., 2.30 (Win.)	Dr. Bruce (Winter)	Mr. Watney...Tu. Th. S., 10	Dr. Pye-Smith (Win)...M. Th. F., 1.30	Demonstrator (Win)...Tu., 11.15; (Sum)...M. W. F., 4
PATHOLOGY AND MORBID ANATOMY	Dr. Gee (lect.)...W., 9.30; (demons.) Medical, 12; Surgical, 2.30	Dr. T. H. Green (Sum)...M. Th., 3; W., 4; Mr. Bloxam...W., 10 (Sum.)	Dr. Dickinson (Win)...Th., 3; Dr. R. J. Lee (demons.), W., 12	Dr. Fagge & Dr. Goodhart (dem.)...daily, 2.30; (lect.), Sum. S., 9	Dr. Beale (Sum)...Tu. Th., 4
PSYCHOLOGICAL MEDICINE	Dr. Claye Shaw (Sum)...Th., 12	Dr. W. J. Hunt...M., 12 (Sum.)	Dr. Blandford	Dr. Savage (Sum)...Tu. F., 11.30	Dr. Sheppard (Sum)...Tu.
PUBLIC HEALTH	Dr. Southey (Jan., Feb.)...F., 3.30	Mr. Heaton & Mr. Eassie	With Medicine	Dr. F. Taylor (Sum)...W. 12.15	Dr. Guy
PRACTICAL AND OPERATIVE SURGERY	Mr. Willett...M. W. F., 2.30; Mr. Langton and Mr. Marsh	Mr. Bellamy...Tu. Th. S., 9 (Sum.); Mr. Clarke...Th., 4	Mr. Haward (Sum.)...M. W. F., 3	Mr. Davies-Colley	Mr. Soelberg Wells (vis.)...Tu. Th. S., 1; clin. lect. (Win)...alt. M., 3
OPHTHALMIC MEDICINE AND SURGERY	Mr. Power (vis.)...Tu. Th., 2; (lect.) Tu. W., 12.45; Mr. Vernon (vis.)...Th. S., 2; (dem.)...M., 2	Mr. Heaton & Mr. Eassie	Mr. R. B. Carter (vis.)...W. S., 2; Win. (lect.) F., 3	Mr. Bader (vis.)...Tu. S., 1.30; (lect.) (Sum) Th., 3; Mr. Higgins (out-p.)...Tu. F., 12	Mr. Cartwright...Tu. F., 10; clin. (Win)...alt. Tu., 10.30
DENTAL SURGERY	Mr. Coleman (vis.)...F., 9; (lect.) F., 10.30 (Oct.-Dec.)	Mr. Fairbank... (vis.)...M. W. F., 9.30; (lect.) in Sum.	Mr. Vasey (vis.)...Tu. S., 2; Th., 1; (lect.) Sum. Tu., 10	Mr. J. Salter...Th., 12; Mr. Moon...Tu. F., 12	Mr. Cartwright...Tu. F., 10; clin. (Win)...alt. Tu., 10.30
ORAL SURGERY	Mr. Langton...F., 2.30	Mr. Bloxam...vis., weekly; demon. in Sum.	Mr. Dalby (vis.)...Tu., 2; (lect.) Sum., W., 2	Mr. Purves...Tu. F., 12	
DISEASES OF SKIN	Mr. M. Baker...F., 1.30	Dr. Sparks... (vis.) M. Th., (lect.); M., 2.30, Sum.	Dr. Whipham (vis.)...Th., 1; (lect.) Sum., Th., 1	Dr. F. Taylor...Tu., 12	Dr. Duffin, Tu.
VACCINATION	Dr. Gee & Dr. Duckworth...W.	Mr. R. W. Dunn	Obstetric Assistant, Th., 10		Mr. R. W. Dunn
MISCELLANEOUS	Natural Philosophy: Dr. Hensley Orthopaedic Surgery: Mr. Willett...F., 12.30	Auscultation: Dr. Irvine...Th., 1 Diseases of Children: Dr. Irvine, twice weekly Morbid Histology: Dr. Bruce (Sum.) Laryngoscope: Dr. Sparks...Feb. March	Orthopaedic Surgery: Mr. Haward...W., 2 Physiological Chemistry: Dr. Ralfe... (Win.) M. W. F., 10 Osteology: Mr. Dunbar...daily, exc. M., 10	Morbid Histology: Mr. Howse...W. S., 1 (Sum) Natural Philosophy: Mr. Reinold...M., 11 (Win.); Th. S., 8.50 (Sum.)	Diseases of Throat and Laryngoscope: Dr. I. B. Yeo...Th., 3 Tutor's Class: (Win.) M. W. F., 5; (Sum.) daily, exc. S., 9

GUIDE TO LONDON HOSPITALS AND MEDICAL SCHOOLS: 1875-6.

For further particulars regarding each Hospital and Medical School, see pp. 340, et seq.

LONDON HOSPITAL.	St. MARY'S HOSPITAL.	MIDDLESEX HOSPITAL.	St. THOMAS'S HOSPITAL.	UNIVERSITY COLLEGE AND HOSPITAL.	WESTMINSTER HOSPITAL.
Mr. McCarthy..Tu. Th. S., 10	Dr. Lawson..M. W. S., 12	Mr. Lowne..Tu. Th. S., 9	Dr. Ord and Dr. J. Harley M. W. F., 4	Dr. Sanderson..M.W.F., 10	Dr. Maclure..M. W. F., 4
Mr. Rivington .M. Tu.Th. F., 3	Mr. Norton..M. Tu.Th.F., 2, 4, 5	Mr. Morris..M. Tu.Th. F., 4	Mr. Mason & Mr. Wagstaffe..M. Tu. Th. F., 3; W., 12, 30	Mr. Schäfer..Tu. Th., 10	Mr. Davy, Tu. W. Th. F. S., 9, 30
Mr. Adams and Mr. Reeves 10 to 3, excepting W. and S. aft.	Mr. E. Owen & Mr. Prowse daily, 9 to 5, exc. S., 9 to 1	Daily, 9 to 4	Mr. Mason, Mr. Wagstaffe, Mr. Rainey, and Mr. Reid ..daily, 9 to 3; S., 9 to 2	Mr. Ellis, Mr. Thane, Mr. Maclean, and Mr. Gould	Mr. Davy and Mr. M. Smith..daily, 10, 30 to 1
Dr. Letheby and Dr. Tidy ..M. W. F., 10, 30	Dr. Wright..M. Tu. Th. F., 9	(Vacant)..M. W. Th. F., 3	Dr. Bernays..Tu. Th. F., 12	Dr. Williamson..daily exc. S. 11; (exerc.) Tu. W. Th. F. 9	Dr. Dupré..W. Th. F., 3
Dr. H. Davies (bef. Chr.) ..Tu. F., 9, 15; Dr. Fenwick ..Tu. F., 4	Dr. Chambers and Dr. Broadbent..M. W. Th., 4	Dr. Greenhow..M. W. F., 9	Dr. Peacock and Dr. Murchison M. Th. or F., 2; W., 5	Dr. Reynolds..daily, exc. M., 9	Dr. Fincham and Dr. Sturges..M. W. Th., 3
Mr. Couper .M. Th. S., 9	Mr. J. R. Lane and Mr. Gascoyen..Tu. F., 4; W., 3	Mr. De Morgan and Mr. Hulke..M. W. Th., 3	Mr. S. Jones and Mr. MacCormac..M. or Tu. Th. F., 5	Mr. Marshall..Tu. W. F., 4	Mr. Cowell..Tu. Th., 4; F., 3
Dr. A. Clark .M. Th., 2	Dr. H. Jones..M. Th., 1, 15	Dr. H. Thompson..Tu. Th. S., 1	Dr. Bristolow 8 to 9.30 A.M. daily.	Sir W. Jenner, Bart. Dr. Reynolds Dr. Wilson Fox Dr. Ringer Dr. C. Bastian	Dr. Basham..M. Th., 1, 30
Dr. Ramskill..W. F., 2	Dr. Sieveking..Tu. F., 1, 15	Dr. Greenhow..Tu. Th. S., 1	Dr. Stone	} 1 and 2 daily.	Dr. Fincham..W. S., 1, 30
Dr. Down..Tu. F., 2	Dr. Broadbent..W. S., 1, 15	Dr. R. Liveing..M. W. F., 1, 30			
Dr. H. Jackson .M. Th., 2					
Dr. Sutton..M. Th., 1, 30					
Dr. Palfrey in-p., M. Th., 1, 30; out-p., W. S., 1, 30	Dr. Meadows..Tu. F., 9, 30	Dr. H. Davis..Tu. F., 1, 30	Dr. Gervis	Dr. Graily Hewitt ..Twice weekly	Dr. Potter..Tu. F., 3
Dr. Fenwick..Tu. F., 1, 30	Dr. Cheadle..Tu. F., 1	Dr. Cayley..M. W., 8, 30	Dr. Ord	Dr. F. T. Roberts	Dr. Sturges..W. S., 1
Dr. Woodman..Tu. F., 1, 30	Dr. Lawson..W. S., 1	Dr. R. King..Th., 8, 30; S., 4	Dr. J. Harley..	Dr. Gowers	Dr. Allchin..M. Th., 1
Dr. S. Mackenzie..W. S., 1, 30	Dr. Shepherd..M. Th., 1	Dr. G. H. Evans..Tu., 4; F., 8, 30	Dr. Payne	Dr. Poore	Dr. Donkin, M. F., 1
Dr. Sansom..M. Th., 1, 30	Dr. Wiltshire (obst.)..Tu. F., 1, 30	Dr. Edis (obst.)..W. S., 1, 30	Dr. Cory (obst.)	Dr. J. Williams (obst.)	Dr. Grigg (obst.)..Tu. F., 1
Mr. Hutchinson..M. Th., 2	Mr. S. Smith..M. Th., 1, 15	Mr. De Morgan..M. F., 1	Mr. Simon	Mr. Erichsen	Mr. Holthousen..Tu. F., 1, 30
Mr. Maunder..Tu. F., 1, 30	Mr. Walton..W. S., 1, 15	Mr. Nunn..Tu. F., 1	Mr. S. Jones	Mr. Marshall	Mr. Cowell..M. Th., 1, 30
Mr. Couper..W. S., 1, 30	Mr. J. R. Lane..Tu. F., 1, 15	Mr. Hulke..M. Th., 1	Mr. Croft	Mr. Berkeley Hill	Mr. Davy..W. S., 1, 30
Mr. Rivington..M. Th., 1, 30		Mr. Lawson..Th. S., 1	Mr. MacCormac	Mr. C. Heath	
Mr. J. Adams..Tu. F., 1, 30	Mr. Gascoyen..M. Th., 1	Mr. Morris..M. F., 1 (cancer); Th., 1, 30	Mr. F. Mason	Mr. Marcus Beck	Mr. T. Cooke..M. Th., 1
Mr. Tay..M. Th., 1, 30	Mr. A. T. Norton..W. S., 1	Mr. A. Clark..Th. S., 1	Mr. H. Arnott	Mr. Barker	Mr. Bond..Tu. F., 1
Mr. McCarthy..M. Th., 1, 30	Mr. E. Owen..Tu. F., 1		Mr. Wagstaffe		Mr. Keene..W. S., 1
Mr. Reeves..Tu. S., 1, 30					
Physicians (Win.) Assistants (Sum.) rotation twice weekly	Dr. H. Jones..Th.	The Physicians..F., 3	The Physicians, after or during visits	Sir W. Jenner, Dr. Reynolds, Dr. Ringer, and Dr. W. Fox (Holme prof.)	Dr. Basham .1st & 3rd Th.
The Surgeons	Dr. Sieveking..alt. F.	The Surgeons Tu., 3	The Surgeons, after or during visits	Mr. Erichsen (occas.), Mr. Marshall, Mr. B. Hill, & Mr. Heath (Holme prof.)	Dr. Fincham, 2nd & 4th W.
Dr. Palfrey (Win.)..2nd F. in mo.; demons. W., 1, 30; (Sum.) alt. Tu., 2, 30	Dr. Broadbent..alt. S.	Dr. Hall Davis..Tu., 10	Dr. Gervis..Tu., 4	Dr. G. Hewitt, fortnightly	Mr. Holthousen, 1st & 3rd F.
Wednesday, 2	Dr. A. Meadows..alt. Tu.	Wednesday, 1	Wednesday and Saturday, 1, 30; S., 9, 30; Eye, Th., 3	Wednesday, 2	Mr. Cowell, 2nd & 4th Th.
	Wednesday, 1, 30				Mr. Davy, 1 & 3rd W.
					Dr. Potter, 2nd & last F.
Dr. Prosser James..Tu. Th. F., 4	Dr. Farquharson..Tu. W. F. S., 12	Dr. Thorowgood..M. W. F., 3	Dr. Payne..M. W. F., 8	Dr. Ringer..M., 9; Tu. W. Th. F., 10	Dr. Phillips..Tu. Th. S., 9
Mr. Baker..M. W. F., 11	Dr. Trimen..M. W. F., 10, 30	Mr. Hensman..M. W. F., 10	Mr. A. W. Bennett..Tu. Th. S., 8 A.M.	Mr. Oliver..daily, exc. S. 8 A.M.	Mr. Holmes..M. W. F., 9
Dr. Palfrey..M. Th., 8 A.M.; Tu. W. F., 9	Dr. A. Meadows and Dr. Wiltshire..Tu. W. Th. F., 9	Dr. Hall Davis..Tu. Th., S., 9	Dr. Gervis..M. T. Th. F., 3	Dr. Graily Hewitt..Tu. W. Th. F., 9	Dr. Potter..Tu. W. F., 4
Mr. Rodgers and Dr. Tidy ..daily exc. S., 10	Dr. Randall..M. W. Th., 10	Dr. R. King..M. W. F., 9	Dr. Stone..M. Th. S., 12	Dr. Maudsley..Tu. W. Th. F., 10	Dr. Dupré and Mr. Bond, M. Th. F., 3
Dr. Letheby..M. Th. S., 9	Dr. Wright..Inorg. Tu. F. S., 9; Organ. Tu. F., 10	(Vacant)..M. W. F., 4	Dr. Bernays..Tu. Th. S., 11	Dr. Williamson and Dr. C. Graham	Dr. Dupré..M. W. F., 10
Mr. E. B. Aveling..Tu., 9; S., 10	Mr. St. G. Mivart..Sum. Tu. Th., 11	Mr. Hensman (Sum.)..Tu. Th., 4	Mr. Stewart (Sum.)..M. W., 11, 30	Mr. Lankester..Tu. W. Th. F. 3; also June & July	Dr. Carter Blake (Sum.)..W. S., 11
Mr. McCarthy..(Win.) M. Th. S., 10; (Sum.) Tu. Th., 11	Dr. Shepherd..(Win.) Tu. W. F., 10	Mr. Lowne (Sum.)..M. W. Th., 9	Dr. Ord and Dr. Harley (Sum.)..daily exc. S., 1, 30	Dr. Sanderson..Oct. Nov. Dec. Jan., daily, 11; Feb. Mar., M. W. F. S., 9	Dr. W. H. Allchin (Win.)..W. F., 1
Dr. Sutton (Win. and Sum.) ..Th., 12, 30; dem., daily, 3, 30	Dr. Cheate (Win.) M. Th., 3	Dr. Cayley (Win.) M. Th., 4	Dr. Bristolow..Th., 4	Dr. Bastian (Sum.) M. Th., 9; F., 4; Mr. Beck (Surg.) Jan. Feb. Mar., M. Th., 4	Dr. Allchin (lect.) (Sum.) M. Th., 4; W., 3; Dr. Allchin & Mr. Cheyne (dem.) 2
Dr. H. Jackson	With Forensic Medicine	Dr. H. Rayner (Sum.)	Dr. W. R. Williams (Sum), F., 12	Dr. Sankey (Sum.)..M. Th., 2 W., 4; (clin.), Tu., 2	Dr. Sutherland
With Forensic Medicine	With Forensic Medicine	Dr. G. H. Evans (Sum.)..M. Th., 10	With Forensic Medicine	Dr. Corfield (Sum.)..Tu. Th., 4	With Forensic Medicine
Mr. Maunder (Sum.)	Mr. Gascoyen	Mr. Lawson and Mr. Morris	Mr. Croft and Mr. McKellar (Win.)..M. or Tu., 5; (Sum.) Tu. F., 4	Mr. Hill (Oct. Nov. Dec.)..M. Th., 4; and in Sum., 3 to 5	Mr. Cheyne (bandaging, etc.) (Sum.)..W. F., 12
Mr. Couper, lect. (Sum.)	Mr. Walton Vis. M. Th., 1, 30; lect. (Sum.) M., 2, 4, 5	Mr. Hulke Tu. F., 8, 30 (o. p.); 1, 30 (i. p.)	Mr. Liebreich (vis.)..M. Th., 3; lect. (Sum.) M., 4	Mr. W. Jones & Mr. Street-feld (vis.) M. W. F., 2; lect. (Sum.), Tu., 3	Mr. Cowell (vis.), M. Th., 2, 30; (lect.) (Sum.), M., 3
Mr. J. Adams and Mr. Tay..W. S., 9		Mr. Turner daily, 9	Mr. Elliott & Mr. Ranger Tu. F., 10	Mr. Ibbetson..(lect.) M. Th., 4; (vis.) W., 10	Mr. J. Walker (vis.), W. S., 9, 15; (lect.) W., 9, 30
Mr. Barrett (vis.)..Tu., 9; lect.	Mr. H. Hayward..W. S., 9, 30	Mr. A. Clark..Tu., 9	Dr. Payne (out-p.)..M., 12, 30	Dr. Tilbury Fox (vis.)..Tu., 1, 30; S., 9; (clin. lect. alt. weeks)	Mr. Keene (vis.), W., 1; lect. in June
Mr. Rivington and Mr. Reeves..S., 9, 30	Mr. Field (lect.) F., 3; (vis.) Tu. F., 2	Dr. R. Liveing..Th., 4	Dr. Gervis	Mr. G. L. Cooper or Mr. W. Pearse	Mr. Bond (vis.), Th., 1; (lect.) (Feb. Mar.), Th., 3
Mr. McCarthy..W., 9	Dr. Jones & Dr. Cheadle Tu. Th., 1, 30; Dr. Cheadle (lect.) Th., 3 (Sum.)	Dr. W. Pearse	Physic and Natural Philosophy.	Em'ryology: Mr. Schäfer (Sum.)	Mr. W. Pearse
Assist. Obst. Phys. and Resident Accoucher	Mr. Sumner	Diseases of Throat: Mr. A. Clark..Tu., 9	Dr. Stone (Win.)..S., 12		Assesitation: Dr. Sturges
Diseases of Throat: Dr. M. Mackenzie (Sum.)	Diseases of Throat: Mr. Norton W. S., 12, 30				Natural Philosophy: Mr. Brooke (Sum.), Tu., 3
					Dental Anatomy: Dr. Allchin..W., 4 (Sum.)
					Dental Metallurgy: Dr. Dupre, Tu., 4

TABLE OF FEES FOR HOSPITAL ATTENDANCE AND LECTURES IN THE LONDON AND PROVINCIAL MEDICAL SCHOOLS.

(The letter "s" denotes single course; "p", perpetual or unlimited attendance.)

	ST. BARTHOLOMEW'S.	CHARING CROSS.	ST. GEORGE'S.	GUY'S.	KING'S COLLEGE.	LONDON.	ST. MARY'S.	MIDDLESEX.
AGGREGATE FEE FOR LECTURES AND HOSPITAL PRACTICE REQUIRED BY LICENSING BOARDS	£105; or £30 15s. in first winter first summer, & second winter.	1st yr. £30 15s.; 2nd yr. £33 12s.; 3rd yr. £34 14s.	1st year, £42; 2nd year, £42; each subs. yr. £10 10s.	1st year, £40; 2nd year, £40; 3rd year, £30; each subseq. year, £10.	£100; or £52 10s. on entrance, £42 at 2nd winter, and £10 10s. at 3rd winter.	£94 10s.; or £47 5s. at beg. of first & second winters.	£80 5s. in instalments, or £84 in one sum lectures alone, £52 10s.	£80; or £35 at beg. of 1st and 2nd winter sessions; £40 at beg. of 3rd.
HOSPITAL PRACTICE	<i>Medical.</i> 3 mos. £8 8s. 6 mos. £12 12s. 2 yrs. £18 18s. Perp. £26 5s. <i>Surgical.</i> 3 mos. £10 10s. 6 mos. £15 15s. 12 mos. £21 Perp. £26 5s.	Total, full period, £41 10s. <i>Med. or Surg.</i> 3 mos. £7 6s. 6 mos. £10 10s. 12 mos. £15 15s. Full p. £21 <i>Med. and Surg.</i> 3 mos. £10 10s. 6 mos. £15 15s. 12 mos. £21 Full p. £31 10s.	<i>Medical.</i> 6 mos. £8 8s. 3 yrs. £16 16s. Perp. £25 4s. <i>Surgical.</i> 6 mos. £15 15s. 3 yrs. £21 Perp. £42	<i>Med. or Surg.</i> 3 mos. £10 10s. 6 mos. £15 15s. Perp. £26 5s.	Perp. £42 3 yrs. £31 10s. <i>Medical.</i> 3 mos. £6 6s. 6 mos. £10 10s. 18 mos. £15 15s. Perp. £26 5s. <i>Surgical.</i> 3 mos. £10 10s. 6 mos. £15 15s. 21 mos. £21 Perp. £31 10s.	Perp. £52 10s. <i>Medical.</i> 6 mos. £7 7s. 12 mos. £12 12s. Perp. £21 <i>Surgical.</i> 6 mos. £8 8s. 12 mos. £12 12s. 18 mos. £18 18s. 3 yrs. £27 7s. Ditto, £31 10s.	Full p. £36 15s. <i>Medical.</i> 3 mos. £5 5s. 6 mos. £7 7s. 12 mos. £12 12s. 18 mos. £15 15s. Perp. £21 <i>Surgical.</i> 3 mos. £6 6s. 6 mos. £9 9s. 12 mos. £21 Perp. £31 10s.	<i>Med. or Surg.</i> 3 yrs. £15 15s. One yr. £8 8s. <i>Med. and Surg.</i> Perp. £26 5s. 6 mos. £7 7s.
ANATOMY	s. £7 7s. p. £10 10s.	1st yr. £14 s. 2nd yr. £2 3s.	s. £6 6s. p. £7 7s.	s. £5 5s.	s. £7 7s. p. £10 10s.	s. £7 7s. p. £8 8s.	s. £6 6s. p. £8 8s.	s. £8 8s. p. £12 12s.
DEMONSTRATIONS AND DISSECTIONS	1st c. £3 3s. 1 sess. £5 5s.	1st yr. £3 3s. 2nd yr. £2 2s.	—	s. £5 5s.	—	s. £5 5s. p. £8 8s.	—	s. £6 6s. p. £8 8s.
PHYSIOLOGY	s. £7 7s. p. £10 10s.	1st yr. £14 s. 2nd yr. £2 2s.	s. £6 6s. p. £7 7s.	s. £5 5s.	s. £7 7s. p. £10 10s.	p. £4 4s.	s. £3 3s. p. £4 4s.	s. £6 6s. p. £8 8s.
PRACTICAL PHYSIOLOGY	s. £5 5s. p. £7 7s.	—	—	s. £4 4s.	s. £3 3s. p. £5 5s.	p. £4 4s.	s. £3 3s. p. £4 4s.	s. £4 4s.
CHEMISTRY	s. £5 5s. p. £7 7s.	s. £5 5s.	s. £6 6s. p. £8 8s.	s. £5 5s.	s. £7 7s. p. £10 10s.	s. £7 7s. p. £7 7s.	s. £5 5s. p. £7 7s.	s. £6 6s. p. £8 8s.
PRACTICAL CHEMISTRY	s. £2 2s.	s. £3 3s.	s. £4 4s.	s. £4 4s.	s. £4 4s. p. £7 7s.	£2 2s. £3 3s.	s. £3 3s.	s. £3 3s.
MEDICINE	s. £5 5s. p. £7 7s.	1st c. £4 4s. 2nd c. £2 2s.	s. £6 6s. p. £7 7s.	s. £5 5s.	s. or p. £7 7s.	s. £5 5s. p. £6 6s.	s. £4 4s. p. £6 6s.	s. £6 6s. p. £8 8s.
SURGERY	s. £5 5s. p. £7 7s.	1st c. £3 3s. 2nd c. £2 2s.	s. £6 6s. p. £7 7s.	s. £5 5s.	s. or p. £7 7s.	s. £5 5s. p. £6 6s.	s. £4 4s. p. £6 6s.	s. £6 6s. p. £8 8s.
PRACTICAL SURGERY	s. £5 5s. p. £7 7s.	—	s. £2 2s.	s. £5 5s.	—	—	—	s. £6 6s.
MIDWIFERY	s. £5 5s. p. £6 6s.	s. £3 3s.	s. £5 5s. p. £6 6s.	s. £5 5s.	s. £4 4s. p. £5 5s.	s. £4 4s. p. £6 6s.	s. £4 4s. p. £6 6s.	s. £4 4s. p. £5 5s.
PATHOLOGY	s. £2 2s. p. £3 3s.	s. £3 3s.	s. £3 3s.	s. £5 5s.	s. £2 2s. p. £3 3s.	s. £3 3s. p. £6 6s.	s. £3 3s.	s. £4 4s. p. £5 5s.
MATERIA MEDICA	s. £5 5s. p. £6 6s.	s. £3 3s.	s. £4 4s. p. £5 5s.	s. £4 4s.	s. £4 4s. p. £5 5s.	s. £3 3s. p. £4 4s.	s. £4 4s. p. £6 6s.	s. £4 4s. p. £5 5s.
FORENSIC MEDICINE	s. £3 3s. p. £4 4s.	s. £3 3s.	s. £4 4s. p. £5 5s.	s. £4 4s.	s. £4 4s. p. £5 5s.	s. £3 3s. p. £4 4s.	s. £3 3s. p. £4 4s.	s. £4 4s. p. £5 5s.
BOTANY	s. £3 3s. p. £4 4s.	s. £3 3s.	s. £3 3s. p. £4 4s.	s. £4 4s.	s. £4 4s. p. £5 5s.	s. £3 3s. p. £4 4s.	s. £3 3s. p. £4 4s.	s. £4 4s. p. £5 5s.
COMPARATIVE ANATOMY	s. £2 2s. p. £3 3s.	s. £3 3s.	£4 4s.	s. £4 4s.	s. £3 3s. p. £4 4s.	s. £3 3s. p. £4 4s.	s. £2 2s. p. £3 3s.	s. £3 3s.
OPHTHALMIC SURGERY	s. £2 2s. p. £3 3s.	—	—	—	—	£2 2s. £3 3s.	s. £2 2s. p. £3 3s.	—
DENTAL SURGERY	s. £2 2s. p. £3 3s.	—	—	—	—	—	s. £2 2s.	—
AURAL SURGERY	—	—	—	—	—	—	—	—
PSYCHOLOGY	s. £2 2s. p. £3 3s.	—	—	—	—	—	—	s. £3 3s.
PUBLIC HEALTH	—	£1 1s.	—	£4 4s.	—	—	—	s. £3 3s.
LIBRARY	1 year, £1 1s. 4 years, £2 2s.	—	Each w. 10s. 6d Perp. £2	—	£1 1s.	£1 1s.	£1 1s.	£1 1s.

MISCELLANEOUS.

ST. BARTHOLOMEW'S HOSPITAL.—House-Physicianships and House-Surgeons' £26 5s. Dresserships 3 months, £12 12s.; 6 months, £18 18s.; 12 months, £26 5s. Demonstrations on Histology, £2 2s.

CHARING CROSS HOSPITAL.—Hospital Practice after third year, £5 5s. for each additional winter, and £3 3s. for each summer. Matriculated Students receive a deduction of 8 per cent., making the total aggregate (including matriculation fee of £2 2s.), £80 7s., which may be paid in four instalments. Non-matriculated Students pay £4 4s. for Comparative Anatomy. The Lectures on Psychology, and on Normal Histology and Operative Surgery, are free to matriculated students; non-matriculated students pay £1 1s. for the former, and £2 2s. for each of the two latter. Morbid Histology: matriculated, £1 1s.; non-matriculated, £2 2s. Private class of Operative Surgery, whole body, £6 6s.; half body, £4 4s. Electro-therapeutics, £1 1s.

ST. GEORGE'S HOSPITAL.—Perpetual Fee, £105; or pupils paying aggregate fee by instalments may become perpetual at any time by making up the payments to £115 10s.

GUY'S HOSPITAL.—Perpetual fee, £105 in one sum at entrance, or in two moieties at commencement of first winter and of following summer session. Natural Philosophy, £4 4s.

KING'S COLLEGE.—Perpetual Fee to Hospital Practice and all classes, £120 on

entrance; or £60 on entrance, £40 at second winter, and £30 at third winter. Non-matriculated students pay £42 for the three years' course of hospital practice, and £52 10s. for perpetual admission. Medical Tutor, £1 1s.; for preparation for Preliminary Scientific Examination of University of London, £5 5s. Practical Physiology in summer, s. £2 2s.; p. £3 3s. Students of Practical Physiology pay £1 1s. for use of microscope, unless possessing one. Practical Zoology, s. £4 4s.; p. £6 6s. Analytical and Experimental Chemistry (exclusive of materials), 1 month, £1 1s.; 3 months, £2 2s.; 6 months, £3 3s.

LONDON HOSPITAL.—The fees for surgical hospital practice include dresserships for 3, 6, 18, and 12 months, and 2 years. Perpetual Fee for Lectures and Hospital Practice and two years' Practical Anatomy, £105; for lectures or hospital practice alone, £52 10s. Composition fee for students entering at or before second winter, £73 10s.; or in two equal instalments, Practical Chemistry, for apparatus and materials, to students of school, £2 2s.; to others, £3 3s. Practical Pharmacy, £4 4s. Use of microscope in Practical Physiology (unless possessing one), 10s. 6d. Diseases of Throat, £22 2s.; p. £3 3s.

ST. MARY'S HOSPITAL.—Unlimited attendance, £105 in instalments, or £99 15s. in one sum. Use of microscope (unless possessing one), £1 1s. Fee for subjects for dissection, £1 15s., at beginning of first and second winters. Inorganic Practical Chemistry (£3 3s.) included in General Fee; Organic ditto (£3 3s.) not included. Practical Pharmacy, 3 months, £3 3s.; 6 months, £6 6s.; 12 months, £10 10s. Instruction in Vaccination, £1 1s.

TABLE OF FEES FOR HOSPITAL ATTENDANCE AND LECTURES IN THE LONDON AND PROVINCIAL MEDICAL SCHOOLS.

(The letter "s" denotes single course; "p", perpetual or unlimited attendance.)

ST. THOMAS'S.	UNIVERSITY COLLEGE.	WESTMINSTER.	QUEEN'S COLL. BIRMINGHAM.	BRISTOL.	LEEDS.	LIVERPOOL.	OWENS COLL., MANCHESTER.	SHEFFIELD.	NEWCASTLE.
£40 each 1st & 2nd years; £20 3rd year; afterwards, £10 a yr.	£105 15s.; or 1st yr. £47 16s.; 2nd yr. £39 8s.; 3rd yr. £14 7s.; 4th yr. £4 4s.	£90; or, 1st win., £29 8s.; 2nd summer, £14 14s.; 2nd win., £26 5s.; 2nd summer, £13 13s. Or, 1st win. £42; 2nd win., £40.	Lects. £52 10s. in 2 equal instalments at 1st and 2nd winters.	Lects. £47 5s.	Lect. £46 4s.; or, £24 3s. at entrance, and in 12 months.	Lectures £47 5s. Half on entrance, & half within twelve months.	Lect. £48; or £25 at beginning of 1st and 2nd yrs.	Lectures, £42	Lectures: one payment £52 10s.; 2 payments, each £28 7s.; 3 payments, each £21.
<i>Med. or Surg.</i> 3 mos. £5 5s. 6 mos. 19 9s. 9 mos. £12 12s. 12 mos. £15 15s. Perp. £26 5s.	Perp. £27 One yr. £10	<i>Med. or Surgical</i> 3 mos. £5 5s. 6 mos. £8 8s. 12 mos. £12 12s. 18 mos. £15 15s. Perp. £21	<i>General and Queen's Hoapl.</i> 4 yrs. £31 10s., or in 2 equal sums. 1 yr. £15 15s. 6 mos. £10 10s.	<i>Royal Infirm. Medical.</i> 6 mos. £8 1 year, £15 18 mos. £20 Perp. £25	<i>Infirmary. Med. or Surg.</i> 1 win. £7 7s. 1 sum. £6 6s. 12 mos. £12 12s. 18 mos. £15 15s. 3 yrs. £21	<i>Royal Infirm. Med.</i> Perp. £33 12s. <i>Medical.</i> 6 mos. £5 5s. 12 mos. £6 6s. <i>Surgical.</i> 6 mos. £6 6s. 12 mos. £8 8s.	<i>Royal Infirmary.</i> Full per. £42; or 2 instalments, £22 <i>Medical.</i> 3 mos. £6 6s. 6 mos. £9 9s. 12 mos. £12 12s. Full per. £18 18s. <i>Surgical.</i> 3 mos. £9 9s. 6 mos. £12 12s. 12 mos. £18 18s. Full per. £31 10s.	<i>Gen. Infirm.</i> Perp. Med. £16 16s. <i>Med. or Surg.</i> 6 mos. £6 6s. 12 mos. £10 10s.	<i>Infirmary.</i> 3 mos. £4 4s. 6 mos. £5 5s. 12 mos. £7 7s. Perp. £17 7s. 1st yr. £7 7s. 2nd yr. £6 6s. 3rd yr. £5 5s.
<i>Med. and Surg.</i> 3 mos. £8 8s. 6 mos. £14 14s. 9 mos. £19 19s. 12 mos. £25 4s. Perp. £42		<i>Med. and Surg.</i> 3 mos. £7 7s. 6 mos. £12 12s. 12 mos. £18 18s. 18 m. £23 12s 6d Perp. £31 10s.		<i>Surgical.</i> 1 yr. £12 12s. 2 yrs. £21 3 yrs. £26 5s. <i>Gen. Hoosp.</i> <i>Med. or Surg.</i> 6 mos. £6 12 mos. £10 Perp. £20					
s. £5 5s. p. £8 8s.	s. £9 9s. p. with 3 yrs. practical anatomy, £11 11s.	1 c. £7 7s. 2 cs. £10 10s.	s. £5 5s. p. £8 8s.	s. £5 5s. p. £8 8s.	1st c. £6 6s. 2nd c. £5 5s.	1st & 2nd cs. ea. £4 4s.; 3rd c. £2 2s. s. £3 3s.	s. £5 5s. 6 mos. £3 3s. 3 mos. £2 2s.	1st c. £3 3s. 2nd c. £2 2s.	s. £4 4s.
s. £5 5s. p. £8 8s. s. £5 5s. p. £8 8s. s. £3 3s.	s. £6 6s. p. £9 9s. s. £7 7s. p. £9 9s.	1 c. £5 5s. 2 cs. £7 7s. 1 c. £4 4s.	s. £4 4s. p. £8 8s.	s. £5 5s. p. £8 8s.	1st c. £6 6s. 2nd c. £5 5s.	1st & 2nd cs. ea. £4 4s.; 3rd, £2 2s. s. £4 4s.	s. £5 5s. s. £4 14s. 6d.	1st c. £4 4s. 2nd c. £2 2s. s. £3 3s.	s. £4 4s. —
s. £5 5s. p. £8 8s.	s. £7 7s. p. £9 9s.	1 c. £5 5s. 2 cs. £7 7s.	s. £4 4s. p. £6 6s.	s. £5 5s. p. £7 7s.	s. £4 4s.	1st c. £5 5s.; 2nd & 3rd, ea. £2 2s. 6d. s. £3 3s.	s. £3 3s. s. £4 4s.	s. £4 4s.	s. £5 5s.
s. £3 3s.	s. £4 4s. p. £7 7s.	1 c. £3 3s.	s. £3 3s. p. £5 5s.	s. £3 3s. p. £5 5s.	s. £3 3s.	1st & 2nd c. ea. £1 4s.; 3rd, £2 2s. 1st c. £5 5s.; 2nd £4 4s.; 3rd, £2 2s.	s. £5 5s.	1st c. £4 4s. 2nd c. £2 2s. s. £4 4s.	s. £4 4s.
s. £5 5s. p. £8 8s. s. £5 5s. p. £8 8s. s. £3 3s.	s. £6 6s. p. £9 9s. s. £5 5s. p. £6 6s. s. £3 3s.	1 c. £5 5s. 2 cs. £7 7s. 1 c. £5 5s.	s. £5 5s. p. £8 8s.	s. £5 5s. p. £8 8s.	1st c. £5 5s. 2nd c. £4 4s.	1st c. £4 4s.; 2nd £4 4s.; 3rd, £2 2s.	s. £5 5s.	1st c. £4 4s. 2nd c. £2 2s. s. £4 4s.	s. £4 4s.
s. £4 4s. p. £6 6s. s. £3 3s. p. £4 4s.	s. £4 4s. p. £6 6s. s. £4 4s. p. £6 6s.	1 c. £4 4s. 2 cs. £5 5s. 1 c. £3 3s.	s. £4 4s. p. £6 6s.	s. £4 4s. p. £6 6s.	s. £3 3s.	1st c. £4 4s.; 2nd & 3rd, ea. £2 2s. 1st c. £3 3s.; 2nd & 3rd, ea. £1 11s. 6d.	s. £4 4s. s. £4 4s.	s. £3 3s.	s. £4 4s.
s. £3 3s. p. £4 4s. s. £3 3s. p. £4 4s.	— p. £4 4s.	1 c. £3 3s. 2 cs. £4 4s.	s. £3 3s. p. £5 5s.	s. £4 4s. p. £6 6s.	s. £4 4s.	1st c. £4 4s.; 2nd & 3rd, ea. £2 2s. 1st c. £3 3s.; 2nd & 3rd, ea. £1 11s. 6d.	s. £4 4s. s. £4 4s.	s. £3 3s.	s. £4 4s.
s. £3 3s. p. £4 4s.	s. £3 3s. p. £4 4s.	1 c. £3 3s. 2 cs. £4 4s.	s. £3 3s. p. £5 5s.	s. £3 3s. p. £5 5s.	s. £4 4s.	1st c. £3 3s.; 2nd & 3rd, ea. £1 11s. 6d.	s. £2 12s. 6d.	s. £3 3s.	s. £4 4s.
s. £3 3s. p. £4 4s.	s. £5 5s.	1 c. £2 2s. 2 cs. £3 3s.	s. £3 3s. p. £5 5s.	s. £4 4s.	s. £2 2s.	1st c. £2 2s.; 2nd & 3rd, ea. £1 1s.	s. £4 14s. 6d. s. £3 3s.	—	—
s. £2 2s. p. £3 3s.	s. £1 1s.	s. £1 1s.	s. £3 3s. 2 cs. £5 5s.	—	—	s. £1 1s.	—	—	—
s. £2 2s. p. £3 3s.	s. £2 2s.	s. £2 2s. 2 cs. £3 3s.	s. £1 1s.	—	—	—	—	—	—
s. £2 2s. p. £3 3s.	s. £2 2s.	s. £1 1s.	—	—	—	—	—	—	—
£1 1s.	—	£1 1s.	—	£1 1s.	£1 1s.	s. 10s. 6d. p. £1 1s.	s. £2 12s. 6d.	—	—

MIDDLESEX HOSPITAL.—Hospital Practice and Lectures each year after third, £10. Occasional students entering to the Hospital Practice pay a registration fee of £1 6s. Anatomy, including dissection, s., £10 10s.; p., £14 14s. Practical Surgery in summer, £4 4s. Instruction in Pharmacy without dispensing, 3 months, £4 4s.; with dispensing, 6 months, £5 5s.; 12 months, £8 8s.

ST. THOMAS'S HOSPITAL.—Perpetual fee, £105. A modified scale of fees is arranged for students entering in the second, third, or any subsequent year. Practical Physiology and Practical Chemistry, each £1 11s. 6d. for use of materials. Practical Pharmacy, £5 5s.

UNIVERSITY COLLEGE.—Physiological Laboratory fees (exclusive of materials), 1st month, £2 2s.; each succeeding month, £1 1s. Organic Chemistry alone, £2 2s.; Chemistry Exercise class, £2 2s. Practical Anatomy after 3 years, £1 1s. each winter; during summer, without lectures, £3 3s. Elementary Biology (summer), £3 3s. Laboratory instruction in Chemistry (exclusive of materials), £12 12s. Practical Pharmacy, 3 months, £3 3s.

WESTMINSTER HOSPITAL.—Perpetual Fee (if in one sum), £80. Students paying by instalments may become perpetual by paying £45 (in place of £40) at second winter session, or £18 18s. (in place of £13 13s.) at second summer session. Practical Pharmacy, 3 months, £3 3s.; 6 months, £5 5s. Instruction in Vaccination, £1 1s. Dissections only, 3 months, £2 2s.; summer, £3 3s.; 6 months, £3 3s.; each subsequent session, £2 2s. Diseases of Skin, s., £1 1s. Natural Philosophy, £1 1s.

QUEEN'S COLLEGE, BIRMINGHAM.—In addition to the fees, each student must deposit £2 as "caution money", which is returned on leaving the College, less deductions for breakages, etc. Midwifery and Diseases of Women, at Hospital (optional), £2 2s.; dental fee (optional), £1 1s.

BRISTOL MEDICAL SCHOOL.—The aggregate fee does not include Comparative Anatomy. Royal Infirmatory: Entrance fee, £5 5s.; extra fee for dresser, one year, £12 12s.; two years, £21; 3 years, £26 5s.; apprenticeship to house-surgeon, including four years' residence and attendance on hospital practice (except dresser's fees), £315. House-pupils, £52 10s. per annum, and £52 10s. to the house-surgeon. General Hospital: Extra fee for clerk or dresser, £5 5s. for six months. Resident pupils, £100 for the first year, £60 for each subsequent year; or 5 years, with apprenticeship, £260.

LEEDS SCHOOL OF MEDICINE.—Instruction in Vaccination, £1 1s. LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.—Summer course of Practical Anatomy, £2 2s. The aggregate fee of £80 17s. for lectures and hospital practice is exclusive of Practical Chemistry, Ophthalmology, Dissections, and Practical Anatomy in summer. Vaccination, £1 1s.

OWENS COLLEGE (MANCHESTER ROYAL) SCHOOL OF MEDICINE. Extra charges beyond composition Fee; Medical Tutor, £2 2s. per annum; Practical Anatomy after two sessions, 3 months, £2 2s.; 6 months, £3 3s.; Demonstrations in Comparative Anatomy, and in Botany, each £1 1s.; Practical Chemistry, for chemicals, £1 1s.

NOTES CONCERNING THE HOSPITALS AND MEDICAL SCHOOLS IN LONDON.

In addition to the Tables of the Classes, hours of attendance, and fees, given at pages 336-339, we subjoin extracts from the Programmes issued by the several Medical Schools. We have extracted those points of information which are of most interest to the student, in addition to those given in the tables.

ST. BARTHOLOMEW'S HOSPITAL.—*The Clinical Practice of the Hospital* now comprises a service of 710 beds: of these 227 are allotted to the medical cases, 322 to the surgical cases, 26 to diseases of the eye, 20 to the diseases of women, and 81 to syphilitic cases; while 34 are at the Convalescent Hospital at Highgate. Children are admitted into both the medical and surgical wards; those under five years of age being received into the female wards.

Museums, etc.—The Anatomical Museum, and the Museum of Materia Medica and of Botany, are open to students daily from 10 A.M. to 4 P.M. The Reading Room is open every day; during winter from 10 to 5; summer, 9 to 5; vacations, 10 to 2.30.

College.—Students are admitted to residence on the recommendation of a medical officer of the hospital, which may be obtained on adducing satisfactory evidence of good moral character. The entrance-fee is £2 2s. Information regarding the College may be obtained on application to the Warden, Dr. Norman Moore.

Examinations.—Students preparing for their examinations are arranged in classes, and examined by the lecturers and demonstrators. An examination of all students of the first year is held at the close of the first winter and first summer sessions.

Appointments.—Four House-Physicians and four House-Surgeons (who must be qualified to practise) are appointed annually. Fee, £26 5s. Each of these officers receives a salary of £25. Two Midwifery Assistants are appointed every six months. An Ophthalmic House-Surgeon is appointed for six months. (The preceding are provided with rooms.) The Clinical Clerks to the medical in-patients, and the Clerks to the Physician-Accoucheurs, are chosen from the most diligent students. Sixteen dressers to the surgical in-patients and the surgical casualty department are selected each year from the students of the second year. Other in-patient dresserships may be obtained by payment of the usual fees. There are also Clerks and Dressers to the Assistant-Physicians and the Assistant-Surgeons in the special departments.

Exhibitions, Scholarships, and Prizes.—Open Scholarship in Science, value £100 for one year, to be competed for on September 27th, by candidates under twenty-five years of age, who have not entered to the medical or surgical practice of any metropolitan medical school. The subjects are Physics, Chemistry, Botany, and Zoology. *First Year.*—Jeaffreson's Exhibition: £20 yearly, tenable for two years. Confined to students of less than six months' standing. Examination on October 18th. Subjects, those of Preliminary Education appointed by the General Medical Council. Preliminary Scientific Exhibition, on October 28th; subjects, Physics, Chemistry, Botany, and Zoology; value £50, for one year; confined to students of less than six months' standing. The holder of the Open Scholarship is not eligible. Three Junior Scholarships, of the value of £50, £30, and £20, after the general examinations in first year's subjects at the end of the winter and summer sessions. Treasurer's Prize for Practical Anatomy, junior. *Second Year.*—Foster Prize for Practical Anatomy, senior. *Second or Third Year.*—Senior Scholarship, value £50, in Anatomy, Physiology, and Chemistry. Wix Prize: subject, "The mutual influence of General Literature and Medical Science, as illustrated by the writers of the seventeenth century." Hichens Prize: subject of examination, Bishop Butler's *Analogy*. *Third or Fourth Year.*—Lawrence Scholarship and Gold Medal, value, £47 5s.: subjects, Anatomy and Physiology, Medicine and Surgery in all their Branches. Two Brackenbury Scholarships in Medicine and Surgery. Candidates for the Lawrence and Brackenbury Scholarships may not compete before the end of the third winter session, nor later than the beginning of the fifth winter session in the hospital. Bentley Prize, for the best report of not less than twelve surgical cases occurring in the wards of the hospital during the previous year. The Kirkes Gold Medal for Clinical Medicine. The conditions under which the exhibitions, scholarships, and prizes are awarded, will be found in the prospectus of the College.

The Abernethian Society, composed of the teachers and students of the hospital, meets in the library on every Thursday evening at 8 P.M. during the winter session, for the reading and discussion of papers on subjects of medical science or practice, and for the exhibition of pathological specimens.

Communications regarding the Hospital and Medical College must be addressed to the Warden of the College, St. Bartholomew's Hospital.

CHARING CROSS HOSPITAL.—Besides the Clinical Instruction in the Hospital, matriculated students are admitted to the practice of the Royal Westminster Ophthalmic Hospital (36 beds).

Appointments.—A Medical Registrar and a Surgical Registrar, each with a salary of £40 a year, are appointed. Resident Medical, Surgical, and Obstetrical Officers, Assistant Medical and Surgical Officers, Clinical Clerks, Surgeons' Dressers, and a Pathological Assistant, are appointed from among the matriculated students, without additional fee.

Scholarships, Medals, and Prizes.—Two Entrance Scholarships, value £30 and £20, tenable for one year, awarded after examination in English, Latin, French or German, and Mathematics, with (optional) either Chemistry, Mechanics, German, or French.—The Llewellyn Scholarship of £25, open to all matriculated students who have just completed their second year. Examination at the end of the second summer session, in Descriptive and Surgical Anatomy, Physiology, Materia Medica, Medicine, Surgery, Midwifery.—The Golding Scholarship, £15 a year, open to all matriculated students who have just completed their first year. Examination at the end of the first summer session, in Descriptive Anatomy, Physiology, Materia Medica, and Chemistry.—The Governors' Clinical Gold Medal, Silver and Bronze Class Medals and Certificates of Honour in all the classes.

Further information may be had of the Librarian, who attends at the office of the School, Chandos Street, Charing Cross, between the hours of 10 and 4; or of the Dean, Mr. Francis Hird.

ST. GEORGE'S HOSPITAL.—The Aggregate and Perpetual Fees do not include Practical Chemistry.* Gentlemen who have commenced their professional studies at an English University will be admitted as Perpetual Pupils on payment of a reduced fee.

The Hospital contains 353 beds, of which 205 are devoted to surgical, and 148 to medical, cases. Wards are especially set apart for the reception of cases of diseases of the eye, and diseases of women. In the women's wards, cribs are placed for the reception of children.

The Library and Reading Room and the *Museum* are open daily.

Clinical Instruction.—The pupils of the hospital are divided into classes under the superintendence of the physicians and surgeons in rotation, and are placed in charge of cases as Clerks and Dressers.

Hospital Appointments.—House-Physicians, House-Surgeons, an Assistant House-Physician, and an Assistant House-Surgeon, half-yearly, from among the perpetual pupils. The House-Physicians and House-Surgeons hold office for twelve months, and reside and board in the hospital free of expense. They must each deposit 50 guineas with the Treasurer of the hospital which will be returned to them on the expiration of their term of office, if they have satisfactorily performed their respective duties.—An Obstetric Assistant is appointed annually. He resides and boards in the hospital, and receives a yearly salary of £100.—A Curator of the Pathological Museum, a Medical and a Surgical Registrar, and a Demonstrator of Anatomy, are appointed annually from among the senior pupils, each with a salary of £50. Every student is required to assist the Curator for one month in performing *post mortem* examinations.—Two Assistant Medical Registrars are appointed every six months by competition. This office must be held before competing for that of House-Physician.—An Assistant-Surgical Registrar is also appointed; this office must be held, alternately with that of Ophthalmic Assistant, before competing for the office of Assistant House-Surgeon.

Exhibitions and Prizes.—The William Brown Exhibitions: 1. £100 *per annum* for two years to a perpetual pupil of the hospital under the age of 25, who has become entitled to be registered as a medical practitioner within two years previously; examination in July. 2. £40 *per annum* for three years to students of the third and fourth winter sessions.—Brackenbury Prizes in Medicine and in Surgery, each interest of £1,000 three per cent. consols, open to all pupils who have not completed the fourth year; examinations in May.—Sir Charles Clarke's Prize, interest of £200 annually, for good conduct; awarded at end of summer session.—The Thompson Silver Medal, and the Treasurer's Prize, at close of winter session, for proficiency in clinical examinations

* Perpetual Pupils are entitled to admission to the practice of the Physicians and Surgeons, to all the Lectures (except Practical Chemistry), to compete for all Prizes and Exhibitions, to hold the appointments of House-Physician, House-Surgeon, and Assistant House-Surgeon, and to become Clinical Clerks for two periods of three months each, and Dressers for two similar periods. This payment must in all cases be made at the time of entry.

in three Medical and three Surgical cases.—Sir Benjamin Brodie's Clinical Prize in Surgery, for the best report (with notes) of not more than twelve surgical cases in the hospital during the preceding twelve months.—Dr. Acland's Clinical Prize in Medicine, for the best record of not more than twelve cases of disease treated in the preceding twelve months. (The Clinical Prizes are open to fourth year's students. Reports must be sent in on or before May 1).—The Henry Charles Johnson Memorial Prize, for Practical Anatomy.—General Proficiency Prizes, £10 10s., for students of each year: subjects for first year, Anatomy, Physiology, Chemistry, and Botany; for second year, Anatomy, Physiology, Chemistry, and Materia Medica; for third year, Medicine, Surgery, Pathology, and Midwifery.

The Medical Society meets once a week at the hospital during the winter session. All former and present pupils of St. George's Hospital are eligible as members.

Further information may be obtained from Dr. Barclay, the Treasurer of the School; from Dr. Wadham, the Dean of the School; and from the Resident Medical Officer of the Hospital.

GUY'S HOSPITAL.—The hospital contains 690 beds. Of these, 220 are for medical cases, 260 for surgical cases, 26 for diseases of women, 48 for syphilitic, and 50 for ophthalmic cases; there are also 30 children's cots, and 60 reserve beds, with 8 in private rooms.

Museums, etc.—The Museums of Human Anatomy, Comparative Anatomy, Pathological Anatomy, and Materia Medica are open to the students. The Library contains upwards of 5,000 volumes, and is open to the students daily from 10 A.M. to 4 P.M.

Clinical Instruction.—Two wards, containing together forty beds, are especially devoted to clinical teaching in Medicine. The Surgeons lecture upon selected cases during the winter, and the Assistant-Surgeons in the summer. The Obstetric Physicians, and the Ophthalmic, Dental, and Aural Surgeons, also give clinical and practical instruction. Special demonstrations and instructions are also given in Cutaneous Diseases.

The Registrars and the Demonstrators of Anatomy and Chemistry assist the pupils in their studies.

Pupils attending the practical courses are charged for the materials used.

Pupils' Appointments.—All these appointments are given according to the respective merits of the candidates, and without payment. Six House-Physicians are appointed in each year, and hold office for six months each—two months as junior, four as senior. Six House-Surgeons and twelve Obstetric Residents are appointed every year: the former hold office each for four months, the latter for two months. The Senior House-Physician, House-Surgeon, Obstetric Resident, and the Dressers on special duty, reside in the hospital, and are boarded free of expense.—Clinical Assistants are selected from those students who have been medical ward-clerks.—Dressers are selected from those who have been surgical ward-clerks. They hold office for six months each.—The Assistant-Surgeons' Dressers and Dressers in the Surgery are appointed for three months; and all students who have not otherwise obtained certificates must hold each of these appointments. The Dressers in the Eye-Wards hold office for four months each.—Dressers are appointed to the Dental and to the Aural Surgeon for two months.—The *Post Mortem* Clerks are selected from students who have completed their second year, and hold office for two months each.—Extern Obstetric Attendants are appointed monthly.—Reporters or Ward-Clerks, and Clerks to the Assistant-Physicians and Assistant-Surgeons, are also appointed.—Two Clerks are appointed to attend in the Electricity Room.—A special honorary certificate is given to every gentleman who has diligently performed the duties of the various offices.

Prizes.—Voluntary examinations are held as follows: 1. At entrance, in Classics, Mathematics, Modern Languages, Chemistry, Physics, and Botany.* The first two of the successful candidates receive £60 and £30. Examination on October 7th, 8th, and 9th. 2. At end of first summer session, in the subjects of the year. Three prizes of £50, £25, and £10 10s. 3. At end of second summer session, in Anatomy, Physiology, and Practical Physiology. Two prizes of £25 and £10. 4. At end of third summer session, in Medicine, Surgery, Midwifery and Diseases of Women, and Medical Jurisprudence. Two prizes of £35 and £20. Honorary certificates are given to those candidates who pass creditable

* Mathematics includes Arithmetic; Algebra to Quadratic Equations; Euclid. Books 1, II, III, and IV; and Plane Trigonometry. The classical subjects are, for 1875: Greek, Euripides, Hecuba; Herodotus, Book III; Latin, Ovid, Epistles V, VII; Sallust, *Catiline's Conspiracy*. German: Schiller's *William Tell*; French: Voltaire, *Charles XII*. For 1876: Greek: Homer, *Iliad*, Book III; Xenophon, *Memorabilia*, Books I and II; Latin: Virgil, *Æneid*, Book 1; Caesar, *De Bello Gallico*, Books 1 and II; German: Goethe, *Hermann and Dorothea*; French: Molière, *Le Misanthrope*. Candidates may substitute French and German for Greek.

examinations. Special certificates are given to gentlemen who have attended 100 cases of Midwifery.—Two Gold Medals given annually by the Treasurer to students who have completed the third, and not exceeded the fourth year, for proficiency in Clinical Medicine and Clinical Surgery.

The *Pupils' Physical Society* meets on alternate Saturdays, at 7.30 P.M. A prize of £5 from the funds of the Society is given at the end of the session to the member who sends in the best essay and report of cases. Two other prizes of £5 and £10 are given to the members who are judged to have read the best essays before the Society. A fourth prize of £5 is given to the member who has most distinguished himself in the debates.

Further information may be obtained from the Dean, Dr. F. Taylor; or from Mr. Stocker, Secretary to the School.

KING'S COLLEGE AND HOSPITAL.—Matriculated students are those who (with certain exceptions named in the *Calendar*) receive their entire medical education at King's College. They have the privilege of filling the offices of clinical clerks, dressers, dentists' assistant, physician's assistant, physician accoucheur's assistant, assistant house-accoucheur, assistant house-physician, house-surgeon, and assistant house-surgeon, to the hospital; of becoming candidates for the Daniel, Inglis, Warneford, and Medical Scholarships, for the Sambrooke Registrarships, and for the Warneford, Leathes, Todd, Tanner, Jelf, and other endowed prizes. They are also admitted to the practice of the hospital at a reduced fee.

Attendance on the Medical Tutor is compulsory on residents during their first year. The Principal requests each student, on entering his second term, to contribute £1 1s. towards the expenses of the restoration of the College Chapel.

The Hospital contains 170 beds in use.

The Museums of Anatomy, Materia Medica, Natural History, etc., are open daily from 10 till 4. The Medical Library is open daily.

Clinical Instruction is given in the wards and by lectures in the medical and surgical departments; also in the Diseases of Women and Children, in Dental Surgery, in Diseases of the Eye, in Throat-Diseases, and in Skin-Diseases.—Demonstration and practical instruction in Morbid Anatomy are given in the *Post Mortem* Theatre.—Special Instruction is given in Medical Chemistry and the Microscope by the Physicians.

The Medical Tutor assists, by instruction and examination, all students in the subjects of the first winter and summer sessions, as well as those preparing for the Preliminary Scientific Examination of the University of London.

Resident Medical Officers, Clinical Clerks and Dressers, are chosen by examination from matriculated students who are pupils at the Hospital.

Scholarships and Prizes.—Two Warneford Scholarships, £25 per annum for three years, for the encouragement of previous education;* and one Warneford Scholarship of £25 per annum, for two years, for resident medical students.—College Scholarships given yearly to matriculated students—one of £40 for two years, open to students of the third and fourth year; one of £30 for one year, open to students of the second and third year; three for £20 for one year, open to students of the first year.—The Daniell Scholarship, open to students who have worked in the laboratory six months, £20 per annum for two years.—Sambrooke Registrarships.—Science Exhibitions given by the Cloth-workers' Company—one, annually, of £25 per annum for two years, for

* Two Scholarships, of the value of £25 per annum each, to be held for three years, will be given in October 1875. Candidates must be matriculated students of the Medical Department, and also perpetual pupils of the Hospital. Their first Winter Session must commence in October 1875. The examination will be in the following subjects: 1. Divinity: The First and Second Books of Samuel, and the Book of Psalms; The Gospel according to St. Luke, and the Acts of the Apostles; The Prayer Book, its general history and structure; (Proctor on the Book of Common Prayer recommended). 2. English Language and Literature: Shakespeare, *Macbeth*; English History—History of England during the Reign of Elizabeth. 3. Latin: Sallust, *The Conspiracy of Catiline*. 4. Mathematics: Arithmetic; the ordinary rules, with vulgar and decimal fractions; Algebra, as far as and including Quadratic Equations; Euclid, Book I, Book II (except props. 8, 9, 10), Book III. 5. Greek: Homer, *Odyssey*, Book XVI. 6. French, *De la Grandeur et de la Décadence des Romains*, par Montesquieu. 7. German: Lessing's *Minna von Barnheim* (Clarendon Press Series). 8. Chemistry: Miller's *Inorganic Chemistry* in Longman's Series of Text Books on Science. 9. Natural Philosophy: Deschanel's *Natural Philosophy*, translated by Professor Everett, Part I and Part IV. 10. Botany: Bentley's *Manual of Botany*, 3rd edition, to page 203, together with chapters on the General Principles of Classification, and Diagnosis of the following natural orders: Ranunculaceæ, Rosaceæ, Compositæ, Labiatæ, Scrofulariaceæ, and Liliaceæ. Subjects 1, 2, 3, 4, are compulsory; candidates will also be allowed to select one subject out of 5, 6, 7, and another either out of 5, 6, 7, or out of 8, 9, 10.—The days of examination for 1875 are fixed as follows: Wednesday, September 29th, Divinity; Thursday, September 30th, Mathematics and Latin; Friday, October 1st, History and English Literature. The other subjects will be arranged as most convenient.

proficiency in four of the following subjects: Mathematics, Mechanics, Physics, Chemistry, Botany, and Zoology.—Leather's Prizes: Interest of £300, applied in purchase of a Bible and Prayer-Book, as annual prizes to two matriculated students.—Warneford Prizes: £40 in medals and books, to two matriculated students.—Class Prizes: Books of the value of £3, and certificates of honour, are awarded annually for proficiency in each of the several subjects taught in the classes.—Two Medical Clinical Prizes, one of £3 for the winter session, and the other of £2 for the summer session; and two Surgical Clinical Prizes of the same value.—Todd Medical Clinical Prize: Bronze Medal and Books to the value of £4 4s.—Jelf Medal, to the candidate at the senior scholarship examination who is second in order of merit.—Tanner Prize, value £10, for proficiency in Diseases of Women and Children, and in Obstetrics.

Associates of King's College.—At the end of each winter session, the professors recommend to the Council the names of medical students to be elected associates.

Residence.—Rooms are provided within the College for a limited number of matriculated students. The cost of the academical year varies from £50 to £60. Some of the professors, etc., receive pupils into their houses. There is a dining-hall in the College.

The Medical Society meets on Thursdays, at 8.30 P.M.

The Dean of the Medical Department of the Subdean attends daily, Saturday excepted, at King's College, from 11 A.M. to 1 P.M., for the purpose of seeing students and their friends. Any letter addressed to the Dean on the subject of this department will receive early attention.

LONDON HOSPITAL.—Students in Arts of Universities where residence is required, who may have attended Lectures in Anatomy, Physiology, Chemistry, Botany, or Comparative Anatomy, and have obtained signatures for such attendance, fulfilling the requirements of the Examining Boards, may become pupils of the London Hospital, eligible for Hospital Prizes and Appointments, on payment of £52 10s. for Practice (perpetual) at the Hospital. Entrance can be made to separate Courses of Lectures. Graduates of Canadian or American Universities or Medical Colleges are admitted, on showing their diplomas, to six months' dressership and perpetual hospital practice for £10 10s. Courses of lectures must be paid for if certificates are required.

The Hospital contains about 600 beds, thus allotted: Accidents and surgical cases, 324; medical cases, 179; diseases of women, 13; children under seven years of age, 36; ophthalmic cases, 12; out-door wards, 36. The completion of the new wing will raise the number of beds to 800.

Museums, etc.—The Anatomical and Pathological Museum, the Materia Medica Museum, and the Library, are open daily.

Clinical Instruction.—Two medical wards, containing together thirty beds, have been set apart for clinical teaching. The Clinical Professor will meet his class twice a week. Bedside instruction will also be given by the physicians not on special clinical duty. Students requiring signatures for medical practice must attend the Clinical Professor. In the out-patient department, the Physicians and Assistant-Physicians impart instruction at each visit. The surgeons make clinical observations on their cases, and a clinical lecture is given once a week.

Special Departments.—There are departments for instruction in Obstetric Medicine and Surgery, Vaccination, Diseases of the Eye and the Use of the Ophthalmoscope, Diseases of the Ear, Diseases of the Skin and of the Throat, Syphilis and Local Contagious Diseases, Mental Diseases, Dentistry, and Practical Pharmacy. Students desirous of obtaining a practical knowledge of Mental Diseases can attend, without additional fee, the practice of Dr. Millar, at the Bethnal House Asylum, every Wednesday, from 10 to 12. Dr. Hughlings Jackson intends to give a short course of lectures on Mental Diseases.

Appointments.—A Resident Medical Officer, qualified to practise Medicine, who receives £75, is appointed for twelve months. He is eligible for re-election, and then receives £100. Two Junior Resident Medical Officers are appointed every six months. Eight Medical Assistants, two for each Physician, are appointed every three or six months. Every student is expected to act as Clinical Clerk for six weeks in the Medical, and as Dresser for three months in the Surgical out-patient department. A Resident Accoucheur is appointed for six months. All students who have attended a course of instruction in Midwifery can place their names on the list of Maternity Pupils, and have cases. Four House-Surgeons are elected, usually for six months. Any student may enter his name on the list as a Dresser. Two Dressers reside and board in the hospital every week. Two Clinical Assistants are appointed every three months for the medical, and two for the surgical out-patients and special departments. They are eligible for re-election. Each receives £40 *per annum*. A Medical Registrar and a

Surgical Registrar are appointed annually; the former receives £100, the latter £100. A Dental Assistant, *Post Mortem* Clerks, and two Prosectors of Anatomy are also appointed. Full pupils, and those who, having commenced elsewhere, pay the general fee to the hospital and college, are eligible for all scholarships, prizes, and appointments. Students who have commenced elsewhere, but who, at or before the beginning of the second winter session, become pupils of the hospital and college by paying the composition fee, will be eligible for the Dresserships, for three months as House-Surgeon, and for the offices of Ward Clerk, *Post Mortem* Clerk, Maternity Pupil, Clinical Assistant, and Registrar. All the appointments are open to students without fee. The holders of resident appointments are provided with rooms and board.

Scholarships and Prizes.—Nine scholarships will be offered for competition. 1 and 2. Two Entrance scholarships, value £60 and £40; examination on September 27th, 28th, and 29th; subjects the same as those of the Preliminary Scientific Examination of the University of London. 3 and 4. Two Buxton scholarships, value £30 and £20, in October, after examination in the subjects of preliminary education.* These scholarships are open to full students of less than three months' standing. 5. A scholarship at the end of the winter session, value £20, to a first year's student: subject, Human Anatomy. 6. A scholarship, value £25, to a first or second year's student, at the end of the winter session: subjects, Anatomy, Physiology, and Chemistry. 7, 8, 9. Hospital scholarships, value each £20, for proficiency and zeal in Clinical Medicine, Surgery, and Obstetrics; also a second prize, value £5, with certificate, for attendance on the largest number of Obstetric cases.—The Duckworth Nelson Prize, value £10, at the end of the winter session, 1875-76, open to all students who have not completed their education: subjects, Practical Medicine and Surgery.—Money prizes to the value of £60 *per annum* to the most meritorious of the dressers in the out-patient rooms. Special certificates to those gentlemen who have faithfully performed their duties in the hospital, and to those who have distinguished themselves at the examinations.

The Medical Society meets for the reading and discussion of papers at 7.30 P.M. on alternate Wednesdays during the winter session.

Information may be obtained from Mr. Waren Tay, Vice-Dean; from any Member of the Hospital Staff; or from the Lecturers at the College.

ST. MARY'S HOSPITAL.—Students who have kept the two years' course of medical study at the University of Cambridge are admitted as perpetual pupils on payment of a composition fee of £57 15s.; and students who have kept a portion of the course there or elsewhere, at a proportionate reduction.

The Hospital contains 170 beds—68 medical and 102 surgical. Two wards are appropriated to Diseases of Children and one to those of Women; there are also beds for ophthalmic cases.

The Reading Room and Library are open daily. *The Museum* is open daily to students. It contains about 3,000 specimens of healthy and morbid anatomy. There are also a Materia Medica Department, and a collection of specimens illustrative of Comparative Anatomy.

Clinical Lectures twice a week by the Physicians and Surgeons. Special courses are given on Ophthalmic, Aural, and Dental Surgery; also clinical demonstrations on Diseases of the Skin and of the Throat. The students are carefully trained to the use of the Microscope. A Histological Room is open daily.

The Medical Tutor assists the students daily in the wards of the hospital, and gives elementary practical instruction on medical and surgical cases. He also examines practically students who are preparing for their final examinations. He receives a certain number of students to board and lodge in his house.

Hospital Appointments are open to the pupils without additional fee. Three Resident Medical Officers are appointed for twelve months, and an Obstetric Officer for six months; all live free of expense in the hospital.—A Demonstrator of Anatomy, a Medical Tutor, and a Resident Registrar, with salaries of £100, are appointed annually, and may be re-elected.—All students must act as clinical clerks and dressers for six months after passing the Primary Examination. Students of the third year are appointed to assist the Physicians and Surgeons in charge of the out-patients for three months each.

Scholarships and Prizes.—Three Scholarships in Natural Science,

* The subjects are: 1. The English Language, including Grammar and Composition. 2. Arithmetic, including Vulgar and Decimal Fractions. 3. Algebra, including Simple Equations. 4. Geometry—first Two Books of Euclid. 5. Latin—Caesar, *De Bello Gallico*, Book II. 6. One of the following subjects at the discretion of the candidate: a. Greek—New-phon's *Analysia*, Book I.; b. French—X. B. Sautemps's *Précis*; c. German—Schiller's *William Tell*; d. Natural Philosophy, including Mechanics, Hydrostatics, Pneumatics.

tenable for three years; value £60 the first year, £40 the second year, and £20 the third year, are awarded by competitive examination at commencement of winter session every year. An exhibition of £20 for one year to the second candidate in order of merit. A Scholarship in Natural Science, tenable for three years; value £60 the first year, £25 the second year, and £15 the third year; restricted to students educated at Epsom College. An open Scholarship in Classics and Mathematics, value £35 for one year.* The successful candidates for Scholarships and Exhibitions must enter as perpetual pupils of the Hospital.—A prize of £4 4s. in Anatomy and Histology, and three of £2 2s. each in Chemistry, Practical (inorganic) Chemistry, and *Materia Medica* and Botany, to first year's students.—A Scholarship in Anatomy, value £20, for one year, after competitive examination in Anatomy, Physiology, and Histology; a prize of £4 4s. for Anatomy and General Physiology; and prizes of £2 2s. each for Midwifery and Medical Jurisprudence; to students of the second year.—A Scholarship in Pathological Anatomy, value £20, after competitive examination in Morbid Anatomy, Dissection, and Microscopic Anatomy, tenable for one year, and prizes of £3 3s. each in Medicine and in Surgery, and two of £2 2s. each in Pathology and Comparative Anatomy, for third year's students; £3 3s. each to the Clinical Clerk and to the In-patient Dresser who shall have discharged their duties in the most satisfactory manner.—Two Prosectors are appointed annually, who each receive a certificate and £5.

The *Medical Society* meets an alternate Wednesday evenings during the Winter Session, at 8 P.M.

Further information may be obtained from Dr. Shepherd, Dean of the School; from any of the Lecturers, or from the Resident Registrar, at the Hospital.

MIDDLESEX HOSPITAL.—The aggregate fee admits to the Library, to one course of Practical Chemistry and two courses of Dissections, to all the lectures, and to the instruction of the tutor; it includes also all charges for Clinical Clerkships and Dresserships. Members of English Universities who have completed one year of medical study in University are admitted to all lectures and hospital practice required (except Practical Chemistry) for £55; this may be paid in instalments of £35 and £20; but in the latter case, £10 must be paid for each additional year.

The *Hospital* contains upwards of 300 beds, of which 185 are devoted to surgical and 120 to medical cases. There are 33 beds for cases of cancer; also wards for cases of uterine disease and of syphilis, and beds for cases of diseases of the eye.

The *Museum* is open to students daily from 9 to 5. It contains above 5,000 specimens.—The *Library and Reading Room* are open to all general students.

Clinical Lectures are delivered regularly by the Physicians and Surgeons, and by the Physician-Accoucheur and the Ophthalmic Surgeon.—Special instruction in Diseases of the Skin, and of the Larynx and Ear is given.

The *College Tutors* assist all general students of the hospital, especially those who are preparing for examination.

Appointments, etc.—Two House-Surgeons are appointed for six months, after competitive examination, in April and October. Candidates must be 21 years of age, and must have obtained certificates of proficiency as in-patient dressers. The Junior House-Surgeon succeeds to the office of Senior House-Surgeon only if he have performed his duties satisfactorily. Each House-Surgeon pays a fee of £21; if he have not been a surgical pupil of the hospital, he pays £31 10s. Three Resident Physicians' Assistants are appointed from time to time for six months, after competitive examination. They must have a legal qualification. Each Resident Physician's Assistant pays £10 10s. on appointment; and, if he have been a medical pupil of the hospital for a limited time, a sum sufficient to make him a perpetual student of the medical practice; if he have been neither a general nor an occasional pupil of the hospital, he pays a fee of £21. A Resident Obstetric Assistant is appointed for six months. He pays £10 10s. Clinical Clerks and Dressers are appointed for six months. The appointments are so arranged that every student may take both a clerkship and a dressership at some period. Each student must be an out-patient clerk and out-patient dresser for six months respectively before being eligible to an in-patient clerkship or dressership.

Scholarships and Prizes.—Two Broderip Scholarships, value £30 and £20, tenable for two years, to students who have completed the third year, for reports or comments on selected medical and surgical cases.—Two Entrance Scholarships, value £25 and £20, tenable for

two years,* open to all gentlemen commencing their medical studies at the hospital in October, 1875.—The John Murray Scholarship and Gold Medal, founded in connection with the University of Aberdeen, will be awarded every third year to a student of the Middlesex Hospital.—The Governors' Prize, value £21, to the student who, at the end of the third winter session, shall have been most diligent in the wards, and have attained the highest proficiency in the periodical examinations.—A Clinical Prize of £10 10s. to the candidate who stands third in the competition for the Broderip Scholarships.—Class Prizes are given in each subject.

The *Students' Medical Society* meets in the Board Room of the Hospital once a fortnight during the winter session.

Information may be obtained from Dr. Robert King, the Dean; from Dr. Greenhow, Treasurer of the College; from any of the Lecturers; or from the Resident Medical Officer at the Hospital.

ST. THOMAS'S HOSPITAL.—The *Hospital* contains 569 beds, distributed as follows: Medical, 180; Surgical, 230; Ophthalmic, 20; Diseases of Women, 20; Venereal (women), 30; Infectious Diseases, 59; Children under six years of age, 30.

Clinical Instruction in the wards and Clinical Lectures are given by the Physicians, Obstetric Physician, Surgeons, and Ophthalmic Surgeon. There are special departments for the diseases of women and children; diseases of the eye, with ophthalmoscopic demonstrations; diseases of the skin; diseases of the teeth; and for vaccination. A course of practical and manipulative Surgery is given in accordance with the regulations of the Royal College of Surgeons, and of the Army, Navy, and India Boards. A course on Mental Diseases is given by Dr. Wm. Rhys Williams, Resident Physician at Bethlem Royal Hospital.

Museum, etc.—Students have access to the Library and to the Museums of Human Anatomy, of Comparative Anatomy, of *Materia Medica*, and of Chemistry and Mineralogy, and to the Laboratories of Practical Physiology and Practical Chemistry.

Scholarships and Prizes.—Two Entrance Scholarships in Natural Science, value £60 and £40, in first week in October; subjects, Physics, Chemistry, Botany, and Zoology.—The William Tite Scholarship, £30, to the student highest on the first class list at the examination at the end of the winter session.—The Musgrove Scholarship, value £42 per annum, biennially to the student highest in the first class list at the end of the second winter session.—A College Scholarship of same value, alternately with the Musgrove Scholarship.—College Prizes for each year's students, of £20, £15, and £10 each winter, and £15, £10, and £5 each summer.—The Chesheld Medal, annually, for Surgery, and Surgical Anatomy.—The Mead Medal, annually, to a third year's student for the practical examination in Medicine.—The Treasurer's Gold Medal, annually, to a third year's student, for general proficiency and good conduct.—The Grainger Testimonial Prize, value £20, biennially, to third or fourth year's students, for a Physiological Essay. The Solly Medal, with a Prize of £10 10s., every two years, for Reports of Surgical Cases.

Appointments.—All students have the opportunity afforded them of being engaged in the performance of practical duties in connection with the Medical, Surgical, Obstetrical, Ophthalmic, and Pathological Departments of the Hospital. Obstetric Clerks are from time to time appointed. Each holds office for a fortnight, and Certificates of Honour are awarded to those gentlemen who have satisfactorily attended fifty Maternity cases. Two or more gentlemen are selected from students who have completed their second winter session, to act as Assistants in the Dissecting Room. Two House-Physicians, two House-Surgeons, and a Resident-Accoucheur, are selected according to merit from gentlemen who have obtained their diplomas, and are provided with rooms and commons. Two Hospital Registrars each year, preference being given to gentlemen who have completed their studies in the school. Each Registrar, on completing his Annual Report to the satisfaction of the Physicians or Surgeons, receives £40.

Further information may be obtained from Mr. R. G. Whitfield, the Medical Secretary, at the Hospital.

* The Examination will take place on September 28th and following days. The following are the subjects for Examination. *Latin.*—Passages for translation into English, short passages for translation from English into Latin, and questions in Grammar and Ancient Geography.—*Greek.*—Easy passages for translation into English; questions in Grammar and Ancient Geography.—*French or German.*—Passages for translation into English, short passages for translation from English into French or German, and questions in Grammar.—*Mathematics.*—Arithmetic, Algebra up to and including Quadratic Equations, and Euclid, books i, ii, iii.—*Natural Philosophy.—Chemistry.—Botany. Zoology.*—Huxley's Classification of the Animal Kingdom; Rudiments of Animal Physiology. Candidates will be examined in any three, and not more, of the above subjects which they may select; but only one Modern Language and two out of the last three subjects are permitted.

* Subjects: Sallust, *Conspiracy of Catiline*; Homer, *Odyssey*, Book xvii; First Four Books of Euclid, with Algebra as far as Quadratic Equations.

UNIVERSITY COLLEGE AND HOSPITAL.—The General and Medical Libraries, the Museums of Anatomy and Pathology, of Comparative Anatomy, of Materia Medica and Chemistry, of Geology, and of Natural Philosophy, are open daily. There are also a Chemical and a Physiological Laboratory, where instruction is given under the superintendence of the Professors of Chemistry and of Physiology.

Clinical Instruction is given by the physicians and surgeons in the wards and in the out-patient department, and by lectures and examinations. Dr. Wilson Fox, the Holme Professor of Clinical Medicine, delivers Clinical Lectures, and trains the pupils in the practical study of disease. Dr. Roberts, Assistant-Teacher of Clinical Medicine, gives special instruction in Physical Diagnosis and Clinical Observation. Lectures are given once a week by Mr. Christopher Heath, the Holme Professor of Clinical Surgery; once a fortnight or oftener by Mr. Marshall, Mr. Berkeley Hill, and occasionally by Mr. Erichsen. Sir Henry Thompson, Emeritus Professor of Clinical Surgery, will deliver a short course during the session. In the summer, the Assistant-Surgeons will instruct first year's students in the observation of patients. Clinical Lectures on Midwifery and the Diseases of Women are delivered once a fortnight; also on Ophthalmic Surgery, and on Diseases of the Skin. Arrangements are made for practical instruction in Vaccination.

Private Instruction.—Gentlemen may obtain assistance in their studies within the College, on application to the respective Professors.

Offices.—Physicians' Assistants, House-Surgeons, Midwifery Assistants, Physicians' Clerks, Surgeons' Dressers, Ophthalmic Surgeons' Assistants, and Ward-Clerks, are selected from among the pupils without additional fees. The Physicians' Assistants, the Obstetric Assistant, and the House-Surgeons reside in the hospital, paying for their board.

Scholarships, etc.—Three Entrance Exhibitions, value £30, £20, and £10 *per annum*, tenable for two years, to gentlemen who are about to commence their first winter's attendance.*—The Atkinson-Morley Surgical Scholarship, £45, tenable for three years, for proficiency in Surgery.—The Sharpey Physiological Scholarship, annual value about £70.—The Filliter Exhibition of £30, annually in July, for proficiency in Pathological Anatomy.—Dr. Fellowes's Clinical Medals, one Gold and one Silver, with Certificates of Honour, at the end of each winter and each summer session.—The Liston Gold Medal, with Certificates of Honour, at the end of the session, for reports and observations on the Surgical Cases in the Hospital.—The Alexander Bruce Gold Medal, for proficiency in Pathology and Surgery.—The Cluff Memorial Prize, every second year, to the most proficient in Anatomy, Physiology, and Chemistry: next award in 1877.—Gold and Silver Medals or other Prizes, as well as Certificates of Honour, after competitive examinations in the classes.—Prizes to the value of £10 in the class of Hygiene.

The *Medical Society* meets to read and discuss papers on alternate Wednesdays throughout the session, at 7 P.M.

Residence of Students.—Several gentlemen connected with the College receive students to reside with them; and in the office of the College there is kept a register of persons who receive boarders.

Information respecting the College may be obtained from the Dean, Dr. Bastian; the Vice-Dean, Mr. Marshall; or the Secretary, Mr. J. Robson.

WESTMINSTER HOSPITAL.—The aggregate and perpetual fees include only one course of Practical Chemistry and Practical Physiology.† Gentlemen who do not enter as perpetual students before the end of their second year will be charged a fee of £4 4s. for every session after the completion of their third year, in addition to any special fees which may be payable. Members of the Universities of Oxford or Cambridge, who have completed one year of medical study at the University, will be admitted to the Hospital Practice and Lectures (except Practical Chemistry and Comparative Anatomy) required by those Universities, and by the Colleges of Physicians and Surgeons, on payment of £52 10s. in one sum.

The *Hospital* contains 101 beds.

Museums, etc.—The Anatomical Museum is constantly open to the

* The subjects of examination are the following:—Latin and Greek.—Translation into English of passages from Cicero and Xenophon; translation of short English sentences into Latin. French or German.—Translation into English of passages from Bossuet's *Discours sur l'histoire universelle*; or passages from Schaefer's *Geschichte der Medicin*; or passages from a Mathematical or Natural Philosophy subject required for the Matriculation Examination of the University of London, with the addition of Aristotle's *Nature of Soul*. The next examination will take place at the College on September 28th and 29th, 1875.

† The following additional classes are free to general students. Psychological Medicine (in connection with the Forensic Medicine course). Ophthalmic Surgery, Minor Surgery, and Venereal Diseases. The Subjects of Surgery, Dental Surgery, Natural Philosophy, and Comparative Anatomy. Fees for these courses must, however, be paid, should a special certificate be required.

Students. There are also a Pathological Museum and a Materia Medica Museum.—The Reading Room is open daily.

Instruction.—There are separate departments for Diseases of the Eye, Ear, Skin, and Teeth, and for Diseases of Women.

Appointments.—All these are made without fee.—A Medical and a Surgical Registrar are appointed annually, each with a salary of £40.—A House-Physician, a House-Surgeon, and a Resident Obstetric Assistant are appointed by competition, and are provided with rooms and commons.—An Assistant House-Surgeon is appointed from among the senior students. He is provided with commons at the hospital table.—A Physician's Assistant, Surgeon's Assistant, and Ophthalmic Assistant are appointed from students of the fourth year.—Clinical Clerks and Dressers for in-patients are appointed for six months from general students of the hospital who have passed their first Examination.—Out-patients' Clerkships and Dresserships are conferred on all students in rotation for three months.

Scholarships and Prizes.—Four Entrance Scholarships, two of the value of £20 and two of £10, tenable for two years.*—Exhibition in Anatomy and Physiology, value £10 10s., tenable for one year for first year's men.—A prize of £2 2s. by Mr. Davy, to the first year's student who is most regular and diligent in the Dissecting Room.—Scholarship in Anatomy and Physiology, value £21, to student of second year (to be styled Assistant Demonstrator).—Prize by Dr. Allichin, in class of Histology; by Dr. Potter, in class of Midwifery.—At the end of third year, prizes of £5 each (or books or instruments, in Clinical Medicine and Pathology, and in Clinical Surgery and Pathology).—Frederic Bird Medal and Prize, to perpetual students who have completed their fourth year; subjects of examination: Medicine, Midwifery, Diseases of Women and Children, and Pathology.—Chadwick Prize for General Proficiency, £21 to the most meritorious student or students of any year not exceeding the fifth.—Certificates of Honour in each Class. Insufficient attendance on lectures and hospital practice disqualifies from receiving any prize.

Communications respecting the Medical School should be addressed to Mr. Cowell, the Dean of the School, from whom all particulars may be obtained. Information may also be obtained from any of the Lecturers, or from the Secretary at the Hospital.

NOTES CONCERNING THE PROVINCIAL AND SCOTCH HOSPITALS AND MEDICAL SCHOOLS.

UNIVERSITY OF OXFORD.—The instruction in Natural Science is carried on at the Museum, where there is practical instruction in Physics, Chemistry, and Anatomy and Physiology, together with courses of lectures by the several professors; viz.—Regius Professor of Medicine and Professor of Clinical Medicine—H. W. Acland, M.D., D.C.L., F.R.S.; Geometry—H. J. S. Smith, M.A., F.R.S.; Natural Philosophy—Rev. B. Price, M.A., F.R.S.; Experimental Philosophy, R. B. Clifton, M.A., F.R.S.; Chemistry—W. Odling, M.B., F.R.S.; Physiology—G. Rolleston, M.D., F.R.S.; Zoology—J. O. Westwood, M.A., F.L.S.; Botany—M. A. Lawson, M.A.; Mineralogy—M. H. N. Story-Maskelyne, M.A., F.R.S.; Lee's Reader in Anatomy—J. B. Thompson, B.A.

Large collections illustrate the several subjects; there is a pathological series, including the collection of Schroeder Van der Kolk, in the medical department, and a medical laboratory. The Radcliffe Library, containing nearly 20,000 scientific volumes, is open to all students daily from ten to four, and on certain evenings during term. There are also lectures and practical instruction in Botany at the Botanical Gardens; and clinical instruction at the Infirmary.

UNIVERSITY OF CAMBRIDGE.—The following Courses of Lectures will be delivered during the ensuing Academic Year. *Michaelmas Term, 1875*.—Physics: Heat and Elasticity, by Professor Maxwell, Tu., Th., S., 12.15: General Physics and Sound, by Mr. Trotter (at Trinity College), M., W., F., 10 A.M. Chemistry, General Course, by Professor Living, M., W., F., 12: Spectroscopic Analysis, by Profes-

* The next Examination will be held at the Hospital on October 5th and 6th. The following are the subjects:—Latin, Cicero's *De Officiis*, Book VI. The paper will contain passages for translation, questions in Grammar, and easy English sentences for translation into Latin. French, German, or Greek.—Homer, *Odyssey*, Book XVII. Questions including Vulgar and Decimal Fractions, and extraction of Square Root. Algebra.—Addition, Subtraction, Multiplication, and Division of Algebraical Quantities; Proportion, Arithmetical and Geometrical Progression, Simple Equations. Geometry.—First four Books of Euclid, or the subjects thereof. Notice of intention to compete, with a statement of the second language in which the Candidate wishes to be examined, and a certificate of moral character, must be sent to the Dean not later than September 27th.

GUIDE TO HOSPITALS AND MEDICAL SCHOOLS IN THE PROVINCES: 1875-6. For further particulars regarding each Hospital and Medical School, see pp. 344 and 346.

Table with columns: LECTURES, ETC.; WINTER SESSION; ANATOMY AND PHYSIOLOGY; ANATOMY, DESCRIPTIVE & SURGICAL; DEMONSTRATIONS AND DISSECTIONS; CHEMISTRY; MEDICINE; SURGERY; HOSPITAL PRACTICE; CLINICAL MEDICINE; CLINICAL SURGERY; SUMMER SESSION; MATHEMATICS; MINERALogy; BOTANY; FORENSIC MEDICINE; PRACTICAL CHEMISTRY; COMPARATIVE ANATOMY; PRACTICAL PHYSIOLOGY; OPERATIVE SURGERY; OPHTHALMIC SURGERY AND THE OPTHALMOSCOPIC; VACCINATION. Each column lists various medical schools and their respective lecturers and subjects.

(a) ABDOMINAL - Diseases of Bowels, etc.; (b) PHYSICIANS; (c) PHYSICIANS; (d) PHYSICIANS; (e) PHYSICIANS; (f) PHYSICIANS; (g) PHYSICIANS; (h) PHYSICIANS; (i) PHYSICIANS; (j) PHYSICIANS; (k) PHYSICIANS; (l) PHYSICIANS; (m) PHYSICIANS; (n) PHYSICIANS; (o) PHYSICIANS; (p) PHYSICIANS; (q) PHYSICIANS; (r) PHYSICIANS; (s) PHYSICIANS; (t) PHYSICIANS; (u) PHYSICIANS; (v) PHYSICIANS; (w) PHYSICIANS; (x) PHYSICIANS; (y) PHYSICIANS; (z) PHYSICIANS.

sor Liveing, M., W., F., 1: Qualitative Analysis, by Professor Liveing and the Demonstrator, daily: Dissociation and Thermal Chemistry, by Mr. Dewar (Jacksonian Professor), Tu., Th., 12: Principles of Qualitative Analysis, by Mr. Main (at St. John's College), Tu., Th., S., 12: Volumetric Analysis, by Mr. Apjohn (at Caius Laboratory), M., W., F., 10. Anatomy and Physiology: Zoology and Comparative Anatomy, by Professor Newton, M., W., F., 1: Practical Course of Comparative Anatomy, by the Demonstrator of Comparative Anatomy, daily, Sundays excepted: Elementary Course of Practical Morphology, by Mr. Balfour and Mr. Marshall (at the New Museum), M., W., 9 A.M., Anatomy and Physiology, by Professor Humphry, Tu., Th., S., 1: Practical Anatomy, by Professor Humphry and Demonstrator, daily, 9 A.M.: Practical Physiology and Histology, by Dr. M. Foster (Trinity Prælector), Elementary, Tu., S., 10; Advanced, Th., 10, and such other times as may be found convenient; Physiology, by Dr. Bradbury (at Downing College), M., W., and F., 9 A.M. Botany: Vegetable Morphology, by Mr. Hicks (at Sidney College), Tu., Th., S., 11. Materia Medica and General Therapeutics, by Dr. Latham (Downing Professor of Medicine), Tu., Th., S., 9 A.M. Pathology, by Dr. Bradbury (Linacre Lecturer), Tu., 10 A.M. Clinical Medicine, by Dr. Paget (Regius Professor), M., W., Th., and F., 10 A.M. Clinical Surgery, by Mr. Lestougeon, Tu., Th., 11.

Lent Term, 1876.—Physics: Electricity and Magnetism, by Professor Maxwell, Tu., Th., S., 12. 15: Sound and Light, by Mr. Trotter (at Trinity College), M., W., F., 9: Electricity and Magnetism (Elementary Course), by Mr. Trotter (at Trinity College), M., W., F., 11. Chemistry: General Course, continued, by Professor Liveing, M., W., F., 12: Analysis, by the Professor or Demonstrator of Chemistry, daily: Organic Chemistry, by Mr. Dewar (Jacksonian Professor), Th., S., 12: Elementary Course, by Mr. Main (at St. John's Laboratory), Tu., Th., S., 12: Non-metallic Elements, by Mr. Apjohn (at Caius Laboratory), M., W., F., 10. Botany: Vegetable Histology and Physiology, by Mr. Hicks (at Sidney College), Tu., Th., S., 11. Anatomy and Physiology: Zoology and Comparative Anatomy, by Professor Newton, M., W., F., 1: Practical Comparative Anatomy, by the Demonstrator, daily: Elementary Practical Course of Morphology, by Dr. Balfour and Mr. Marshall (at the New Museum), M., W., 9 A.M.: Anatomy and Physiology, by Professor Humphry, Tu., Th., S., 1: Practical Anatomy, by Professor Humphry and the Demonstrator, 9 A.M., daily until Jan. 30, afterwards Tu., Th., and S.: Practical Physiology and Histology, by Dr. M. Foster (Trinity Prælector), continued, Tu., Th., S., 10 A.M.: Anatomy and Physiology, by Dr. Bradbury (at Caius College), Tu., Th., S., 12: Physiology, by Dr. Bradbury (at Downing College), M., W., F., 9 A.M. Principles and Practice of Medicine, by Dr. Paget (Regius Professor), M., F., 9 A.M. Pathological Anatomy, by Dr. Bradbury (Linacre Lecturer), Tu., 10 A.M. Clinical Medicine, by Dr. Latham (Downing Professor), M., W., Th., F., 10 A.M. Clinical Surgery, by Mr. Carver, Tu., Th., F., S., 11.

Easter Term, 1876.—Physics: Electro-magnetism, by Professor Maxwell, Tu., Th., S., 12: Heat (Advanced), by Mr. Trotter (at Trinity College), M., W., F., 9: Heat (Elementary), by Mr. Trotter (at Trinity College), M., W., F., 10. Chemistry: History of Chemistry, by Professor Liveing, M., W., F., 12: Analysis, by Professor Liveing or the Demonstrator, daily: Laboratory Instruction in Chemical research, by Mr. Dewar (Jacksonian Professor): Elementary Organic Chemistry, by the Demonstrator, Tu., Th., S., 12: Elementary Course (concluded), by Mr. Main, Tu., Th., S., 12: Organic Analysis and Elementary Organic Chemistry by Mr. Apjohn (at Caius Laboratory), Tu., F., 12. Anatomy and Physiology: Practical Comparative Anatomy, by the Demonstrator of Comparative Anatomy, daily, Sundays excepted; Anatomy and Physiology, for preparation for the second examination for M.B., by Professor Humphry, twice a week, 10 A.M.: Practical Elementary Biology, by Dr. M. Foster (Trinity Prælector), Tu., Th., S., 10 A.M.: Anatomy and Physiology, by Dr. Bradbury (at Caius College), Tu., Th., S., 12. Botany, by Professor Babington, M., Tu., Th., F., 1. Materia Medica and General Therapeutics, by Dr. Latham (Downing Professor), Tu., Th., S., 9 A.M. Principles and Practice of Medicine, by Dr. Paget (Regius Professor), M., W., F., 9 A.M. Clinical Medicine, by Dr. Bradbury, M., W., Th., F., 10 A.M. Clinical Surgery, by Dr. Humphry, Tu., Th., F., S., 11.

Long Vacation.—Practical Chemistry in the University Laboratory; Course of Instruction in Practical Anatomy; Course of Practical Histology; Clinical Instruction at the Hospital. The Chemical Laboratory of the University will be open daily for the use of the students. The Demonstrator attends daily to give instruction alternately morning and afternoon. The Dissecting Rooms and Museums of Anatomy are open daily during the vacations as well as in the terms, and the Professor and Demonstrator of Anatomy are in attendance to assist and

direct the students. The Museum of Materia Medica at Downing College is open daily to all Medical Students.

Opportunities for Clinical Instruction in mental diseases will be afforded at the County Asylum, Fulbourn, by Dr. Bacon, during the Michaelmas and Lent Terms. Notice will be given of the days and hours.

Commencing Students of Medicine must be registered according to the Regulations of the General Council of Medical Education and Registration. Forms for registration, abstracts of regulations, schedules, and other papers may be obtained from the attendant at the Anatomical Schools, Pembroke Street.

Attendance on the Lectures on Chemistry, Botany, Materia Medica, Anatomy, Physiology, Dissections, and Medicine, is recognised by the Royal College of Surgeons, England. Hence all the Courses required for admission to the first Professional Examination at that College may be attended in Cambridge.

BIRMINGHAM—QUEEN'S COLLEGE.—Clinical Lectures and Lectures in special departments are given in the General Hospital and the Queen's Hospital, which have a total of upwards of 400 beds. Special instruction is given in the use of the microscope, laryngoscope, and ophthalmoscope, also in case-taking and bandaging, with minor surgery and prescribing. Students must attend for six months alternately at each hospital, except those who enter for six months only.

Appointments.—*General Hospital:* Resident Medical and Resident Surgical Assistant, two Resident Dressers, tenable six months after examination, and with board and lodging. *Queen's Hospital:* Resident Obstetric Assistant, tenable six months; Resident Dresser, tenable three months.

Prizes.—The Sands Cox Prize, value £20 annually, to students who have completed their curriculum, after examination in Medicine, Surgery, and Midwifery.—Warden's Prize, £5 5s to the most proficient student of the first year.—The Percy Prize, books of the value of £5 5s., for the best examination in German.—Medals and Certificates of Honour, annually, in each class after examination.

Clinical Prizes.—Two Senior Medical and two Senior Surgical Prizes (third and fourth years), value in each department £5 5s. and £3 3s.; two Junior Medical and two Junior Surgical Prizes (second year), values £3 3s. and £2 2s.; Midwifery Prize, £4 4s.

Further particulars may be obtained by application to the Rev. the Warden, at the College; to Dr. Jolly, 83, Newhall Street; to Mr. Thomas, Bradford Street; or to Dr. Hinds, 10, Easy Row.

BRISTOL MEDICAL SCHOOL.—Clinical Lectures are delivered at the Royal Infirmary and the General Hospital. The Royal Infirmary contains 242 beds, of which 112 are medical, and 126 surgical. The General Hospital contains 154 beds. The Infirmary and the Hospital each contain a Library and a Museum.

Appointments.—*Royal Infirmary.* Each physician can appoint a Clinical Clerk from among the most diligent of his pupils. Dressers reside in the house in weekly rotation when qualified. A Pathological Clerk is appointed every three months, and receives £3 3s. if his duties have been performed satisfactorily.—*General Hospital.* Clinical Clerks and Dressers are appointed. The dressers reside in the hospital in rotation, free of expense.

Prizes.—Prizes and Certificates of Honour will be distributed at the end of the winter session, after examination in all the subjects of each year.—Prizes and Certificates of Honour for Practical Anatomy.—*Royal Infirmary.* Suple's Medical Prize, and Suple's Surgical Prize, each a gold medal value £5 5s. and about £7 7s. in money, awarded after examinations in Medicine and in Surgery respectively. Clark's prize (interest of £500) to the prizeman of the third year in the Medical School, if he have attended the Royal Infirmary.—*General Hospital.* Lady Haberfield's Prize (interest of £1,000) for general proficiency. Guthrie Medical Scholarship and Clarke Surgical Scholarship, each £15, annually. Sanders Scholarship (interest of £500) for Proficiency in Medicine and Surgery.

Further particulars respecting the infirmary may be known on application to the House-Surgeon of the infirmary; respecting the hospital, on application to Dr. Skerritt, at the hospital. Information regarding the Medical School will be afforded by the Honorary Secretary, Dr. G. F. Burder.

LEEDS SCHOOL OF MEDICINE.—There are Anatomical, Pathological, Chemical, Botanical, and Materia Medica Museums. The course of Chemistry is conducted at the Yorkshire College of Science.

Clinical Instruction, &c.—Clinical Lectures are delivered by the Physicians and Surgeons of the Infirmary, which contains 310 beds.—Courses of Practical Physiology and Practical Surgery are given.—

Demonstrations of Cutaneous and Aural Diseases, and Ophthalmoscopic Demonstrations, are given.—The West Riding Lunatic Asylum at Wakefield is open for the study of Mental Diseases, and a course of lectures will be given during the summer.—Students can also attend the practice of the Leeds Public Dispensary and the Fever Hospital. There are several Resident Appointments at these Institutions.

Hospital Appointments.—Every student in turn must hold the offices of Clinical Clerk and Dresser. Four Assistants are elected to work under the direction of the Senior Resident Officers. They are selected from the senior students who have shown industry and skill as Dressers and Clinical Clerks.

Prizes.—At the close of each Session, Silver and Bronze Medals, Books, and Certificates of Honour, are awarded according to merit.—The Hardwick Clinical Prize, value £10, is given annually for the best reports of medical cases, and the Surgeon's Clinical Prizes of £8, £5, and £3, for the best reports of surgical cases, during the winter session.—The Thorp Scholarship in Forensic Medicine (£10) at the close of each summer session.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.—There are a Museum containing specimens of Morbid and Comparative Anatomy; a collection of Wax Models; and a collection of *Materia Medica*; a Library, and a Reading Room.

Clinical Instruction, etc.—Clinical Lectures are given weekly at the Royal Infirmary, which contains nearly 300 beds; the Lock Hospital adjoining contains 80 beds. The Northern Hospital contains 146 beds. For the study of Mental Diseases, a class will be formed to attend the practice of the Rainhill Asylum, where instruction will be given by Dr. Rogers once a week during the summer.

Appointments: Royal Infirmary.—Two House-Physicians and Three House-Surgeons are appointed for six months after (if there be more applicants than vacancies) competitive examination. Candidates must have a legal qualification.—Three Dressers for each Surgeon and three Clinical Clerks for each Physician are elected quarterly.—Two *Post mortem* Clerks are appointed for six weeks. All students must perform this duty before the final certificate is signed.

Exhibitions and Prizes.—The sum of £2,000 has been left by the late Mr. Roger Lyon Jones for the purpose of founding a scholarship; but the bequest is not yet actually possessed by the school.—Gold Medal for Anatomy and Physiology, presented by Mr. Torr, M.P., for second year's students; and one, also, for Anatomy and Physiology, presented by Dr. J. Bligh, for students of first year.—Medals and Certificates of Honour for groups of "junior" and "senior" subjects.—Clinical Prize to be awarded by the Surgeons of the Infirmary in May, 1876, value £5, for the best report of twelve surgical cases in the Infirmary.

Communications should be addressed to the Registrar, Mr. W. Mitchell Banks.

LIVERPOOL ROYAL SOUTHERN HOSPITAL.—Physicians: Dr. Cameron, Dr. Carter. Surgeons: Dr. Nottingham, Mr. Hamilton, Dr. Wollaston. The hospital contains 200 beds. Clinical Lectures are given by the Physicians and Surgeons during the winter and summer sessions. Clinical Clerkships and Dresserships are open to all students. There is a special ward for diseases and accidents of children. Fees for Hospital Practice and Clinical Lectures, perpetual, £26 5s.; one year, £10 10s.; six months, £7 7s.; three months, £4 4s. The practice of the hospital is recognised by all the examining bodies. For further particulars, application must be made to the House-Surgeon.

OWENS COLLEGE (MANCHESTER ROYAL) SCHOOL OF MEDICINE.—Museums of Human and Comparative Anatomy and of *Materia Medica*, and Physiological and Chemical Laboratories, are connected with the College.

The *Royal Infirmary* contains 100 medical and 170 surgical beds. In addition to the practice of the infirmary, the Monsall Fever Hospital (130 beds) and the Barnes Convalescent Home (140 beds) will be open, under certain regulations, for the purposes of instruction. The Royal Lunatic Asylum at Cheadle is also connected with the infirmary, and accommodates 150 patients.

Clinical Instruction, etc.—Medical Demonstrations will be given by Dr. Leech and Dr. Dreschfeld, and Surgical Demonstrations by Mr. Bradley and Mr. Whitehead. These classes must be attended for three months before a clerkship or dressership can be taken, or the clinical classes attended.—Pathological Demonstrations are given by Dr. Dreschfeld.—Medical Clinical Classes are held, in the winter by Dr. Roberts, and in the summer by Dr. Simpson; and Surgical Clinical Classes by Mr. Southam and Mr. Lund in the winter, and Mr. Heath, and Mr. Bowring in the summer. Ward-classes are also

held by the other Physicians and Surgeons.—Dr. Simpson will give instruction in the use of the Laryngoscope; Dr. Wilkinson, clinical instruction in Fever and Contagious Diseases; Dr. Thorburn, clinical instruction in Diseases of Women; and Mr. Mould, demonstrations of Mental Diseases.

Appointments.—Dressers and Clinical Clerks in the Royal Infirmary are appointed for periods of three months. A senior House-Surgeon, two junior House-Surgeons, a House-Physician, and four Physicians' Assistants, are appointed annually. The senior House-Surgeon and House-Physician are appointed for twelve months, the others for six months; they all receive board, residence, and salary.

Prizes.—Turner Scholarship of £25 for third years' students, one of £15 for second years' students, and one of £10 for first year's students—all for perpetual students; also £15 and £10 prizes for General Proficiency.—Two Platt Physiological Scholarships, value £50 each, tenable for two years, to students who have attended Physiology in the College Laboratory during one session, for best original investigation and the result of a written examination.—Dumville Surgical prize, value £20, at end of winter session, to students of two years, who have attended four courses, including at least one in Surgery.—A Gilchrist Scholarship of £50 *per annum*, tenable for three years in the College, to the candidate standing highest in the Matriculation Examination of the University of London in June, if in the Honours Division; or two of £25 each to the first two candidates in the First Division.—Medical and Surgical Clinical Prizes are given for reports of cases.

Prospectuses may be obtained from the Registrar, Mr. J. H. Nicholson.

SHEFFIELD MEDICAL SCHOOL.—The General Infirmary contains 200 beds. Opportunities for clinical study may be obtained at the Sheffield Hospital and Dispensary (99 beds), and at the Sheffield Hospital for Diseases of Women.

The Infirmary contains a Museum of Pathology, a Library, and a *Post Mortem* Theatre, with Microscopes and all the appliances for clinical research.—The Library of the Medical School is open to students.

Prizes and Certificates of Honour are given annually.

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, NEWCASTLE-ON-TYNE.—Chemistry and Practical Physiology are excepted from the courses which may be attended in perpetuity by composition students.

A course of Practical Physiology will be given during the summer by the Professor of Physiology and Biology. Fee for use of microscopes, 10s. 6d. Separate courses of *Materia Medica* and Pharmaceutical Chemistry, and of Therapeutics, are delivered; the former by Dr. W. C. Arnison, and the latter by Dr. T. Humble.

The Laboratories, Libraries, and Museums of Anatomy, Pathology, and *Materia Medica* are open daily.

The Newcastle Infirmary contains 230 beds. Four Resident Dressers are elected half-yearly. They are provided with board and apartments on payment of £10 10s. for the six months. Midwifery can be attended at the Newcastle Lying-in Hospital, and Diseases of the Eye at the Eye Infirmary.

Prizes.—Four Medical Scholarships, annual value £25 each, tenable for four years, by students residing in Durham or Newcastle. One will be awarded in October.—The Dickinson Memorial Scholarship, value £15 annually, for general proficiency.—A Silver Medal and Certificates of Honour in each class.

Further information may be obtained from the Secretary, Dr. Byrom Bramwell, Newcastle-on-Tyne.

UNIVERSITY OF ABERDEEN.—Fee to each class, £3 3s., except Anatomical Demonstrations, £2 2s. Matriculation fee, both sessions, £1; summer session alone, 10s. A three months' course of Practical Ophthalmology is given in summer.

ROYAL INFIRMARY, ABERDEEN.—Perpetual fee, £6: or first year, £3 10s.; second year, £3. Clinical Medicine and Clinical Surgery, each £3 3s.—The General Dispensary and the Lying-in and Vaccine Institutions are open daily, and the Eye Institution three days in the week.—Clinical Instruction is given in the Royal Lunatic Asylum for three months in the year.

UNIVERSITY OF EDINBURGH.—Minimum expenses for Lectures and Hospital Practice (including also £21 for degrees of M.B. and C.M.), £104 18s.; Annual Fee for each subject required in the ordinary curriculum (including Clinical Medicine and Clinical Surgery), £4 4s.; except Anatomical Demonstrations; Dispensary (third winter) and Instruction in Vaccination, each £1 1s.; Practical Midwifery, £1 4s. 2

TABLE OF THE MEDICAL OFFICERS, PROFESSORS, AND LECTURERS IN
MEDICAL SCHOOLS OF SCOTLAND.

For further particulars regarding each Hospital and Medical School, see pp. 347-49. The letters (W.) and (S.) in this Table denote respectively Winter and Summer Courses.

LECTURES, ETC.	ABERDEEN UNIVERSITY.	EDINBURGH UNIVERSITY. (d.)	SCHOOL OF MEDICINE, EDINBURGH. (g.)	GLASGOW UNIVERSITY. (l.)	GLASGOW, ANDERSON'S UNIVERSITY. (r.)
ANATOMY	Dr. Struthers, 11 (W.)	Mr. Turner, 1 (W.)	Dr. Handyside, 1 (W.)	Dr. Allen Thomson and Demonstrator, jun. 11; sen. 2 (W.); Embryol. and Dem., 11 (S.); Elem. Anat. M. W. F., 1 (S.)	Dr. A. M. Buchanan, jun., 10; sen., 3 (W.); Surgical Anatomy, 12; Osteology, daily (S.)
ANATOMICAL DE- MONSTRATIONS...	Dr. Struthers, and De- monstrator, 9 (W.); 2 (S.)	Mr. Turner, 4	Dr. Handyside, 4 (W.) 11 (S.)	Dr. A. Buchanan, 4 (W.)	
DISSECTIONS	9 to 4 (W. and S.)	Daily (W. and S.)	9 to 4 (W. and S.)	9 to 4 (W.); 7 to 2 (S.)	Daily (W. and S.)
PHYSIOLOGY OR INSTITUTES OF MEDICINE	Dr. Ogilvie, 4 (W.)	Dr. Rutherford, 11 (W.)	Dr. Bell Pettigrew and Dr. McKendrick, 11 (W.)	Dr. A. Buchanan, 4 (W.)	Dr. E. Watson, 5 (W.)
CHEMISTRY	Mr. Brazier, 3 (W.)	Dr. Crum Brown, 10 (W.)	Dr. S. Macadam, 10 (W.)	Mr. Ferguson, 10 (W.)	Mr. Dittmar, 10 (W.)
PRACTICAL CHE- MISTRY	Mr. Brazier, 10 A.M. (S.)	Dr. Crum Brown (W. and S.)	Dr. Macadam and Mr. King, 9 to 5 (W. & S.)	Mr. Ferguson, Tu. W. Th., 10 (S.) ^m	Mr. Dittmar, 10 to 4 (S.) ^s
MATERIA MEDICA	Dr. Harvey, 3 and 4 (S.)	Sir R. Christison, 9 (W.)	Dr. Moinet, 9 (W. & S.) Dr. W. Craig, 9 (S.)	Dr. Cowan, 11 (W.)	Dr. Morton, 4 (W.)
BOTANY	Dr. Dickie, 9 (S.)	Dr. Balfour (S.)	...	Dr. Dickson, 12 (S.) ⁿ	Mr. Hennedy, 10 (S.)
NATURAL HISTORY	Mr. Nicol, 2 (W.); 11 (S.) ^a	Dr. W. Thomson (S.)	...	Dr. Young, <i>Zoology</i> , 8 A.M. (S.)	Dr. Wood Smith 5 (W.)
MEDICINE	Dr. Smith-Shand, 3 (W.)	Dr. Laycock, 3 (W.)	Dr. Haldane, Dr. Muir- head, and Dr. G. Stewart 3 (W.)	Dr. Gairdner, 12 (W.) ^o	
SURGERY	Dr. Pirrie, 10 (W.)	Mr. Spence, 10 (W.) Operative in Summer	Dr. P. H. Watson, Mr. J. Bell, Mr. Chiene, and Dr. John Dun- can, 10 (W.) ^h	Dr. G. H. B. Macleod, 1 (W.)	Dr. Dunlop, 11 (W.)
MIDWIFERY.....	Dr. Stephenson, 2 (W.)	Dr. A. Simpson, 11 (W.)	Dr. M. Duncan, 11 (W.); Dr. Keiller, Dr. A. Mac- donald, & Dr. Under- hill, 10 (S.)	Dr. Leishman, 5 (W.)	Dr. J. G. Wilson, 3 (S.)
FORENSIC MEDI- CINE	Dr. Ogston, 9 (W.) ^b	Dr. D. MacLagan (S.)	Dr. Littlejohn, 2 (W.); 11 (S.)	Dr. P. A. Simpson, 4 (W.)	Dr. A. Lindsay, 4 (S.)
PRACTICAL PHY- SIOLOGY & HIS- TOLOGY.....	...	Dr. Rutherford (W. & S.)	Dr. Bell Pettigrew, Tu. F., 12	Dr. A. Buchanan and Mr. Fleming (three days weekly), (S.)	Dr. E. Watson, 12 (S.)
PATHOLOGY.....	Dr. Rodger	Dr. Sanders, 2 (W.); and in Summer	Dr. J. Wyllie & Dr. J. G. S. Coghill, 2 (W.)	Dr. J. Coats, 2 (W.)	...
HOSPITAL PRAC- TICE	Royal Infirmary, <i>c</i> Daily, 12	Royal Infirmary, <i>i</i>	Royal Infirmary, <i>i</i>	Royal Infirmary, <i>p</i> ; Western Inf., 9, 9 A.M.	Royal Infirmary, 9 A.M.
CLINICAL MEDI- CINE	Dr. Smith-Shand, Dr. Beveridge, and Dr. A. Fraser	Drs. Laycock, Macla- gan, and Sanders, M. Tu. Th. F., 12 to 2	Drs. Haldane, G. W. Balfour, G. Stewart, and J. M. Duncan (Obst.), Tu. F., 12	Dr. McCall Anderson & Dr. Gairdner, 9 A.M.	Physicians of Royal Infirmary, twice weekly, 9 (W. and S.)
CLINICAL SURGERY	Dr. Pirrie, Dr. Kerr, and Dr. Ogston	Mr. Lister, M. Th., 12 (W.); also in Sum.	Dr. P. H. Watson and Mr. Annandale, M. Th., 12 (W. and S.)	Dr. G. Buchanan and Dr. Macleod, 9 A.M.	Surgeons of Infirmary, twice weekly, 9 (W. and S.)

a. Zoology with Comparative Anatomy.

b. With Medical Logic.

c. ABERDEEN ROYAL INFIRMARY: *Physicians*—Dr. J. W. F. Smith-Shand, Dr. Beveridge, Dr. A. Fraser; *Surgeons*—Dr. Pirrie, Dr. D. Kerr, Dr. A. Ogston; *Junior Surgeon*—Dr. Will; *Ophthalmic Surgeon*—Dr. Davidson; *Dental Surgeon*—Mr. Williamson.

d. Medical Psychology and Mental Diseases, Dr. Laycock (S.)

e. Vaccination, six weeks' courses in Winter and Summer, Dr. Husband. Diseases of Children, Dr. Stephenson (S.), Tu. and F., 3. Diseases of the Eye, Dr. A. Robertson (S.), Tu. and F., 3. Insanity, Dr. Batty Tuke (S.), M. and Th., 3. State Medicine and Hygiene, Dr. A. Smart, W. and S., 4 P.M.

f. Operative Surgery and Surgical Appliances, Dr. J. Bell (S.), 4: Operative Surgery and Surgical Anatomy, Dr. Chiene (S.), 4: Practical Surgery, Dr. J. Duncan (S.), 4.

g. EDINBURGH ROYAL INFIRMARY: *Physicians*—Dr. Laycock, Dr. MacLagan, Dr. Sanders, Dr. R. Haldane, Dr. G. W. Balfour, Dr. T. Grainger Stewart, Dr. J. M. Duncan, and Dr. A. R. Simpson; *Assistant Physicians*—Dr. C. Muirhead and Dr. D. J. Brakenridge; *Consulting Surgeons*—Dr. J. Dunsinclair and Dr. J. D. Gillespie; *Surgeons*—Mr. J. Spence, Dr. P. H. Watson, Mr. J. Lister, Mr. Annandale, and Dr. J. Bell; *Ophthalmic Surgeons*—Mr. Walker and Dr. D. A. Robertson

Surgeon for Ovarian Diseases—Dr. T. Keith; *Assistant Surgeons*—Dr. John Duncan and Mr. J. Chiene; *Dental Surgeon*—Dr. J. Smith; *Pathologist*—Dr. J. B. Pettigrew.

h. Dr. M. Duncan gives Clinical Lectures on Diseases of Women.

i. Operative Surgery, Dr. Macleod, M. W. F., 1 (S.); Lectures on Eye, Dr. T. Reid, Tu. Th., 1 (S.); Practical Pharmacy, Dr. Tennent, M. W. Th., 12 (S.)

m. Chemical Laboratory from 10 A.M. to 4 P.M. (W. and S.)

n. Demonstrations in the Botanical Garden, 6.30 P.M.

o. Dr. Gairdner lectures in the Summer at 12 noon on Tuesdays and Fridays, on Diseases of the Heart, etc.

p. GLASGOW ROYAL INFIRMARY: *Physicians*—Dr. Scott Orr, Dr. Perry, Dr. MacLaren, Dr. Wood Smith, and Dr. Charteris. *Surgeons*—Dr. E. Watson, Dr. Dewar, Dr. Dunlop, Dr. Cameron, and Dr. Morton.

q. GLASGOW WESTERN INFIRMARY: *Physicians*—Dr. Gairdner, Dr. McCall Anderson, Dr. Finlayson; *Surgeons*—Dr. Macleod, Dr. G. Buchanan, Dr. A. Patterson; *Dispensary Physicians*—Dr. Tennent, Dr. Coats, and Mr. McVail; *Dispensary Surgeons*—Dr. J. G. Lynn, Mr. Fleming, and Mr. Knox; *Pathologist*—Dr. Coats.

r. Ophthalmic Medicine and Surgery, Dr. Wolfe, daily, 1 (W. and S.)

s. Practical Medical Chemistry—Mr. Dittmar, 1 (S.)

Practical Pharmacy and Dispensary (third summer), each £2 2s.; Practical Anatomy and Practical Chemistry, each £3 3s.—Every Student, before entering with any Professor, must produce a matriculation ticket for the ensuing session, for which a fee of £1 is paid at the beginning of each winter session. Students first entering in the summer session pay a matriculation fee of 10s. for that session.—The Library is open every lawful day during the winter session, from 10 A.M. till 4 P.M.; on Saturdays, till 1 o'clock.

Fellowships, etc.—Falconer Memorial Fellowship, for the encouragement of the study of Paleontology and Geology, value £100, tenable for two years, open to graduates in Science or Medicine of the University of not more than three years' standing. The next appointment may be made in October 1876. Syme Surgical Fellowship, value about £100, tenable for two years, open to Bachelors of Medicine of not more than three years' standing, who shall present the best Thesis on a Surgical subject, giving evidence of original research. Sibbald Scholarship, value about £40, tenable for four years. Abercromby Bursary of £20, for four years, to students who have been brought up in Heriot's Hospital. Sibbald Bursaries, £30 each, tenable for four years, open to the sons of duly registered medical men practising, or who may have practised in Scotland, and to the sons of parents who are or may have been householders in Edinburgh. Grierson Bursary, £20 per annum for three years, open to students who have completed one winter session: Subjects of Examination—Chemistry, Botany, and Natural History. Tyndall-Bruce Bursary, £25 for one year, to students who have completed the third winter session: Subjects—Materia Medica and Pathology. (The above three bursaries are to be awarded in November. Competitors must have studied the subject of examination at the University of Edinburgh.) Ettles Medical Prize, value about £40, to the most distinguished Graduate in Medicine of the year. Hope Chemistry Prize, value £100, open to all students of the University not more than twenty-five years of age, who have worked for eight months, or for two summer sessions, in the chemical laboratory. Neil Arnott Prize, about £40, to the candidate who, having been a medical student of the University during either a summer or a winter session, shall pass with the greatest distinction the ordinary examination in Natural Philosophy for the degree of M.A. The successful candidate must continue to prosecute his medical studies in the winter session succeeding the award. The Ellis Prize for the best Essay on the Respiration of Plants as distinguished from their Nutrition, open to students or graduates of five years' standing. Value, proceeds of sum of £500 accumulated for three years. Essays to be given in by November 2nd. Goodsir Memorial Prize, to be founded in commemoration of the late Professor Goodsir.—Gold Medals are given on graduation to Doctors of Medicine whose theses are deemed worthy.

EDINBURGH ROYAL INFIRMARY.—Fees: 6 months, £3 3s.; 1 year, £5 5s.; perpetual, £10 10s. Clinical Medicine and Clinical Surgery, each £4 4s. for the course.—No fees for any medical or surgical appointment. Four Resident Physicians and four Resident Surgeons are appointed; they live in the house for six months free of charge. Candidates must be registered as legally qualified practitioners. Non-resident Clinical Clerks are appointed. Each surgeon appoints from four to nine Dressers for six months. Assistants in the Pathological Department are appointed by the Pathologist.—Instruction is given in special departments.

SCHOOL OF MEDICINE, EDINBURGH.—The courses qualify for examination for various diplomas and licenses, and for degrees in those years in which University residence is not required.

Fees.—For the first of each Course of Lectures, £3 5s.; second, £2 4s.; perpetual, £5 5s. To those who have already attended a first course in Edinburgh, the perpetual fee is £2 4s. Second Course of Midwifery, £1 3s. Practical Chemistry and Practical Anatomy (six months), each £3 3s. Anatomical Demonstrations, £2 2s.; with Practical Anatomy, £1 1s.; perpetual, £4 4s. Analytical Chemistry, £2 a month, £5 for three months, or £10 for six months. Vaccination, £1 1s.; State Medicine and Hygiene, £2 2s. Summer Courses of Clinical Surgery and Clinical Medicine, each £2 4s.; Practical Anatomy, including demonstrations, Operative Surgery, Diseases of the Eye, and Insanity, each £2 2s.—The minimum education costs in this school for the double qualification of Physician and Surgeon from the Royal Colleges of Physicians and Surgeons of Edinburgh, including the examination fee, is £90 4s., payable by yearly instalments; for the single diploma of either Physician or Surgeon, including the examination fee, £80.

Practical instruction in various subjects may also be obtained on payment of moderate fees at the Sick Children's Hospital, Royal

Public Dispensary and New Town Dispensary, Royal Maternity Hospital, and the Edinburgh Eye Infirmary.

UNIVERSITY OF GLASGOW.—Fees, each course, £3 3s.; except Lectures on the Eye, £1 1s.

GLASGOW ROYAL INFIRMARY.—Fees, 1st and 2nd years, each £3 3s.; 3rd year, and perpetual, £1 1s.; 6 months, £2 2s.; 3 months, £1 11s. 6d. Vaccination, £1 1s.; Practical Pharmacy (6 months), £3 3s. Clinical Lectures in Medicine or Surgery, as for the courses of lectures in the University.

GLASGOW WESTERN INFIRMARY.—Fees, 1st and 2nd years, each £3 3s.; 3rd year, £1 1s. The fees for clinical lectures are the same as for the courses in the University.

GLASGOW EYE INFIRMARY.—Fee, 6 months, £2 2s.; to students who are attending or have attended the Lectures on the Eye in the University, £1 1s.

Instruction may also be obtained at the Glasgow University Lying-in Hospital and Dispensary for Diseases of Women and Children; and at the Dispensaries for Diseases of the Skin and Ear; and the Royal Lunatic Asylum, Gartnavel, is open to students on payment of a small fee.

GLASGOW.—ANDERSON'S UNIVERSITY.—Fees for all the Lectures required for the Diplomas of Physician and Surgeon, £50. Class Fees for each course of Lectures: First session, £2 2s.; 2nd session, £1 1s.; afterwards free. Anatomy Class Fees, for Lectures and Demonstrations: 1st session, £4 4s.; 2nd session, £4 4s.; summer session, with dissection, £1 1s. The Dissecting-room is free for two sessions to those who attend both courses of Anatomy; after the second year, £1 1s. per session. There is a Matriculation Fee of £1 1s. at the beginning of each winter session.

BRITISH MEDICAL JOURNAL.

SATURDAY, SEPTEMBER 11TH, 1875.

THE CHOICE OF TEXT-BOOKS.

MEDICAL students are often much puzzled in the choice of their text-books by hearing very conflicting accounts of the value of different books. We shall not attempt to remove all these difficulties by any dogmatic selection. The lecturers and tutors at the respective Medical Colleges generally make this a part of their business. We may, however, advise students not to encumber themselves at the outset with too many books, but to wait till their own experience develops and enables them, each to decide for himself, what sort of book suits his own quality of mind and power of learning. To this we add the advice to buy only the best text-books, and to lean as little as possible on "outlines", "sketches", "handy books", "epitomes", and "memoranda".

The first year's student's first care is to get a good handbook of "the bones"; and, strange to say, there is not one really good monograph in print on the subject. There are a good many competitors for favour, but none that at all equals that most excellent and complete little book of Ward. A student can scarcely be said to "know his bones" thoroughly until he has studied Ward; and Ward is out of print. Copies, however, may be had occasionally; and fortunate the student who gets one, and thoroughly masters it. Next to Ward in merit are Gray and Holden. Holden is, we believe, out of print. The descriptions of bones in Quain, Wilson, Norton, and the rest, are somewhat wanting in accuracy, completeness, and method. Gray's *Anatomy* generally is an excellent handbook, and so are Ellis's and Heath's dissectors. In Chemistry, there is a long list; but we know of nothing which has superseded Fownes in popular favour, except, perhaps, the larger and more costly treatise of Miller, which is a general favourite for the University of London and other higher examinations. Of manuals of Surgery there is a good choice in Drutt and Bryant, to which, we see, will this session be added one by Holmes, the accomplished editor of Gray and of the great *System of Surgery*, from whom much will, of course, be expected. By common consent, no manual of Midwifery yet published has come up to the useful character of Tyler Smith's.

Leishman's book is probably the most successful; it remains to be seen what Dr. Playfair's promised manual yields. Of students' books of Medicine there have been some excellent ones of late years. Roberts and Aitken are the most recent. Tanner is an old favourite, although it has always seemed to us not of so high a character as a modern text-book should be. Watson's great book is at once instructive and delightful. Dr. Fagge and Dr. Bristowe are both engaged on new manuals of medicine; and, as both are careful, thorough, and highly accomplished physicians and writers, their books are sure to be good. In text-books of Physiology there is an acknowledged want. There is nothing except the great laboratory manual of Sanderson which represents the present status of physiology—physiology as it exists, as it is taught in some schools, and ought to be in all. Kirkes's *Physiology* hardly continues to deserve the popularity which in earlier years justly belonged to it. It belongs in a measure to a pre-scientific period in physiology. Carpenter's book is scientifically out of date. A little manual by Küss, just translated for Messrs. Baillière, Tindall, and Co., is very handy; and Professor Gamgee, of Owens College, Manchester, announces an edition of Hermann's *Handbook of Physiology* with notes. This is reported to be the best students' handbook of physiology extant: it is a great favourite in German medical schools, and Dr. Gamgee's edition of it is looked for by many physiological teachers as likely to be very useful in their classes. Huxley's small manual is most admirable, but is not specially designed for medical students. Of large books, Dalton's *Physiology* is the most readable and useful. In Histology, the works of Stricker and Frey are of unexceptionable excellence; but they are very ponderous. The section of histology in Quain's *Anatomy* is very accurate and well done. In Pathology, we have two most excellent manuals by Payne (the new edition, rewritten by him, of Sieveking and Jones's manual) and by Dr. T. H. Green; the latter singularly clear and good, but of course much less copious than the former. The second and greatly improved edition of Green is just out. Wilks and Moxon's monograph is more suited for highly advanced students or practitioners.

For the medical ward, we should recommend to younger students of medicine Sturges's *Clinical Introduction*, or Barclay on *Diagnosis*; or, for more advanced students, Da Costa's admirable treatise on *Medical Diagnosis*. For the surgical student, a more complete guide to the study of surgery in the wards is wanting. Heath's and Berkeley Hill's little books are excellent for dressers. For surgical operations, Bell and Maunder have written two very good little handbooks. Erichsen, Gross, Fergusson, Spence, and Pirrie, among the greater books, will prove profitable reading at all times during the student's career. He can hardly do without one or other of them.

In *Materia Medica* and Therapeutics there is an *embarras des richesses*. Ringer is excellent reading, thoughtful, and liberal, but unsystematic, and so incomplete and unsystematical as to be bewildering. Scoresby Jackson is concise and sound, but old-fashioned. Bentley and Redwood's Pereira is particularly suited for pharmaceutical students, but wants therapeutic value for medical students. Garrod's last edition is very good, and would be the best extant if an American physician, Dr. Wood, had not lately written one which is decidedly better, so far as it takes the scientific view of therapeutic action, and is from the basis upwards written in the modern spirit. Garrod's excellent book begins to show patchwork too much. Dr. Lauder Brunton, Lecturer on Therapeutics at St. Bartholomew's, is announced to be writing a handbook, which, we suppose, is intended to be the handbook of the day in respect to scientific therapeutical investigation; he being our principal expert at present in the physiological investigation of the action of medicines. But it is still in embryo. We hear also of a forthcoming work on the same subject by Dr. Fothergill, an accomplished and indefatigable worker in the field of therapeutics. Squire's classic *Companion to the Pharmacopœia* is extremely useful. Dr. Walter Smith's *Handbook of the Pharmacopœia* is intended to supersede it for medical students; and, as it has had the benefit of revision by Dr. Aquilla Smith, the Professor

of *Materia Medica* in the University of Dublin, who was and is one of the *Pharmacopœia* Committee, it should be a good book. We have had no experience of its use, but hear it favourably spoken of as a text-book for examinations and for practice. For special subjects, there are a great many handbooks, of which students will be able to estimate the relative usefulness as they pass on in their studies. In books of Practical Chemistry, so much depends on the particular line taken by the teacher, that they must be guided almost entirely by that consideration. In Toxicology and Medical Jurisprudence, Taylor's standard books are scarcely to be excelled.

Physiological Chemistry still needs a *vates sacer* in this country. We have few physiological chemists, and no good handbook of the subject. Ralfe and Moore have written little outlines not without merit, but said to be meagre and full of faults. Of Medical Physics, we have no book at all, such as the French have in Gavarret. In Surgical Anatomy, we are wanting a good monograph. The translation of Roser by Galton, published by Renshaw, is, however, a very handy little book, and good as far as it goes. Blandford's little *Manual of Insanity* is a good one on that subject. Winslow's handbook relates to the practical management of lunatics, and is for practitioners, and not for students. The valuable works by Bucknill and Tuke, and by Maudsley, are standards for advanced study.

We have spoken here only of English and American text-books. We advise, however, those who can read French or German moderately well to provide themselves with one or two in those languages: first, because there are a few of great excellence not yet translated; and, secondly, because it will greatly aid their acquisition of familiarity with the foreign technical terms in the medical sciences to study a French or German alongside with an English text-book. We shall on a future occasion discuss the merits of some of the principal French and German text-books.

CHANGES IN THE HOSPITALS AND MEDICAL SCHOOLS.

THE following changes have taken place during the past year.

At St. Bartholomew's Hospital, Dr. Harris has retired from the office of Physician. Dr. Church has been promoted to be Physician; and Dr. Lauder Brunton has been appointed Assistant-Physician. A new office—that of Assistant Physician-Accoucheur—has been created, to which Dr. Clement Godson has been appointed. Dr. Norman Moore lectures on Comparative Anatomy in place of Dr. Church; and Mr. Marrant Baker gives instruction in Diseases of the Skin in place of Dr. Duckworth.

At the Charing Cross Hospital, Dr. Poore has retired from the offices of Assistant-Physician and Lecturer on Medical Jurisprudence, in consequence of his appointment to University College Hospital. Dr. Irvine succeeds Dr. Dowson as Lecturer on Botany; he also gives instruction in Auscultation in place of Dr. Green, and in Diseases of Children in place of Dr. Bruce. Mr. J. F. Blake has succeeded Mr. A. H. Garrod as Lecturer on Comparative Anatomy.

At St. George's Hospital, Dr. Barnes has been appointed Obstetric Physician and Lecturer on Midwifery in the room of Dr. John Clarke. Dr. R. J. Lee has retired from the office of Assistant Obstetric Physician, and gives demonstrations in Morbid Anatomy. Mr. Prescott Hewett having resigned the office of Surgeon, Mr. Rouse has become full Surgeon, and Mr. Warrington Haward has been appointed Assistant-Surgeon. Mr. Haward also teaches Practical Surgery, and takes charge of the Orthopædic Department, in place of Mr. Pick, who retires from the lectureship on Surgery, and succeeds Mr. Rouse as Lecturer on Anatomy. Dr. Brailey succeeds Dr. Cavafy as Lecturer on Comparative Anatomy. Dr. Ralfe succeeds the late Mr. S. W. Moore as teacher of Physiological Chemistry.

At Guy's Hospital, Mr. Birkett has retired from the office of Surgeon. Mr. Howse has been promoted to a Surgeonship; and Mr. R. C. Lucas and Mr. Golding Bird have been appointed Assistant-Sur-

geons. Mr. Davies-Colley succeeds Mr. Durham as Mr. Howse's colleague in the Lectureship on Anatomy. The lectures on Surgery will be delivered by Mr. Bryant and Mr. Durham, in place of Mr. Birkett and Mr. Cooper Forster. Mr. Jacobson lectures on Comparative Anatomy instead of Dr. Pye-Smith.

At King's College, the vacancy in the Professorship of Physiology, caused by the appointment of Dr. Rutherford to the Chair in the University of Edinburgh, has been filled by the appointment of Dr. Gerald F. Yeo, Lecturer on Physiology in the Carmichael School of Medicine, Dublin. Dr. Buchanan Baxter and Dr. Curnow have been appointed Assistant-Physicians. Dr. I. B. Yeo gives demonstrations with the Laryngoscope, in place of Dr. George Johnson.

At the London Hospital, the course of Lectures in Medicine is given by Dr. Davies and Dr. Fenwick, Dr. Ramskill and Dr. Down having ceased to lecture on this subject. Dr. Palfrey has succeeded Dr. Head as Obstetric Physician and Lecturer on Midwifery. Mr. E. B. Aveling has been appointed Lecturer on Comparative Anatomy.

At St. Mary's Hospital, Dr. Wiltshire lectures on Midwifery conjointly with Dr. Meadows.

At the Middlesex Hospital, Mr. Hulke becomes Mr. Campbell De Morgan's colleague in the Lectureship on Surgery.

At St. Thomas's Hospital, Dr. Clapton has retired from the office of Physician, and Dr. Stone has become full Physician. Dr. Gervis succeeds Dr. Barnes (appointed to St. George's) as Obstetric Physician and Lecturer on Midwifery; and Dr. Cory has been appointed Assistant Obstetric Physician in the vacancy caused by the promotion of Dr. Gervis. Dr. Gervis retires from the Lectureship on Forensic Medicine, which is now held by Dr. Stone alone. Dr. Greenfield teaches Pathological Anatomy jointly with Mr. Arnott, and Mr. McKellar joins Mr. Croft in giving instruction in Practical Surgery.

At University College, Mr. E. Ray Lankester has been appointed Professor of Comparative Anatomy in the room of the late Dr. Grant. Dr. G. V. Poore has been appointed an Assistant-Physician to the Hospital. Sir Henry Thompson has retired from the office of Surgeon to the Hospital; and Mr. A. E. J. Barker, late Surgeon to the City of Dublin Hospital, has been appointed Assistant-Surgeon. Mr. Christopher Heath has succeeded Mr. Erichsen as Holme Professor of Clinical Surgery.

At the Westminster Hospital, the vacancy in the office of Physician caused last year by the death of Dr. Anstie was filled by the promotion of Sir D. Gibb, who has himself lately retired. Dr. A. S. Donkin has been appointed Assistant-Physician. Dr. Anstie's post as Lecturer on Medicine has been filled by the appointment of Dr. Fincham and Dr. Sturges as joint Lecturers; and Dr. C. D. F. Phillips succeeds Dr. Sturges as Lecturer on *Materia Medica*.

In the Queen's College, Birmingham, Dr. Rickards joins Dr. Norris and Mr. Bartleet as Professor of Physiology, and Dr. Jolly becomes Mr. Thomas's colleague in the Professorship of Anatomy. Dr. Sawyer gives Pathological Demonstrations in place of Dr. Rickards.

At the Bristol General Hospital, Dr. Skerritt has been appointed Physician; Mr. Coe has retired from the office of Surgeon, and Mr. Keall has been appointed; and Dr. Swayne is succeeded by Dr. Lawrence as Physician-Accoucheur, but continues to lecture on Midwifery in the Medical School.

At the Leeds School of Medicine, the lectures on Chemistry and the instruction in Practical Chemistry are given by Dr. Thorpe, in place of Mr. Fairley. Mr. Wheelhouse has retired from his share of the Lectureship on Surgery; this subject is now taught by Mr. Teale, Mr. Jessop, and Mr. Atkinson. Mr. Price and Dr. J. Braithwaite lecture on Midwifery in place of Mr. W. Hall. The Lectureship on Botany, lately held by Mr. Atkinson, is vacant.

At the University of Durham College of Medicine at Newcastle, Dr. Reoch has been appointed Lecturer on Physiology, in the place of Dr. H. A. Nicholson, who has gone to St. Andrews' University as Professor of Natural History. Dr. Nesham has retired from the Lectureship on Anatomy, and lectures on Midwifery in conjunction with Dr. Gibson.

Mr. McBean has become Mr. H. E. Armstrong's colleague in the Lectureship on Botany. Dr. F. Page lectures on Forensic Medicine, in place of Dr. Bramwell, who has been appointed a Physician to the Infirmary, and teaches Pathology in conjunction with Dr. Gibb.

In the University of Aberdeen, Dr. Smith-Shand has been appointed Professor of Medicine in the room of Dr. Macrobin, resigned; and the vacancy in the Professorship of Midwifery, caused by the death of Dr. Inglis, has been filled by the appointment of Dr. Stephenson.

In the University of Edinburgh, the vacancy in the Professorship of Institutes of Medicine, caused by the resignation of Dr. Hughes Bennett, has been filled by the appointment of Dr. W. Rutherford, lately Professor of Physiology in King's College, London.

In the Edinburgh Extra-Academical School of Medicine, several additions have been made. Mr. J. Falconer King teaches Practical Chemistry; Dr. Underhill lectures in the summer on Midwifery and Diseases of Women and Children; and Dr. J. G. S. Coghill teaches General Pathology and Pathological Anatomy.

In the University of Glasgow, Practical Physiology is taught by Dr. A. Buchanan and Mr. Fleming in the summer session. The Western Infirmary is announced as open for Clinical Instruction.

In Anderson's University, Glasgow, Dr. Eben Watson is announced as teaching Practical Physiology in the summer session. Mr. Dittmar teaches Chemistry and Practical Chemistry in place of Dr. Thorpe.

OPENING OF THE MEDICAL SCHOOLS.

THE subjoined is a list of the Medical Schools in England and Scotland, with the date of their opening, and the names of the gentlemen appointed to deliver introductory addresses. Where no name is inserted, there is no special introductory lecture.

- St. Bartholomew's Hospital—October 1st.
- Charing Cross Hospital—Mr. Fairlie Clarke—October 1st, 4 P.M.
- St. George's Hospital—Dr. Barnes—October 1st, 4 P.M.
- Guy's Hospital—Dr. Stevenson—October 1st, 2 P.M.
- King's College—Dr. Curnow—October 1st, 4 P.M.
- London Hospital—Dr. W. B. Woodman—October 1st, 3 P.M.
- St. Mary's Hospital—Dr. Randall—October 1st, 8 P.M.
- Middlesex Hospital—Mr. B. T. Lowne—October 1st, 3 P.M.
- St. Thomas's Hospital—Dr. Payne—October 1st, 3 P.M.
- University College—Dr. Corfield—October 4th, 3 P.M.
- Westminster Hospital—Mr. R. Davy—October 4th, 3 P.M.
- Bristol Medical School—October 1st.
- Birmingham (Queen's College)—The Warden (Rev. W. H. Poulton)—October 1st, 3 P.M.
- Birmingham (General and Queen's Hospital)—Introductory Clinical Address at the General Hospital—Mr. A. Baker—Oct. 8th, 3.30 P.M.
- Bristol Medical School—October 1st.
- Leeds School of Medicine—Mr. Jessop—October 1st, 4 P.M.
- Liverpool Royal Infirmary School of Medicine—Dr. Dickinson—October 2nd, 3 P.M.
- Owens College (Manchester Royal) School of Medicine—Mr. Lund—October 4th, 4 P.M.
- Newcastle College of Medicine—Mr. H. E. Armstrong—October 1st, 2 P.M.
- Sheffield School of Medicine—Dr. J. Young—October 1st, 4 P.M.
- Aberdeen University—October 27th.
- Edinburgh University—The Principal—November 3rd, 2 P.M.
- Edinburgh School of Medicine—Mr. Chiene—November 1st, 11 A.M.
- Glasgow University—Dr. G. Buchanan—October 26th, 12 noon.
- Glasgow, Anderson's University—October 26th.

It is announced that very extensive alterations and sanitary improvements are being carried out at a great outlay at St. Mary's Hospital, London. It is right that the teachings of sanitary science should be rigorously applied to hospitals, and that patients introduced into wards for the purpose of cure, should be freed from all extraneous causes of disease and mortality. Many other hospitals may take a lesson from St. Mary's, where several thousand pounds are now being expended on the wholesome work of sanitation.

A WOMAN is reported to have died on August 8th at Dekan near Rakontsky, in Bohemia, at the age of 115 years.

SURGEON-GENERAL BALFOUR, M.D., has left for Gibraltar to resume medical charge at the station from leave of absence.

M. DEMARQUAY has left direction in his will that any of his old pupils who desire it shall have *souvenirs* of their master, in the form of books or instruments.

THE CHOLERA IN SYRIA.

OUR correspondent at Constantinople writes:—The latest advices received from Syria concerning the present outbreak of cholera are on the whole reassuring; though, I am sorry to say, that some cases with fatal results have occurred in the Lebanon. It seems on the decline in all the Syrian towns with the exception of Aleppo; where, during the week ending August 15th, there were 341 cases and 253 deaths. At Damascus, from the 9th to the 11th, there were only nine new cases. A large amount of intermittent fever, frequently of the form "perniciosa", prevails throughout the entire country, more especially along the shores of the Marmora and Black Sea, which may be accounted for by the fact of the continued wet; the presence of hot sun and heavy rainfalls invariably increasing the amount of malaria.

TEACHING OF STATE MEDICINE.

THE extension of the functions and sphere of duty of State Medicine, and the multiplication of medical "health appointments", has given rise to a call for additional special instruction. This is very necessary to enable candidates for such appointments to fulfil their duties satisfactorily; it is probably indispensable to most of those who may wish to arm themselves with diplomas in State Medicine of either of the Universities or examining bodies who propose to grant them. Separate courses of lectures on Hygiene are now delivered in several of the London and provincial medical schools; while in others the subject is taught as a part of Forensic Medicine. We observe that the authorities of University College have made special provision for the purpose of teaching this subject under the guidance of Professor Corfield and Professor Williamson. A complete laboratory course has been arranged, in addition to systematic lectures on hygiene and public health. In Owens College, Manchester, it is announced that, in addition to a comprehensive course of lectures on Hygiene by Dr. Arthur Ransome, practical instruction in the analysis of food, etc., will be given by Professor Roscoe. So far as we know, the organisation at University College for the teaching of State Medicine is the most complete that has yet been added to a medical school; but the hint will no doubt be taken elsewhere. Preventive medicine is now an essential element in the education of almost every medical student.

HOSPITAL SATURDAY.

HOSPITAL Saturday, we learn, is still going on, that is to say, subscriptions are yet coming in, and will be received by the committee until the end of the present month, when the accounts for the year will be made up and published. The sum already collected is £4,700, and further sums of £200 or £300 from one local committee, of between £100 and £200 from another such committee, of sums unknown from several other committees, from the south-eastern district post-office, and from about five hundred firms from which intimations have been received, and of about £100 from the South-Western Railway are still expected to swell the amount. The expenses this year have been only about £900, against £1,800 last year; and the accounts will be duly audited. But we fear that the amount for distribution will not be so large as that of 1874, when the sum collected exceeded £6,463.

THE HEALTH OF LONDON.

DURING last week, London had the lowest death-rate of the eighteen largest English towns. The metropolitan rate of mortality was 21.6; and in the other towns the rate ranged upwards to 36 in Salford and in Nottingham. In London the deaths were 1,429, and were 6 below

the average. There were 2 deaths from small-pox, 22 from measles, 99 from scarlet fever, 9 from diphtheria, 60 from whooping-cough, 29 from different forms of fever, and 188 from diarrhoea: or 409 deaths (equal to an annual rate of 6.1 per 1,000 persons living) from the seven principal zymotic diseases. Both the deaths classed to small-pox were, however, cases of chicken-pox. In outer London, the total death-rate and the zymotic death-rate were 19.9 and 4.7 per 1,000 respectively, against 21.6 and 6.1 in inner London. The mean temperature of the air at Greenwich during the week was 60 deg. or 0.5 deg. above the average. The wind was variable in direction. Rain fell on Sunday and Friday to the extent of .23 of an inch.

REGISTRATION AND COMPULSORY EDUCATION FOR DENTISTS.

A MEETING was held at Manchester on the 1st instant, with a view to promoting the compulsory education and registration of dentists. Mr. C. J. Fox took the chair, and the principal resolution was moved by Mr. Dennatt of Brighton, and seconded by Mr. Wormald of Bury. It is a question whether any government would be prepared to pass an Act rendering dental education compulsory, since the practice of dentistry in many of its branches involves no personal risk to the patient from the ignorance of the practitioner. It is different with dental surgery proper. Here we find an undoubted necessity for higher education of a compulsory character, but it must be quite separated from mechanical dentistry, and hence arises a complication. The promoters of the present movement evidently overlook the point that we raised some two weeks back, that dentistry is still half a profession and half a business. We should have thought that an attempt to obtain registration would have had the best chance of success if it had been commenced in London, since in the metropolis we have the largest proportion of dentists possessing a purely surgical degree; we shall, however, watch the movement with interest, to see how far the profession is prepared for the great change that the movement, if successful, involves.

ASSOCIATION INTELLIGENCE.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE autumnal meeting of this Branch will be held at Tenby, on Thursday, September 30th.

Nomination-papers must be sent to one of the undersigned by the 9th instant.

ANDREW DAVIES, Swansea. } *Hon. Secs.*
ALFRED SHEEN, M.D., Cardiff. }

September 2nd, 1875.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THE next meeting of the above Branch will be held at the Pavilion Hotel, Folkestone, on Thursday, September 16th, 1875, at 3 o'clock; Dr. HENRY LEWIS of Folkestone in the Chair.

Dinner at 5 o'clock precisely. Charge, 6s. 6d., exclusive of wine.

Gentlemen who wish to make communications to the meeting are requested to inform me at once, in order that a notice thereof may be included in the circular convening the meeting.

EDWARD WHITEHEAD PEARSON, *Honorary Secretary.*

Ashford, August 29th, 1875.

READING BRANCH.

THE annual meeting of the above Branch will be held in the Library of the Athenæum, Friar Street, Reading, on Wednesday, Sept. 15th.

Mr. MAY, the President, will take the Chair about 4.30, and deliver an address.

The election of a President and other Officers of the Branch for the year 1875-76 will then take place.

The meeting will then adjourn to the Queen's Hotel, where dinner will be provided at Six o'clock. Tickets, 16s. each (comprehending the entire charge), should be obtained of Mrs. George, at the Queen's Hotel, on or before Saturday, September 11th, to allow the necessary arrangements to be made.

RICHARD C. SHETTLE, M.D., *Honorary Secretary.*

Reading, September 2nd, 1875.

NORTHERN COUNTIES (SCOTLAND) BRANCH.

THE annual meeting will be held in Gray's Hospital, Elgin, on Saturday, September 18th, at 12.30 P.M.; Dr. VASS, of Tain, President-elect.

The following papers have been promised.

1. Address by the President-elect.
 2. Cases of Monstrosities. By Dr. Duff.
 3. The Sanitary Condition of our Villages and Rural Districts. By Dr. R. S. Turner.
- Luncheon in Gordon's Arms Hotel, at 2.30.
J. W. NORRIS MACKAY, M.D., *Hon. Sec. and Treasurer.*
Elgin, September 8th, 1875.

SOUTH MIDLAND BRANCH.

THE autumnal meeting of the above Branch will be held in the Council Chamber of the Guildhall, Northampton, on Wednesday, September 22nd, at 2 P.M.; HENRY TERRY, Esq., President-elect.

Gentlemen intending to read papers are requested to forward their titles forthwith to Dr. Bryan.

J. M. BRYAN, M.D. } *Honorary Secretaries.*
W. MOXON, Esq. }

Northampton, September 1st, 1875.

SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT.

THE next meeting of the above District will be held on Wednesday, September 22nd, at the Burlington Hotel, Eastbourne, at 3.30 P.M.; T. F. SANGER, Esq., of Alfriston, in the Chair.

Dinner at 5.30 P.M. Charge, 5s., exclusive of wine.

Notice of intended communications is requested by Tuesday, the 14th instant, in order that they may be inserted in the circular convening the meeting.

THOMAS TROLLOPE, M.D. Cantab., *Hon. District Secretary.*

35, Marina, St. Leonards-on-Sea.

SHROPSHIRE SCIENTIFIC BRANCH.

THE annual meeting of the above Branch will be held in the Museum, Shrewsbury, on Wednesday, September 22nd, at 2 o'clock; WILLIAM MATHEWS, Esq., President-elect.

Dinner at the George Hotel at 5 o'clock, exact time.

Gentlemen intending to read papers are requested to communicate with the Honorary Secretary.

SAMUEL WOOD, *Honorary Secretary.*

Shrewsbury, September 8th, 1875.

MIDLAND BRANCH.

A MEETING of the above Branch will be held at Matlock Bath, on Thursday, September 23rd. Several papers have been promised. Further information in next week's JOURNAL.

F. W. WRIGHT, *Honorary Secretary.*

Derby, September 1st, 1875.

NORTH OF ENGLAND BRANCH.

THE autumnal meeting of this Branch will be held at the Queen's Hotel, Sunderland, on Thursday, September 23rd, at 3 P.M.; S. E. PIPER, F.R.C.S., President.

The following papers have been promised.

1. Dr. J. W. Eastwood. The Prevalent Practice of Advertising Medical Works in the Non-Medical Press.
2. Dr. C. Gibson. Certain Forms of Blood-Diseases.
3. Dr. G. Y. Heath. Some of the less noticed complications of Prostatic Disease.
4. C. S. Jeaffreson, Esq. Remarks on some of the recent Advances in Surgical Pathology and Therapeutics.
5. Edward Jepson, jun., Esq. The Mechanical Treatment of Intestinal Obstruction.
6. Edward Jepson, jun., Esq. Case of Tumour of the Neck.
7. Dr. Byrom Bramwell. Report of a Case of Hydatid Disease of the Liver.

Gentlemen who are desirous of reading papers will oblige by communicating with the Secretary.

Dinner at the Queen's Hotel, at 4.45 P.M. Tickets, exclusive of wine, seven shillings and sixpence.

G. H. PHILIPSON, M.D., *Honorary Secretary.*

Newcastle-upon-Tyne, September 1st, 1875.

CORRESPONDENCE.

ETHER AS AN ANÆSTHETIC.

SIR,—In reply to the question put to me in your leading article on July 31st, I beg to say that the kind of ether which I make use of is what is called washed ether—*i. e.*, pure sulphuric ether, containing as much water as it will take up when agitated with water, and of specific gravity .735; but I find it desirable to keep its temperature at about 65 deg., by means of a vessel holding water.

I presume the difficulty of supplying ether-vapour of sufficient strength during the latter part of a prolonged operation by means of washed ether, given from a sponge or towel is the reason why anhydrous ether is often preferred.—I am, sir, yours faithfully,

J. T. CLOVER.

Cavendish Place, Cavendish Square, W., August 1875.

MEDICAL NEWS.

MEDICAL VACANCIES.

THE following vacancies are announced:—

- BLACKBURN and EAST LANCASHIRE INFIRMARY—House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications on or before the 14th instant.
- BOURNEMOUTH GENERAL DISPENSARY—Resident Medical Officer and Secretary. Salary, £120 per annum, with furnished apartments, coals, gas, and attendance.
- BRISTOL LUNATIC ASYLUM—Assistant Medical Superintendent. Salary, £100 per annum, with furnished apartments, board, and washing. Applications on or before the 16th instant.
- CAISTON UNION—Medical Officer and Public Vaccinator for the Tealy District. Salary, £30 per annum, and fees. Applications on or before Oct. 1st.
- COLCHESTER UNION—Medical Officer for the Second District. Salary, £75 per annum.
- DISPENSARY FOR SICK CHILDREN, Manchester—Assistant Medical Officer. Salary, £180 per annum. Applications on or before September 15th.
- DOVER HOSPITAL and DISPENSARY—Resident Medical Officer. Salary, £100 per annum, with furnished apartments, coals, and lights. Applications on or before the 14th instant.
- DUNDEE ROYAL INFIRMARY—Resident Medical Assistant. Salary, £70 per annum, with board, lodging, and washing. Applications on or before the 15th instant.
- ESSEX and COLCHESTER HOSPITAL—House-Surgeon and Apothecary. Applications on or before October 7th.
- GATESHEAD UNION—Medical Officer for the Township of Winlaton. Salary, £25 per annum.
- HENLEY UNION—Medical Officer for the Nettlebed District. Salary, £80 per annum.
- HOSPITAL FOR SICK CHILDREN, Manchester—Assistant Physician. Salary, £300 per annum. Applications on or before September 15th.
- INVERNESS DISTRICT ASYLUM—Assistant Medical Officer. Salary, £70 per annum, with bed, board, and washing. Applications on or before the 11th prox.
- NORWICH DISPENSARY—Salary, £120 per annum, with unfurnished residence and apartments.
- OSWESTRY INCORPORATION—Medical Officer for the Llansilin District. Salary, £35 per annum.
- PEMBROKE UNION—Medical Officer for the First District.
- QUEEN'S HOSPITAL, Birmingham—House-Physician. Salary, £50 per annum, with board, lodging, and washing. Applications on or before the 23rd instant.
- ROYAL UNITED HOSPITAL, Bath—House Surgeon. Salary, £60 per annum, with board and residence. Applications on or before the 22nd instant.
- ST. GILES-IN-THE-FIELDS and ST. GEORGE, BLOOMSBURY, Parishes—Medical Officer. Salary, £250 per annum.
- SHEPTON MALLETT UNION—Medical Officer for the Fourth District. Salary, £32 per annum.
- SOLIHULL UNION—Medical Officer for the Yardley District. Salary, £17 per annum, and fees.
- STAINES UNION—Medical Officer for the Shepperton District.
- STROUD GENERAL HOSPITAL—House-Surgeon.
- SWAFFHAM UNION—Medical Officer for the Seaham Toney District. Applications on or before the 13th instant.
- WARWICK COUNTY LUNATIC ASYLUM—Second Assistant Medical Officer. Salary, £100 per annum, with board, lodging, and washing.
- WIMBORNE and CRANBORNE UNION—Medical Officer for No. 1 and 2 District and Workhouse. Salary, £85 per annum for No. 1, and £75 for No. 2, with £20 additional for the Workhouse. Applications on or before the 23rd instant.
- WORCESTER GENERAL INFIRMARY—Physician. Applications on or before the 25th instant.
- YORK DISPENSARY—Resident Medical Officer. Salary, £130 per annum, with furnished apartments, coal, and gas. Applications on or before the 16th inst.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTH.

UNDERHILL.—On September 7th, at Great Bridge, ton, the wife of *A. S. Underhill, M.B., of a daughter.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.

FRIDAY.....Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 1.30 P.M.—King's College, 2 P.M.

SATURDAY....St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M.—Royal Free, 9 A.M. and 2 P.M.

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with Duplicate Copies.

AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

Mr. J. V. Solomon (Birmingham). 1. Next week. 2. Already arranged.

MEDICAL ETHICS.

A correspondent in Sussex states the following case, and asks our opinion:—Dr. A. is in attendance on Mrs. B. Her son, authorised by Mrs. B.'s husband, calls on Mr. C. for a prescription for treating Mrs. B. C. declines, on hearing that Dr. A. is in attendance, but suggests meeting Dr. A. in consultation. The mother states they will not leave any more of Dr. A.'s attendance; they are determined to have fresh aid. She goes to the house of Dr. A., and specifically declines further attendance on the part of Dr. A. The mother then returns to Mr. C., and informs him that, if he will not attend, she, the mother, must seek medical attendance elsewhere.

Does not Mr. C. act professionally in undertaking the case under these conditions?

In the circumstances stated, Mr. C. is perfectly justified in attending; it is, of course, understood that he has neither directly nor indirectly undermined confidence in Dr. A., nor procured his dismissal.

DR. GARDNER (Poznan).—The letter has been forwarded to the General Secretary, to whom all directions as to change of address and business communications should be sent. 2. We shall be happy to hear from our correspondent on the subjects mentioned, and wish him success.

THE WORCESTER INFIRMARY.

We mentioned last week that the Executive Committee of the Worcester Infirmary had declined to sign a resolution necessary if made to any alteration in their rules in respect to the manner in which the members of the honorary staff were to supply substitutes in the case of their unavoidable absence. We intimated, also, that the medical staff, not being contented to let matters remain on the present uncertain footing, had signified their intention of bringing the questions in dispute before the general body of the members. We have now received a full report of the meeting at which the Executive Committee came to the above-mentioned determination. From this we learn that a letter from the honorary medical staff was submitted to the Committee, in which they expressed their regret that the alterations which they had suggested had not met with a favourable reception, and intimated their intention of submitting a general meeting of the governors, in order to obtain their opinion on the matter. The rules proposed by the medical men were the following:

"1. The honorary staff shall be supplied by the in-patients at least twice every week, and whenever they shall receive any notice from the House-Surgeon of any emergency. They shall be absent on the alternate every Wednesday and Saturday, between the hours of eleven and twelve, for the purpose of receiving governors' letters and prescribing for the out-patients."

"2. In the case of the unavoidable absence of any one of the Honorary Medical Staff from the Infirmary at the time appointed for his attendance, he shall, if possible, secure the services of a colleague to act for him; but in the event of his being unable to do so, the House-Surgeon shall, at twelve o'clock, attend the in-patients, and the out-patients, waiting to see the physician or surgeon. But on every such occasion, the particulars of such absence, and the reason for failing to comply with the rules, shall be laid before the House-Committee at every meeting."

Surely these are reasonable enough. But the medical men were even willing to

make a further concession, and stated that they would be satisfied if the governors insisted only upon an authoritative declaration that the existing rules should always be construed with fairness and liberality, and with a due regard to the exigencies of private practice. The temperate and conciliatory character of these proposals is worthy of admiration, more particularly when we consider the manner in which Dr. Inglis has been treated. We quite agree with the Worcester Infirmary Chronicle that "it was a great mistake on the part of the Executive Committee not to have settled the thing on the easy terms held out." Had the Subcommittee but recommended, and the Executive Committee but sanctioned, the trivial alteration in the rules called for by the medical staff, the difference would have come to an end, and all would have been set right again. As it is, it is well that the matter is in train for reference to the governors; and we sincerely trust that, in one shape or the other, the requirements of the medical men will obtain their assent.

MR. DISSELANIUM.—It is stated that Dr. Cheyne weighed, in 1775, more than thirty stone; but afterwards, by changing his habits, and living on milk and vegetables, reduced himself to less than half that weight.

IMPROVED HYPODERMIC SYRINGE.

SIR.—I see, in the last number of the BRITISH MEDICAL JOURNAL, a notice of a new hypodermic syringe, supposed to be invented by Messrs. L. Blaise and Co., St. James's Street. With respect to this instrument, I beg to state that I exhibited precisely the same make syringe at the Norwich Meeting of the British Medical Association in 1874, and also exhibited it at the Edinburgh meeting this year. 35, St. James's Street, Borough. I am, sir, yours, etc. J. MILLIKIN.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than *Thursday*, twelve o'clock.

DR. CAMPBELL.—See *TAYLOR'S Medical Jurisprudence*. You will also find cases in Morgagni. In the letters of the first Earl of Malmesbury, published by Bentley, you will state, on page 100, that "General Amberg, aged 60, was married at 17, and died last Saturday evening, March 25th, 1770, of a lady between thirty and forty years, went to bed, and was dead by one o'clock."

LXX.—The late Lord St. Leonard's, when Lord Chancellor of Ireland, founded the Sugden Prize. It is awarded by the Irish College of Surgeons.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Bristol Daily Post; The Bristol Daily Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Glasgow Herald; The Sunderland Daily Echo; The Carnarvon and Denbigh Herald; The Manchester Guardian; The European Review; The Hackney and Kingsland Gazette; The Worcestershire Chronicle; The Birmingham Daily Post; The Brighton Daily News; The Sussex Daily News; The Glasgow Herald; The Cork Examiner; The Scotsman; The Cork Daily Herald; The Southampton Times and Hampshire Express; The Hampshire Advertiser; The Birmingham Morning News; The Chester Courant; The Metropolitan; The Live-Stock Journal; The Shield; The Grocer; The Shipping and Mercantile Gazette; The Advertiser; The Islington Gazette; The Penrith Observer; The Hastings and St. Leonard's Gazette; The Ilkley Free Press; The Leicester Daily Post; The York Herald, etc.

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Dr. Corfield, London; Mr. C. Rawson, London; Dr. F. O'Brien, Aberdeen; Dr. T. W. Blackshaw, Stockport; Dr. Norris, Birmingham; Dr. W. M. Campbell, Liverpool; Dr. Needham, Gloucester; Dr. E. T. Wilson, Cheltenham; Mr. T. Law Webb, Ironbridge; Our Birmingham Correspondent; M.R.C.S.; Dr. McKendrick, Edinburgh; Dr. Wolfe, Glasgow; Mr. Thurston, Ashford; Mr. E. R. Morgan, Neath; Dr. Myrtle, Harrogate; Dr. Jolly, Birmingham; Mr. Sharman Wood, Boston; The Secretary of the Accident Assurance Company; Dr. Cameron, Glasgow; Dr. Inglis, Worcester; Dr. Dowse, Highgate; Dr. Hardie, Manchester; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; Mr. T. M. Stone, London; The Registrar-General of England; Dr. G. M. Humphry, Cambridge; Dr. Taaffe, Brighton; Mr. W. A. Thomson, Southall; Dr. R. Shettle, Reading; the Secretary of the Glasgow Medico-Chirurgical Society; Mr. W. R. Smith, Winchester; Mr. S. M. Bradley, Manchester; Dr. James Gardner, Bognor; Dr. Johnson, Canterbury; Mr. J. V. Solomon, Birmingham; Mr. W. P. Blanchard, London; Mr. Francis Hird, London; Mr. T. F. Chavasse, Birmingham; Dr. Denton, Bridlington; Dr. Dawson, Hunmanby; Mr. F. H. Elliott, Scarborough; Dr. T. Trollope, St. Leonard's; Mr. J. Milliken, London; Mr. S. Coates, Ashton-under-Lyne; Mr. R. H. Gilbert, Glasgow; Dr. C. Holman, Reigate; Mr. W. Eddowes, Shrewsbury; Dr. Smith, Pershore; Mr. W. H. Jalland, York; Mr. H. Cotton, Chichester; Dr. J. Haddon, Manchester; Mr. R. Chandler, Tewkesbury; Mr. Leech, Woolpit; Dr. E. Norton, Kimbolton; Dr. J. S. Muschet, Stirling; Mr. W. Carey, Manchester; Dr. A. Buchanan, Glasgow; Mr. H. J. Fausset, Tamworth; Dr. Bryan, Northampton; Mr. J. Williams, Bethesda; Mr. S. Snell, Sheffield; Mr. C. S. Barter, Bath; Mr. H. Greenwood, Liverpool; Mr. E. J. Parrot, Hayes; Dr. C. Kelly, Worthing; Mr. T. A. Roberts, Boston; Mr. G. Etheridge, Halifax; Dr. Spender, Bath; Mr. Husband, York; Dr. T. Britton, Halifax; Mr. C. Abbott, Liverpool; Dr. S. Holdsworth, Wakefield; Dr. M. Masters, London; Dr. R. Lord, Crewe; Mr. Johnson, Stoke-under-Trent; Mr. J. P. Smith, Hay; Mr. J. F. Smith, Hay; Mr. T. N. Smith, Hay; Dr. R. Munro, Kilmarnock; Mr. S. S. D. Wells, Plymouth; Mr. J. B. Walker, Golcar; Dr. H. L. Snow, London; Mr. G. G. Bothwell, Worcester; Mr. F. E. Manby, Wolverhampton; Mr. T. Cooke, Ashton-under-Lyne; Mr. G. Rigden, Canterbury; Mr. W. Snow, Plymouth; Mr. H. B. White, Mansfield; Dr. W. Stirling, Edinburgh; etc.

A LECTURE

ON

THE RELATION BETWEEN CROUP AND DIPHThERIA.

By GEORGE JOHNSON, M.D., F.R.S.,

Physician to King's College Hospital; Professor of Medicine in King's College.

GENTLEMEN,—Some of you probably will remember that, at the beginning of the year 1870, the relation between croup and diphtheria formed the subject of discussion in the BRITISH MEDICAL JOURNAL—a discussion which had its origin in a paper which I there published on the Morbid Anatomy of Croup and Diphtheria. In that paper, I expressed my belief that, while most English writers on croup had confounded together two essentially distinct diseases—namely, simple catarrhal laryngitis and the specific diphtheritic membranous laryngitis—the true doctrine is that of the French pathologists, who teach that membranous croup is always diphtheritic, and that laryngitis from exposure to cold never results in the formation of false membrane.

At the commencement of the present year, the *Lancet* published simultaneously a lecture by Sir William Jenner on Croup and the Diseases that resemble it, and a paper of mine on Certain Points relating to the Etiology, Pathology, and Treatment of Diphtheria. In this paper, I reiterated my former statement that membranous croup is no other than laryngeal diphtheria; and Sir William Jenner stated that his opinion had undergone some modification. He said: "I am inclined now to the belief that there is no such disease as idiopathic simple membranous inflammation of the larynx. I say I am inclined to that belief. I am not sure that it is true; but, as I formerly thought that the weight of evidence was in favour of their non-identity, I now incline, from my further experience, to think that the two diseases are really identical; that the so-called croup" (that is, membranous croup) "is really diphtheria". The simultaneous statement of this pathological doctrine by Sir William Jenner and myself appears to have excited considerable interest, and has given rise to a prolonged discussion in the columns of the *Lancet*. Latterly, too, several communications on the same interesting subject have appeared in the BRITISH MEDICAL JOURNAL. I propose now to set forth briefly the main facts relating to this subject, which appear to me to be established almost beyond controversy.

In the first place, then, it is an unquestionable fact, that, although the name *diphtheria* is a modern invention of Bretonneau, the disease which we now recognise by that appropriate designation has existed for centuries. Bretonneau, in his first memoir on *Diphtheria*, translated by the New Sydenham Society, gives an interesting historical account of the disease, and shows that Aretæus describes it, and speaks of it as being so common in Egypt and Syria, that it had received the name of the Egyptian or Syriac ulcer. Two or three centuries later, the same disease is described by Aëtius; but, to come nearer to our own time, ever since the end of the sixteenth century, the disease now recognised as diphtheria has shown itself frequently in Spain, Italy, France, England, Sweden, and in America. Dr. John Starr, in the *Philosophical Transactions* (1749-50), describes under the name of *morbus strangulatorius* a disease which he says "has within a few years reigned in several parts of Cornwall with great severity". In his description we recognise the unmistakable features of diphtheria. He speaks of a "white body seen on the palate and tonsils", and gives a woodcut illustration of a membranous cast of the larynx, trachea, and primary bronchi, which was expectorated by one of his patients. He also describes the formation of a white membrane on blistered cutaneous surfaces.

Huxham, in his *Dissertation on the Malignant Ulcerous Sore-throat* (3rd ed., 1759), evidently confounds together the two diseases scarlet fever and diphtheria. We recognise diphtheria in his description of ash-coloured spots on the tonsils, uvula, palate, and pharynx, in the noisy breathing resulting from the extension of the disease to the air-passages, and in the expectoration of portions of membrane from the windpipe. He speaks of the discharge from the nostrils as being so acrid that it excoriated the lips and hands of the patients, and the

fingers and arms of the nurses. He believes that the "rheum" from the throat and nostrils, being swallowed, caused griping pains, diarrhoea, and excoriations of the anus and buttocks. While passing into the air-passages, "the windpipe itself was sometimes much corroded by it, and pieces of its internal membrane were spit up".

In the first volume of the *American Philosophical Transactions*, originally published in 1771, Dr. Samuel Bard gives an admirable description of diphtheria, under the name of *angina suffocativa, or sore-throat distemper*, as it appeared at New York. He describes the membrane on the tonsils as being frequently, but not invariably, present. He speaks of the membrane in the air-passages as being "preternaturally thickened mucus", without much inflammation; and he contrasts this with a case in which, death having resulted from "a very violent inflammation of the internal membrane of the trachea, there was no such mucous lining to be discovered upon it". He describes the formation of membranes on the abraded skin; and he recognises the infectiousness of the disease, but rather, as he says, "from the breath of the infected persons", than from "any generally prevailing disposition of the air". And this, he says, explains the fact that a whole family may suffer from the disease while the next-door neighbours escape. He speaks of one family in which seven cases occurred, three of which were fatal.

In the year 1765, Dr. Home published his treatise on the *Nature, Cause, and Cure of Croup*. The word "croup" had long been in popular use in Scotland to designate a disease, or a group of diseases, attended with the symptom of noisy breathing. Dr. Home was the first to describe a membrane lining the air-passages as the essential anatomical character of croup. A careful study of his cases clearly shows that under the name of croup he included two diseases essentially different; namely, simple laryngitis from cold, and the specific disease diphtheria. Most of the cases that recovered belonged to the former class, while the fatal cases were diphtheritic. His two first fatal cases of croup with false membrane occurred in a brother and a sister aged respectively seven and five years, who died within a few days of each other. The fact of two fatal cases occurring thus in quick succession would alone excite a suspicion that the disease was diphtheria. In the second case, there was "purulent" expectoration; "the amygdalæ were a little swelled and covered with mucus"; and after death, besides the false membrane in the trachea, the back of the tongue was covered with mucus, and "all about the glottis was covered with tough viscid mucus". It can scarcely be doubted that these cases of so-called croup were really diphtheritic. Cullen, in his *First Lines of the Practice of Physic*, 4th ed., 1784, in describing *cynanche trachealis*, refers to Home as "the first who has given any distinct account of it"; and, after describing the purulent and sometimes membranous expectoration, says that, "when the internal fauces are viewed, they are sometimes without any appearance of inflammation, but frequently a redness and even swelling appear; and sometimes in the fauces there is an appearance of matter like to that rejected by coughing". Under the head of *cynanche maligna*, Cullen evidently includes scarlatina anginosa and diphtheria. The latter cases are indicated by the appearance of white or ash-coloured spots on the fauces, and by the fact that "the larynx and trachea are often affected in the same manner as in the *cynanche trachealis*"; as a consequence of which, "the *cynanche maligna* often proves fatal by such a sudden suffocation as happens in the proper *cynanche trachealis*". But he adds: "There is reason to suspect that dissectors have not always properly distinguished between the two diseases."

Mr. Henry Rumsey, in "An Account of the Croup as it appeared in the Town and Neighbourhood of Chesham, in Buckinghamshire, in the years 1793 and 1794" (*Med.-Chir. Trans.*, vol. ii), says that "frequently large films of a white substance were formed on the tonsils", evidently what we now call a diphtheritic exudation; and he describes "a film or membranous substance lining the cavity of the trachea". Mr. Rumsey, after referring to the opinion of Drs. Home and Cullen, that croup is an inflammatory disease, makes the following remarkable comment. "It appears to me that the croup is an inflammation of its own kind. If it consisted in common inflammation, we might expect to find the same appearances (that is, the same kind of concretion on the surface of the trachea) every day, as its mucous membrane is so frequently the subject of inflammation attended with an increased secretion. The matter, however, of which this substance is formed, possesses different properties from those of the mucus which is thrown out upon the membrane of the nose or of the trachea in common catarrhal affections." In these remarks of Mr. Rumsey, we have the earliest intimation of the specific character of that inflammation of the larynx and trachea which results in the formation of false membrane, and of the essential difference between that and what he calls common inflammation.

Dr. Cheyne's treatise on the *Pathology of the Membrane of the Larynx and Bronchi* was published in 1800. In describing croup, he says: "I have seen children so affected that I at first imagined they were suffering under the second stage of croup; but, upon examination, I discovered sloughs on the tonsils and uvula. The cough, voice, and breathing were those of the second stage of croup." Dr. Cheyne doubts whether these were cases of "true croup"; but it can scarcely be doubted that they were cases of diphtheritic croup. Dr. Cheyne mentions two cases in which croup occurred as a complication of scarlet fever. In a child, there was croupy cough and breathing, and "the fauces were sloughy". In this case, no examination was made after death; but, in the case of a soldier who died, "the trachea was found lined by a membrane as in croup". Unquestionably, these were cases of diphtheria associated with scarlet fever.

I have shown you that our English writers on croup, from Home and Cullen downwards, unquestionably met with cases of membranous exudation on the fauces and air-passages which could have been no other than the disease which we now recognise as diphtheria; but until the publication of Bretonneau's memoirs on *Diphtheria*, if we except the brief statement which I just now quoted from Rumsey, no one had pointed out the essential distinction between the specific diphtheritic inflammation of the throat and air-passages, with its resulting membranous exudation, and simple catarrhal inflammation of the same structures.

Most writers on croup before the time of Bretonneau, and many writers since, have confounded two essentially distinct diseases; namely, a specific diphtheritic laryngo-tracheitis, and simple catarrhal inflammation of the air-passages. Bretonneau, Trousseau, Guersant, and all the leading French pathologists, agree in defining true croup to be that form of the disease which is attended with a membranous exudation. They also agree that this is a specific product of the diphtheritic poison; while "false croup", or, as they call it, "stridulous laryngitis", is a catarrhal inflammation excited by cold, and not resulting in the formation of a coherent membrane. I believe this pathology to be correct; but it is unfortunate that the term croup should have been diverted from its original significance of a croaking or crowing noise, to express an anatomical condition. It is unquestionable, that this attempt to restrict the application of the term croup has been a source of confusion, especially to English practitioners, who, having been accustomed to think of croup as an inflammatory disease the result of exposure to cold, often fail to distinguish between this simple inflammatory croup and the "true croup" of the French.

It is evident that most cases of membranous croup have been and are diphtheritic, and the only question that remains for consideration is this: Is there a form of membranous croup which is not diphtheritic? It is possible that there may be more than one form or modification of morbid poison which may excite a membranous exudation in the air-passages. Of this, however, we have no proof; but the evidence is very weighty against the opinion entertained by some that exposure to cold alone may excite a membranous inflammation. Our experience of catarrhal inflammation of the mucous membrane of the air-passages is very great. We see it constantly under the forms of laryngo-tracheitis and bronchitis; and the product of this inflammation, at every period of life from infancy to old age, is the same—a muco-purulent secretion, and not a coherent false membrane.

On the other hand, we meet with numerous cases of diphtheritic inflammation affecting the nares, fauces, and air-passages, with the formation of a more or less coherent membranous exudation; this product being, as Mr. Rumsey said eighty years ago, entirely different from that of ordinary catarrhal inflammation.

It is, then, unquestionable that, in the vast majority of cases, a membranous exudation in the air-passages is the specific product of diphtheria. It is equally certain that, as a rule, catarrhal inflammation the result of cold, although intense enough to destroy life, as it does in very numerous instances, is attended with no such membranous exudation. The arguments which are sometimes put forth in support of the proposition that there is a form of membranous croup which is not diphtheritic, are quite inconclusive. It is admitted by the best authorities that the morbid anatomy of membranous croup is identical with that of diphtheria. The infiltration of the mucous membrane, by some supposed to be characteristic of diphtheria, may exist in the fauces and larynx, while in the trachea and bronchi of the same subject there is an unadherent so-called croupous exudation on the surface. It is certain that the absence of exudation on the fauces will not prove the croup to be non-diphtheritic; for the diphtheritic process may begin in the larynx, or, what is more common, the exudation which first occurred on the fauces may become detached, while the disease is extending downwards into the air-passages. In some cases, the posterior surface of the soft palate is covered by exudation, while none is visible on the

anterior surface. I saw two sisters, aged respectively nine and six years, who were taken ill simultaneously. The younger child had a diphtheritic patch on one tonsil, which went no further, and she was soon well; the other had a croupy cough and breathing, but no visible exudation on the fauces, and she quickly died from obstructed breathing. There was no *post mortem* examination; but there could be no question that the case was one of laryngeal diphtheria without exudation on the fauces. Mr. Lattey of Southam mentions a case (*BRIT. MED. JOUR.*, May 29th, 1875) in which a pellicle appeared on the tonsils on the second day, and separated on the third, when, a day or two afterwards, croup symptoms occurred; so that, if this case had been first seen at that period, it would have been taken for a case of croup without exudation on the fauces.

It is sometimes said that, whereas membranous croup is a sthenic disease, diphtheria is asthenic; but it is notorious that, in many cases of undoubted diphtheria, there is a remarkable absence of constitutional symptoms until the larynx is invaded. Then, although diphtheria belongs to the class of epidemic and contagious diseases, it often occurs sporadically, and shows no disposition to spread from the sick to the healthy.

It has been urged, as an argument against the identity of membranous croup with laryngeal diphtheria, that the older writers on croup make no mention of the paralytic sequelæ which occur in some diphtheritic cases. In reply to this argument, I would remark first, that, since laryngeal diphtheria is usually fatal, it rarely happens that the sufferers from this form of disease live long enough to develop the paralytic sequelæ; and, secondly, it is remarkable that in none of Bretonneau's elaborate memoirs on diphtheria is there any reference to these paralytic symptoms, which had escaped the notice of that acute observer. We see only what we have been educated to observe. To deny the identity of laryngeal diphtheria with membranous croup because no reference in past times was made to paralytic sequelæ, would be as unreasonable as to doubt their identity because the frequent coexistence of albuminuria was never mentioned until Dr. Wade pointed out the fact, and so taught us to look for it.

One remarkable fact in the history of diphtheria is, that it often occurs as a complication of other diseases. Thus it may coexist with scarlet fever, or with measles; and it is probable that a common catarrh may act as a concurring cause of the specific diphtheritic process. As an abraded skin may become inoculated by the diphtheritic poison, so may the throat when abraded by a simple catarrhal inflammation. Now, with reference to cases of this kind, I wish to impress upon you a point of great practical importance. Whenever you meet with a case of membranous croup which has been supposed to be a result of mere exposure to cold, make careful inquiry for any possible source of infection from a similar case; and, failing this, make a rigid search for insanitary conditions in the house where the disease originated. You must not be content with simply asking whether the drains and the water-supply are such as they should be; but you must search for insanitary conditions with the certain conviction that they exist; and, unless your experience is different from mine, you will find that the cases of supposed membranous croup from exposure to cold resolve themselves into cases of diphtheria the result of poisoning by foul air or contaminated water; for diphtheria in all its forms and varieties is as certainly as typhoid fever a disease of filth-origin. If ever it should be found that membranous laryngitis occurs from simple exposure to cold, without evidence of infection or of septic poisoning, I shall abandon the belief, which at present I hold firmly, that membranous croup and laryngeal diphtheria are one and the same disease.

In future, if we would avoid confusion in the use of the word croup, we must associate it with a distinctive prefix. There are three distinct diseases to which the term croup has been applied generically.

1. Spasmodic croup; *syn.*, laryngismus stridulus, crowing inspiration, child-crowing, thymic asthma. This is a pure neurosis, and is often associated with infantile convulsions. It is the "false croup" of some English writers.

2. Inflammatory croup; *syn.*, catarrhal laryngitis, the "stridulous laryngitis" or "false croup" of French writers. This disease is a catarrhal inflammation of the larynx and trachea, excited by exposure to cold, often complicated with laryngeal spasm, usually recurring again and again in the same subject in successive cold seasons, rarely fatal, and never associated with the formation of a coherent false membrane in the air-passages.

3. Diphtheritic croup; *syn.*, laryngeal diphtheria, membranous laryngitis, membranous croup, the "true croup" of French pathologists; a specific contagious disease, which may be either sporadic or epidemic, and which may exist alone or as a complication of other diseases, as, for example, measles and scarlet fever. This form of disease is one of the most fatal complications of diphtheria.

ON ACCIDENTAL DEATHS IN THE NAVY AND ARMY.*

By W. R. E. SMART, M.D., C.B., K.L.H.,
Inspector-General of Hospitals and Fleets.

IN dealing with the subject of deaths by accident or by negligence occurring in the navy and army, it is fortunate to have a reliable standard from civil life through an equally long period in the Registrar-General's Reports, Annual Summary, 1874, Table 9, giving the causes of deaths registered in London in each of the thirteen years 1862-1874.

The mean population is approximated by the half of the sum of the censuses of 1861 and 1871, yielding 3,030,000 souls, which is here adopted as the divisor of the total of deaths under the various headings, after their division by 13, the number of years of the entire period.

The data for the services are abstracted from the Sanitary Returns published annually by authority; and, in dealing with these, the same rule has been observed as with the Report of the Registrar-General, the period of thirteen years being 1860-1872. In the Navy Returns for 1870 there is an exceptional calamity that augments the ratios of death by drowning—the foundering of H.M.S. *Captain* with 418 picked officers and men; but, in comparing the risks to life in the sister services, I have preferred to present this apart from ordinary risks.

It is to be regretted that the sanitary returns are not drawn up with uniformity of, at least, the "total results", as that would render comparisons less difficult than they now are. The specialties of the services would be treated apart, as at present; and with respect to these, I consider each service would derive advantage by copying some of the forms used by the other.

The gross totals, and the annual means of deaths from all causes, accidental or by negligence, drawn from these various sources, together with the relative ratios, are :

	Average Population.	ACCIDENTAL DEATHS.				
		Total in 13 yrs.	Annual mean.	Annual ratio.	Including the Captain. 13 yrs.	Mean. Ratio.
Metropolitans, of all ages	3,030,000	27,868	2143	.707	—	—
Army, 17 to 45 yrs..	176,100	2290	176	1.	—	—
Navy, " ..	52,700	2098	161	3.05	2576	198 3.75

A cursory examination of this table elicits a very great inequality in the risks incurred in the navy above those of the army in generally peaceful periods, when the latter do not exceed those of the metropolis more than 30 per cent. This percentage would be reduced if data were at hand for the classification of the metropolitan deaths by violence according to ages, since we are only able to show the gross statistics, including all ages, from the overlaid infant to the octogenarian run over by a careless driver—extremes of age in which deaths by violence are at their minimum—which reduces the ratios of working age, when they are at their maximum, in the statistics thus presented in gross; so that it may be assumed that, by classification of age-periods, the same ages in civil life would offer as high a ratio as those of the army. It is seen also that the ratio of violent deaths in the navy exceeds that of the army in the proportion of 1 to 3 per 1,000 men; so that, whatever may be found to be the ratios of deaths from climatic causes and from ordinary diseases, it is clear that, apart from them, the special dangers arising from calling are higher in naval than in military life. Although the naval ratios on this head are high comparatively with those of life ashore in a great city and in barracks and camps, yet there are grounds for the belief that they are still lower than those of the mercantile navy, concerning which full and reliable statistics are still wanting.

The second stage in this inquiry will be the estimating of the various elements of danger which, combined, render the sea-service so much more destructive by accidents than the land-service; to obtain which satisfactorily, the relative conditions of health, sickness, and mortality of the two services must be ascertained. Then we must proceed to examine the ratios of deaths by accidents of every description; and, finally, we may discriminate the same under the headings: in battle, or in face of an enemy; by drowning, without proof of suicidal intention; from all other kinds of accidental violence: the first being the specialty of the fighting services, the second being appropriate to sea-

life, and the last being the ground on which the sister services might be expected to stand somewhat on an equality.

The yearly averages relative to diseases and injury are, in round numbers, as follows.

Averages of 13 Years.	Navy.	Deaths.	Army.	Deaths.
Mean strength	52,700	—	176,100	—
Admissions, total	70,050	—	201,393	—
Deaths, total	—	615*	—	2049
Admissions for sickness	54,500	—	184,900	—
Deaths by sickness	—	445	—	2698
Admission for injuries	15,550	—	16,470	—
Deaths by injuries	—	161	—	175

By examining the ratios per 1,000 of these several elements, a fair estimate may be formed of the comparative sanitary conditions and the causes of mortality existing in the fighting services of the country.

	Navy.		Army.	
	Admissions.	Deaths.	Admissions.	Deaths.
Group I. Admissions, total, to mean strength	1329	11.6	1143	16.6
" " sick, "	1034	5.4	1050	5.3
" " hurt, "	215	3.05	93	1.
" " hurt, to admissions, sick	205	8.16	89.7	14.7
Group II. Deaths, total, to mean strength	11.6	15.3	16.6	16.6
" " diseases, "	5.4	15.3	5.3	16.6
" " injuries, "	3.05	1.	1.	16.6
" " diseases, to admissions sick	8.16	14.7	14.7	16.6
" " injuries, to admissions hurt	10.35	10.68	10.68	16.6
" " injuries, to deaths by disease	371.	65.02	65.02	16.6
" " diseases, to total deaths	721.	902.	902.	16.6
" " injuries, to total deaths	262.	59.	59.	16.6
" " in battle, to mean strength	16	137	137	16.6
" " by drowning, "	1.72	4.6	4.6	16.6
" " all other injuries, "	1.16	4.5	4.5	16.6

The first group of these ratios per 1,000 proves that more men are taken under treatment in the navy than in the army; that the admissions for diseases are nearly alike in both services, while the admissions for injuries are more than thrice as numerous in the navy than in the army. Equality of disease and inequality of "hurts" are the prominent characteristics; and it remains to be shown whether these indicate similar relations in the mortality under these general heads—*i. e.*, whether the death-rates by diseases are equal where the admissions for treatment of disease are equal; and whether the increased ratio of admissions for hurts in the navy carries a correspondingly high death-rate.

The second group affords the reply to these questions, where it is shown, on the very threshold, that the average total mortality in the army is about 50 per cent. higher than that in the navy, consisting in a much higher death-rate by disease in the former than in the latter service, which much more than counterbalances the higher death-rate by accidents in the latter; the deaths by diseases alone being 15.3 per 1000 in the army, against 11.45 in the navy by diseases and accidents combined, or as 31 to 23. This is a very strongly marked inequality, that indicates the greater salubrity of the conditions prevailing in ships over those of garrisons and camps in every part of the world, which may be assigned to the diminished force of climatic causes afloat, and to the decreased liability to zymotic and epidemic diseases which seamen enjoy relatively to soldiers.

Collating the data concerning disease and its mortality, we find :

	Mean Strength.	Admitted.	Ratios per 1000.	DEATH RATIOS PER 1000.		
				Dead.	To Mean Strength.	To Admitted.
Navy	52,700	54,500	1034	445	8.4	8.16
Army	176,100	184,900	1050	2698	15.3	14.7

The reading of which is this, that in the navy there are 84 deaths to each 10,000 men, and 81 deaths in every 10,000 treated for diseases medical and surgical; and that in the army there are 153 and 147 deaths respectively in the same conditions. It follows that the navy is, so far as the Sanitary Reports instruct us, a far healthier service than the army; but these reports afford no data beyond the proximate mortality resulting from diseases contracted in the services, as they do not trace out the history of the *invalids* who are discharged on account of disability from diseases attributable to or contracted in the services, without which, through at least three years after their discharge, there cannot be any accurate estimate of the mortality by disease dependent on calling, as applied to seamen and soldiers.

Naval returns prove that in the period of thirteen years, with which this inquiry interests itself, the annual average of *invalids* amounted to

* The difference between the "total deaths" and the sum of the "deaths by sickness" and "deaths by injuries" represents "deaths by suicide", etc., which are not classed with "accidents".

* Read before the Public Medicine Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

35 per 1,000, concerning whom there are no published data to show how many have returned to the service with restored health, how many have died after their discharge from the diseases with which they were invalided, nor how many have been permanently broken down in health so as to become pensioners. Such data are essentially necessary to any just conclusions as to the pathological results of the seaman's calling, relatively to other callings, which becomes the more evident in consideration of the fact that a large proportion of the total invalids are on account of such diseases as phthisis, diseases of the heart and aneurisms, Bright's disease, and climatic diseases of the liver, dysentery, and the sequelæ of fevers. So far as is known, similar conditions surround the question of results among invalids from the army.

Thus the statistics of mortality in the services are to be accepted as the exponent of the direct results of disease, attacking previously healthy individuals and terminating fatally between the time of attack and that of arrival in England of such as were invalided, of whom a certain proportion may have succumbed soon after their return home; and, this return being effected more quickly by seamen than by soldiers, it follows that more invalided soldiers than sailors die on foreign stations, thus increasing the death-rate by disease of the army disproportionately to that of the navy while away from England.

Passing on to the consideration of deaths from accidental causes, we find that, as the duty of soldiers exposes them to higher ratios of death by disease, so that of sailors involves greater risks of destruction by violence, which is the special danger of their calling; and it is found that deaths by accidents are very rare among troops taking passage in H.M. transports, falling in much larger proportion among the outward bound than among others—for it is the sailor's work that kills.

There is in all minds an intuitive conception of this fact, in reflection on the characteristics of the seaman's vocation; performing duties that demand rapidity of motion on an unstable standing-place, where he is constantly dealing with unusually heavy bodies, or aloft, where he must devote his attention and his prehensile power to his personal safety in a degree always diminishing with the increasingly less favourable conditions of weather that of themselves render his position less safe. The terrible nature of the accidents that befall him is well displayed in the quotation of some of the injuries, prognosed as fatal on first inspection, if he have escaped annihilation by the stroke; among them are enumerated:

Multiple injuries by crushing, etc.	59
Fractures of vertebræ and pelvis	74
Fractures of skull, often complicated with other injuries equally fatal	429
Injuries of brain, cord, and viscera	49

Presenting a total of 609 in 52,000 seamen, against 474 for the army distributed among a body of men counting 176,000 of average strength, whose analogous cases of fatal injuries are thus classed:

Multiple injuries	32
Fractures and luxations	269
Contusions	48
Injuries of brain, cord, and viscera	125

These facts alone show the accumulated dangers by accidents, to which seamen are so much more subject than soldiers, that they may be regarded as special risks of the naval service.

With this light thrown in advance on the question, the force of the tabulated ratios may be the more readily understood; viz., that deaths by accidental violence are as 3 in the navy to 1 in the army, which may seem to depend on the greater number of accidents that occur in the former than in the latter service, standing as 295 to 93 of admissions for hurts; so that, with thrice as many admissions, there are thrice as many deaths; although, from difference of relative position and other reasons too numerous to mention here, it is credible that the admissions for minor hurts are relatively far more numerous than in the army. On the same ground, it must be inferred that, were the injuries admitted in the navy for treatment reducible to a parallel severity with those admitted in the army, the ratio of mortality to each 1,000 admitted would not be so low as 10.35 in 295 among sailors, against 10.68 in 93 among soldiers. For, deduct the excess of slight injuries from the navy admissions, and a higher ratio of deaths to the reduced number admitted, will at once appear.

Collating the data concerning accidental deaths, we find:

	Mean Strength	Admitted	Ratios per 1,000	DEATH-RATIOS PER 1,000.		
				Dead.	To Mean Strength.	To Admitted.
Navy.....	52,799	15,880	29.5	161	3.05	10.35
Army.....	176,100	16,479	9.3	176	1.00	10.68

The reading of this is, that in the navy there are by casualties 3 deaths, and in the army 1 death, to every 1,000 men; and that the proportion of deaths to each 1,000 of accidents admitted are nearly alike, being as 10.35 in the navy to 10.68 in the army. At first sight this approximation might seem fallacious, and the opinion would receive support from other data in Group II, that out of every 1,000 deaths there succumb by casualties 262 in the navy to 59 in the army; but it is a complexity that clears away on a correct appreciation of the internal modifications proper to the service in their immediate and prospective conditions.

In whatever light it may be viewed, it will be admitted that a contrast so strong must originate in differentiating causes, influencing the principles of action of such large bodies of men. Every allowance being made for the impulse to run to the surgeon at once on the receipt of any injury, which declines with the shock and is therefore more frequently obeyed where the surgeon is always at hand, as on shipboard, than in barracks or camps where he may not be equally accessible; and also for the desire on the part of the surgeon to obviate inflammatory aggravation of slight wounds, which was formerly a common consequence, there remains a large margin for further consideration. Perhaps there may have been with soldiers a diffidence to being admitted to hospital, which, until 1874, incurred stoppage of pay: this feeling has had no weight with naval seamen, always free from such stoppage. Experience also teaches the seaman that the final consideration he may claim for disabilities arising from injuries may in no small degree depend on the early date of the record of the same made by the medical officer, which may influence the amount, if it do not deprive him, of a Greenwich Hospital pension. Besides this, the more provident of them become, while in health, beneficiary members of lodges and clubs ashore, and not unfrequently in ships, for the relief of those who are discharged on account of injuries: this has been a guiding principle of their community since the days of Elizabeth, when they voluntarily submitted to a deduction from their pay to institute the "Chest of Chatham", to which alone they could look for aid under such circumstances. In these respects, notwithstanding a general reputation for improvidence, the seamen of our day have not degenerated from their predecessors, as is clearly shown in the present agitation among them to create a fund, to be placed under control of the Government, for the benefit of their widows and orphans or fatherless children. It is to these principles of action we may look, I think, for an explanation of the reasons why the sick-list of the navy presents so marked a feature in contrast with that of the army as its excess in the actual number of admissions for hurts, as well as the disproportion between the numbers admitted for treatment and the proportion of fatal cases recorded, which, under the opposite conditions, might become far closer, as it is in the army. There is no other inference, in face of the great preponderance shown in the relative numbers of the directly fatal injuries on the side of the navy; because from that there must be a gradually descending scale of severity, and not a sudden descent from those of the utmost gravity to those of minor importance, free from every danger of a fatal result. But, with every just allowance on these grounds, even to the extent of one-half the admissions for hurts, there remains so wide a difference as to leave the inference that, from this habitual prudence of seamen in seeking treatment for every injury, however trivial, and from the extreme caution of their medical officers, the death-rate by injury is diminished in the naval statistics, not only in favour of the sufferers, but beneficially to the service itself.

The next and final point I have proposed for examination is that of the ratios of disease under the headings of "Battle, Drowning, and other Violence". With regard to these, we discover that under the first the loss of life is truly insignificant under ordinary service, free from great wars with civilised nations, although not without such hostile events as wars in China, New Zealand, and Abyssinia, in all of which the army prestige has sometimes stood as if alone worthy of national consideration, the services of the navy being subordinated to it in general estimation. Even with this drawback, it is found, statistically, that the actual loss of life in face of an enemy stands at a higher point in the navy than in the army. On each of those occasions sailors have formed an integral portion of the force employed; for, if the enemy have been unable to contest with them on their own element, they have been ever ready to co-operate with the army on shore to gain the object of the campaign, to which the history of our Naval Brigades brings ample testimony. In addition to this, boats' crews are sometimes, when employed on barbarous coasts, brought into conflict with the natives, thus undergoing considerable losses in battle, without the formal declarations necessary to our ideas of "war", although not the less so in its realities.

With reference to the ratios of "drowned"—1.72 per 1,000 in the navy, against .426 in the army—it may be said that, considering the

intrinsic natures of the services, it may well be a source of marvel and admiration that there should be only four deaths in the navy against one in the army; but out of this the question arises, why the army ratio should stand so high as it does relatively to that where lives are passed on the sea. But, if the appalling calamity that fell on 478 persons on board the *Captain* were superadded, the naval ratio would be raised from 1.72 to 2.46 per 1,000. For the reasons already given, the *Captain* has been excluded from the ordinary ratios.

Lastly, the deaths by accident from "all other causes combined" are as 1.16 to .435 per 1,000, or nearly as 11 to 4. This ratio, together with that of drowning, are the criteria which establish beyond question the greater risks of deaths from accidental causes to which seamen are exposed beyond the men of the army; and the reasons for its comparative excess are to be found in the lists of primarily fatal injuries given prefatory to the estimation of the ratios in both services.

Notwithstanding this proved inequality of the navy on the ground of the greater mortality by accidental violence, it is an irrefutable fact, that the causes of disease to which the army is exposed beyond the navy render service in it more inimical to life, or more subject to death-causes, than service in the navy, in the proportion of 17 to 12. Having in view the main features of this disparity, it may be hoped that, by increasing our efforts to mitigate in the respective services the causes of increased mortality peculiar to each, very much may still be done to render the lives of seamen and soldiers more secure than they are at present. Enforced attention to sanitary measures in the army and navy has already produced very marked improvement in their health-conditions, and a decrease of the mortality in both services, as shown by comparison of the later annual statistics with the average ratios of the past, affording us the highest encouragement to rely on statistics, and to persevere in the direction they point out. Greater care than ever before is devoted to the ventilation of ships, and to the diet and regimen of their crews, which is quite equalled in the army by improvements in barracks and in the selection of healthy sites for camps, to which we owe the decrease of death-by-disease rates which marks our era, in which it is deeply felt by all authorities that where by careful treatment we may, as practitioners, save hundreds, the enforced laws of hygiene will protect thousands from destructive diseases; and we are not forbidden to hope that, with reference to the casualties which present so large a summary of deaths by violence, there is a margin within the inevitable in which the lives of men might, by equal precautions adapted to that end, be rendered safe. Seamanship, like railway travelling, will ever exact an indefinite amount of sacrifice of life; and so imbued is the public mind with a sense of that necessity, that nothing short of a great wreck or a railway disaster creates any emotion. It must, however, have fallen to the lot of most dwellers on the depths of the ocean to see life needlessly sacrificed, where there is no coroner's law to investigate the circumstances and to assign blame where due. Where obedience is the fundamental principle, guiding men implicitly by the orders of their officers, it behoves those who command to dwell on these facts, so that their rule of action shall bear always the impress of foresight to prevent accidents, so far as may be, in a service where unusual risks are inevitable, but at the same time mitigable, as is proved by their greater frequency in some ships than in others. In the streets of cities, the rarity of fatal accidents depends much on the vigilance of police; and likewise it is not beyond probability that their frequency might be reduced in the navy, if special tabulated returns, not less minute in details than the returns of punishments, were required from every ship in commission.

Hygiene is the science of saving life by obviating the causes of death. As applied to diseases, the public services afford ample proof of its efficacy, and there seems to be no reason why the prevention of accidents should not be deemed worthy of being included within its legitimate bounds; nor why the combatant officers of both services should not be instructed in this science in their schools and colleges; for it is one which, from the earliest records of the military art, was deemed essential to the perfection of a great commander.

Concerning it, we read an interesting discussion of its merits and necessity in the first book of the *Institution of Cyrus*, as held between that mighty king, when a prince, and his uncle, to this effect. Cyrus speaks thus: "With respect to health, having heard and observed that cities wanting in health get physicians, and that generals, for the sake of their men, take physicians with them, so, when I was placed in command, I at once had regard to this point; and I believe that I have in my army men who are very skilful in that art." To this Cyaxares replied, "But these men are only like the patchers of worn garments, for it is only when men are sick that physicians are had recourse to; but your care of the health of your troops should be of a nobler nature—to prevent your army from becoming sickly, is what you, as a commander, ought to attend to." Then follow sanitary maxims, the

root of all army hygiene, imparted by the veteran to the younger soldier.

Thus we recognise that, from the earliest epochs of military history, hygiene has been regarded by the most enlightened conquerors as a study demanding their personal attention.

We may trace further back, by the aid of sacred history, the same principle of action in the Book of Leviticus, which contains precepts that have stood the test of three thousand years, embodying the experience of forty years of camp life, and there the execution was placed under the ægis of religion by an inspired leader and lawgiver.

In the modern history of civilised states, this important duty has become relegated from the limits of strategy and religion to those of medicine, with great advantage to mankind.

Whilst we recognise the change as one adapted to the law of the fitness of social affairs, and may glory in this, that the practitioners of medicine, who were once looked at as like to the menders of ragged uniforms, have become the proper administrators of that which has been regarded as a very noble and divine office and function, we can yet safely admit that our own efficiency in it is proportioned to the enlightenment in the same path of those under whom we are called to serve, and therefore we may hail with satisfaction any course of instruction to them which would aid and support us in our endeavours to lessen still further the mortality amongst seamen and soldiers.

A CASE OF TRIPLETS, COMPLICATED WITH DOUBLE UTERUS.

By ALEXANDER G. DUNCAN, M.B., Crimond, N.B.

On the 25th December, 1873, I was asked to see a woman, who, on my arrival, informed me that she was pregnant for the fifth time. She was about eight and a half months advanced in her pregnancy, and anticipated her confinement to take place in about a fortnight; but, as she was different in shape and size from what she had ever been previous to her other confinements, she wished to consult me.

She had, as I have already mentioned, borne four children previously to her present pregnancy, all of whom are strong and healthy.

Upon examination, she had a somewhat strange appearance. The abdomen seemed much larger than usual, and also to fall too far forward; and, at the same time, the width was greater than in most cases, with a well marked depression from above downwards, and a little to the left side. Upon further examination, I found that this depression was a distinct division between two tumours; the one upon the left side being the larger of the two, and reaching further up in the abdomen, also overlapping the tumour to the left side. At the same time, I could insert my hand between the two, separating them down to the pubes. I could also move the one tumour distinctly without in any way moving the other. Upon applying the stethoscope, I could detect foetal heart-sounds in both tumours. At this stage, I was firmly convinced that I had to do with a case of double uterus, each division containing a foetus.

My patient was a very intelligent person of her class, anxious about her condition, and wished distinctly to know what was wrong with her, for that there was something unusual she was firmly convinced. The case seemed so uncommon, that I declined to say anything concerning it until I had consulted with some of my neighbouring medical friends. Unfortunately, I never had any opportunity of doing so, owing to her labour coming on rather suddenly two days after my visit, and before I had an opportunity of consulting with any of my brethren.

I was called again on the 27th December, at 7 P.M., found the os fully dilated, the head presenting in the first position; and in a very short period she was delivered of a healthy female infant, which weighed a little over six pounds. The pains continued, and a breech presented, and in time we had another female child, this time weighing rather less than six pounds; in ten minutes, with a little assistance, the double placenta came away, and the newly emptied cavity contracted well.

There was now the well contracted womb in the lower part of the abdomen, to the right side; but there still remained the other tumour, which lay to the left, and rather behind the lately emptied cavity. It gradually assumed a middle position in the abdomen, and inclined to fall forward and overlap the contracted womb; however, I applied a binder in the usual way, and, with the exception of an occasional after-pain, she felt very comfortable.

After waiting about four hours, and there being no appearance of any action in the remaining tumour, I left, after giving the nurse instructions as to her duty if there should be any symptoms of labour in my absence.

In two hours after I left her, and six hours after the removal of the placenta, she again complained of pains, and I was again sent for. On my arrival, I found the head of the third child at the perinæum. This was also a female, but a much stronger child than any of its predecessors, weighing over seven pounds; the combined weight of all the three being over twenty pounds.

After the separation of the placenta, the tumours were now about equal in size, and quite distinct the one from the other, neither of the two occupying a middle position, but each taking its own side.

I examined my patient lately, and I found that the external os was single, the opening very much elongated from side to side; but, upon tilting it forward, the dividing septum was distinctly seen. I also introduced an uterine sound into each cavity. The septum could also be felt by the introduction of the finger.

This case may only be interesting in an anatomical point of view, as there was little skill or dexterity in manipulation required during the confinement; but, as such cases are rare, I concluded that the case would not be altogether void of interest to the members of the Association.

SYMPATHETIC OPHTHALMIA:

A HISTORICAL CORRECTION.

By J. VOSE SOLOMON, F.R.C.S., Birmingham.

MR. CARTER, in his recently published work on *Eye-Diseases*, in treating of the channel through which sympathetic irritation is conveyed, makes the following statement in reference to myself.

"Mr. Vose Solomon accuses the optic nerve, but only on the ground that, in a single instance, sympathetic ophthalmia followed enucleation of the eye in a patient of his own, whose optic nerve, on account of some imperfection in the scissors employed, was bruised at the place of division, instead of being cut."

My reply to these statements is, that not only such case has never occurred in my own practice, but, so far from its being considered by me that the optic nerve is the channel through which irritation is primarily conveyed, I contributed in February 1863 to the *Dublin Quarterly Journal*, page 58, a short article and illustrative case to prove that such hypothesis was untenable. (*Vide also Braithwaite's Retrospect*, vol. ii, 1864, p. 275.) The following is an epitome of the case with remarks: the latter are unabridged.

A man, aged 36, lost his left eye from a burn. In two months, sympathetic irritation affected the right. The left was excised, with great relief to the symptoms in the best eye. A bridle having formed between the lid and conjunctiva of the empty orbit, a glass mask was inserted, with the effect of reproducing the same train of symptoms as existed in the right before excision was performed. A retrocession of the sympathetic disturbance followed the removal of the mask, but, on its reinsertion, the symptoms returned with the addition of *photopsys*.

"English authors on ophthalmology have hitherto attributed the occurrence of sympathetic traumatic ophthalmia to the (existence of the) commissural arrangement of the optic nerve-fibres. The phenomena presented by the preceding case do not appear to afford a *locus standi* for such theory, inasmuch as the optic nerve on the side of irritation had been severed; but they may be satisfactorily explained, on the supposition that the irritation from the eyeless orbit was conveyed by the ophthalmic division of the fifth pair to the centre, and thence reflected to the opposite side. This view derives support from examples of reflex traumatic disorder, wherein the symptoms are those purely of hyperæsthesia of the fifth, and which yield almost *instantaneously* on removal of the original source of irritation; of this class of cases, some account is given in a paper of mine in the *BRITISH MEDICAL JOURNAL* for June 13th, 1857.

"Careful observation of a large number of instances of reflex ophthalmia has led me to the following, among other conclusions: that the *primary* traumatic irritation is conveyed to the sound eye through (sensory) branches of the fifth nerve; that soon afterwards, and sometimes simultaneously, the vaso-motor nerves (trophic) take on disordered action, and, as a consequence, intraocular congestions and their results occur; that if the disease be not arrested, the optic nerve-fibres become inflamed, or affected with such changes as induce atrophy, and which lead to similar degeneration of the opposite nerve. In this stage of the complaint, the commissural arrangement of the optic nerve-fibres is probably the channel through which the disorder is conveyed. Where there is an advanced amaurosis (of the eye affected sympathetically), the usual signs of atrophy of the optic nerve are revealed."

Since writing the above, my attention has been drawn to a valuable and carefully written article on this subject in the *British and Foreign Medical Review* for January 1868, in which my case and physiological views are adduced, as supporting the opinion that the vaso-motor nerves are the channel of communication; and if reference be made to the dates of publication of the author's works, which the reviewer has ably analysed, it will be found that my views, which were formed quite independently, possess priority of publication.

A NEW METHOD OF PERFORMING PLASTIC OPERATIONS.

By J. R. WOLFE, M.D., F.R.C.S. Ed.,

Surgeon to the Glasgow Ophthalmic Institution; Lecturer on Ophthalmic Surgery in Anderson's University.

It is now nearly three hundred years since Tagliacozzi published his great work on *Plastic Operations*; and, notwithstanding the admiration which the work of the Bologna professor had elicited, it is remarkable how comparatively little has since been done for the cultivation of plastic surgery. The reasons are obvious. The fact is that, in operations on the nose, eyelids, and face—the most interesting regions for improving deformities—Tagliacozzi's method of taking flaps from the arm has been generally abandoned, on account of the extreme discomfort which it involves; and the practice of taking flaps from the forehead or face having been the only one in vogue, the procedure came to be considered more serious. In addition, when we take into account the elements of failure, from shrinking of the flap, from erysipelas or gangrene, it is not to be wondered at that surgeons are generally chary of resorting to the expedient, except in great emergencies. It amounts to this: we are to cut skin off the face to repair the face; and, in doing so, we run great risk of failure. To render plastic operations on the face more acceptable, and to bring them within a wider scope of utility, the following conditions must be fulfilled. 1. We must take a flap from the arm, or from any other part but the face. 2. We must seek to eliminate the elements of failure. I propose, in this short communication, to indicate the means of fulfilling both these conditions.

First, Tagliacozzi laid down the rule, which has ever since been considered as the primary law, and *sine quâ non* to the success of the operation, that the flap must retain its connection to the adjacent living structure by a pedicle which is to be severed only after complete union and cicatrization of the raw surfaces. This pedicle has, in my opinion, been a source of great embarrassment to surgeons, and tended rather to retard the progress of plastic surgery. From my observations on transplantation of structures from the lower animals and on skin-grafting, as well as on plastic operations, I have long held it demonstrated, that in most cases the pedicle is not essential, if indeed it do contribute anything, to the vitality of flap. This being once established, we are henceforward free to choose our bit of skin from any part of the body we may find suitable.

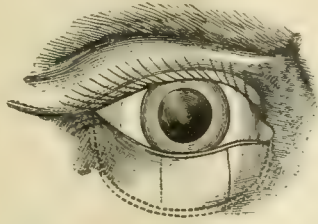
My next endeavour has been to eliminate the elements of failure. The principal cause of failure I find to be in the subcutaneous structures. If we wish a skin-flap to adhere to a new surface by first intention or agglutination, we must be sure that it is cleared of all areolar tissue, and properly fixed in its new place. The following case will illustrate the points referred to.

Formation of the Lower Eyelid with Skin from the Forearm.—P. C., aged 25, a quarrier, was admitted into the Glasgow Ophthalmic Institution, with his face, eyes, and eyelids injured by an explosion of powder. I showed the man recently to the Edinburgh meeting of the Association, as an instance of conjunctival transplantation from the rabbit.* The right upper eyelid, which was strongly everted, I partially succeeded in correcting by skin-grafting. The lower right eyelid being completely everted, its integument totally destroyed, and the skin of the face consisting of discoloured cicatrices not by any means suitable for plastic operations, I formed a new lower eyelid in the following manner. The edges of the upper and lower eyelids having been vivified, I introduced three ligatures into the border of the lower eyelid, which I entrusted to my assistant. By means of these ligatures, he used traction, whilst I dissected the whole of the cicatricial tissue, and thus liberated the subjacent structure. The ligatures were then introduced into the upper eyelid, and the edges of the upper and lower eyelids were thus united. I then elevated the edges of the wound, preparing them to receive the

* This patient had to undergo several operations before his eyes were rendered serviceable and his face presentable. Left eye: 1. Artificial pupil; 2. Conjunctival transplantation from rabbit. Right eye: 1. Paracentesis for onyx and hypopyon; 2. Skin grafting on upper eyelid; 3. Plastic operation on lower eyelid. All these operations were done without chloroform.

new flap like a watch-glass. The skin required for the formation of this eyelid was two inches in length and one inch in breadth, which I took from the forearm. To test the principles above indicated, I divided my flap into three portions. The first I removed, along with the cellular tissue, as close to the dermis as compatible with the integrity of the flap. The other two portions, after removing them from the forearm, I turned up; and with a cataract-knife I sliced off the areolar tissue, leaving a white surface, which I applied to the eyelid. The difference between these flaps was very remarkable. The two flaps, which were previously prepared, healed by agglutination, without exhibiting even the slightest tendency to desquamation of the cuticle. Twenty-four hours after the operation, the surfaces looked pale; but the next day the temperature was normal, and appearance healthy; whilst that part which was applied without previous preparation looked rather livid the first day, improved the next two days; the fourth day, it began slightly to suppurate; and, after a hard struggle for life, a portion of it only remained, while the rest shrank. This, however, will not compromise the result of the operation, which may be considered satisfactory.

The dressing consisted of gutta-percha tissue applied next to the skin, a graduated lint-compress, and a bandage to maintain immobility of both eyes. The union was so rapid and so perfect, that I separated the upper from the lower eyelid on the fourth day.



This figure was taken eight days after the operation, when union was complete. The thicker upper dotted line represents the elevated dissected edge, and the thinner lower dotted line shows the point of insertion of the new skin. The vertical lines mark the division of the flap. The two outer and larger portions have been prepared before application; while the smaller, placed at the inner canthus, has been applied without previous preparation.

In conclusion, I would recommend this method to the profession, from its simplicity and safety, for trial, not only in similar cases, but also for the cure of congenital blotches on the skin of the face, which are not amenable to any other treatment.

CASE OF MENINGEAL APOPLEXY.*

By GEORGE F. HODGSON, M.R.C.S.Eng., Brighton.

ON the 19th of last March, about mid-day, I was asked to see a widow, aged 42, a cook in a private family, who had then been suffering for about two hours with severe pain in the back of her head and neck, which she declared "must drive her mad if it could not be relieved soon". This was considered by her mistress and myself an exaggerated expression, as the woman was known to be of a very irritable temper, and also of a highly nervous temperament, especially since the death of her husband, which took place suddenly (twenty years previously) whilst in bed by her side. In the condition of her tongue, pulse, etc., no departure from health was present to offer a clue to the nature of the severe pain; but as it transpired that she had, twice in her life, been laid up with rheumatic fever, and that on the day previously she had been out for two hours in the piercing north-east wind, the attack was apprehended to be rheumatic; and accordingly I prescribed a potash saline draught every four hours, together with five grains of chlorhydrate, and seven grains of bromide of ammonium.

Next day (March 20th), I was informed that, within two hours of my having seen her yesterday, and before the first dose of the medicine, she had become "stupid", and had been more or less so ever since. The word "stupid" was not altogether inapplicable, although evidently her state was one for which she was not responsible, unless she had been "drinking"; but there was no history of such a habit. She still complained of the pain; answered questions, and put out her tongue reluctantly. She had taken her medicine; had had some sleep; and had taken both milk and gruel, though not without much persuasion. In

other respects, she was much as on the previous day. She was ordered to go on with the medicine.

On the 21st, she was rather worse. She was sick once last evening. The bowels had been moved each day. The urine was clear, and not albuminous. Pulse 80, firm and full. The heart's impulse was rather strong; an aortic *bruit* was heard with the systole. The tongue was becoming furred and dry. Temperature 101 deg. She was still in a semi-stupid state; but complained of the pain in the back of her head. She could put out her tongue, but seemed obstinate and intractable about taking her food and medicines. The catamenia occurred a fortnight ago. An empty bottle was found in one of her drawers, labelled and smelling of "paregoric". Her medicine was stopped. On the 22nd, she seemed more ill; pulse 90, bounding. Temperature, 104 deg.; tongue white. She passed urine, and her bowels were moved. She complained less of the pain; and the stupidity was not so great, although she was still very "queer". On her mistress pressing me for an opinion, I replied that I could only guess that she was suffering from rheumatism of the membranes of the brain, or possibly from typhoid fever; and from this vagueness on my part, especially as to the issue of the case, her mistress decided on moving her into the Sussex County Hospital. On one of the other maids asking her where she kept her clean night-gowns, she replied she would get one herself, and therewith got out of bed, went to her drawers, and took one out.

On March 23rd (at the Hospital), she became violent, and was restrained by a strait waistcoat. Her physician did not venture on a diagnosis; and prescribed simple saline draughts. Subsequently, hemiplegia (left) occurred of the arm and leg; the cranial nerves were not involved; and, on the 27th, death ensued.

A necropsy was made the next day, of which the following notes are all that I have been able to obtain, viz.: "Brain remarkably congested throughout. The subarachnoid space round the medulla oblongata (especially on the right side) filled with recent clot of bright coloured blood, probably about an ounce and a half in bulk. Arteries extensively atheromatous. Heart much hypertrophied; valves healthy; commencement of the aorta much dilated and roughened by atheroma."

I presume that the hæmorrhage occurred on the first seizure of the illness on the 19th; but the case, both at its onset and in its subsequent course, illustrates the excessive difficulty there is sometimes in diagnosing apoplexy. This has been my chief object in recording the case.

CASES OF PALPITATION OF THE HEART DUE TO EPILEPSY, WITH REMARKS.

By WM. L. LANE, M.B., etc., Crossgates, Dunfermline.

THE following cases, which I shall describe in a summary manner, are somewhat interesting in showing how palpitation of the heart may be due to a cause hitherto unobserved, viz., epilepsy.

CASE I. Michael B., aged 42, a strong healthy man in appearance, has been complaining for the last three years of a constant pain at the cardiac region, which is not increased by pressure, and is accompanied by a strong impulse of the heart. This pain and beating, which are never entirely absent, get more severe upon any excitement or exertion. The pulse is 78 a minute, and strong. The heart has no valvular lesion nor any hypertrophy, although its impulse is stronger than normal. Lately, that is, within the last eighteen months, he has had some attacks of epileptic vertigo and two or three severe fits of epilepsy (*grand mal*). He describes the attacks of epileptic vertigo, or, as he terms them, attacks of "giddiness", thus: the beating of the heart and the pain over it, which are worse than usual for a day or two before the attack of giddiness, suddenly, a few seconds before the attack, become much worse; he then fixes his eyes upon a spot from which he cannot move, loses his senses, staggers, or falls down, and then immediately recovers consciousness (the attack altogether does not last longer than a quarter or half a minute), feeling his head sore and his memory confused. The beating and the pain, which I stated as being more troublesome some time previously to the attack, continue so for some hours after it.

CASE II. Wm. B., aged 31, is a healthy strong man; his aunt was epileptic at one time; her son (his cousin) is a great epileptic. Wm. B.'s father was insane at one time. Wm. B. has never had any fits. He complains of an uneasy pain in the cardiac region and a strong beating of his heart. He feels very anxious about his condition. I examined his heart with the utmost care, and found it healthy in every respect. There is no tenderness upon pressure over the cardiac region, but the cardiac impulse is stronger than normal. The pulse is strong, and 72 a minute. Respiration is normal. His appetite is good. His

* Read at the East Sussex District Meeting at Lewes.

bowels are open regularly. The pain and cardiac beating are worse at times, and are aggravated by mental excitement or bodily exertion.

CASE III. Mrs. D., aged 50, who has a strong and healthy appearance, has been suffering from a beating of the heart and a pain at the cardiac region for the last twelve months. The heart's sounds and size are normal, but its impulse is stronger than normal. A few days ago, while she was at the railway station here, apparently in excellent health, she had a fit and fell upon the ground. Her face was severely hurt by her fall. She states that lately she has a few attacks of dizziness (most probably epileptic vertigo), which pass away very quickly. Her appetite is excellent; her bowels are regular. She has ceased menstruating since she was forty-seven years old.

REMARKS.—The predominant symptoms in these cases are the cardiac pain and the strong cardiac impulse, and the feelings of anxiety which these symptoms cause the patients. I may say that they have consulted various medical men in this district and Edinburgh for their palpitation without any benefit. Cases of this kind, which are by no means uncommon, differ from cases of palpitation which we usually meet in many respects. 1. The heart's action is not accelerated, nor is it irregular. 2. The causes which produce palpitation, such as anæmia, indigestion, excessive smoking, alcoholic or tea drinking, could not be discovered in these. 3. The cases occur in individuals strongly predisposed to or suffering from epilepsy. I have often thought that the name "mild angina pectoris" would be a very appropriate one for cases like these, on account of the symptoms somewhat resembling angina pectoris, but being a great deal less severe. I may say that cases of this kind are generally unbenefited by any of the remedies, such as bromide of potassium, belladonna, etc., that I have used or seen others use.

OBSTETRIC MEMORANDA.

NOTE ON PUERPERAL FEVER.

PUERPERAL peritonitis does not often come under my observation, but in the year 1873 two cases occurred in my practice. I made notes of them at the time; and, as bearing on the question of contagion, the cases seem worthy of a brief record.

I was requested to see, in consultation with her medical attendant, Mrs. F., on the day week of her delivery of her sixth child. Four days previous to our visit, she had a shivering fit, which was quickly followed by the usual symptoms of peritonitis. She died on the day following our visit. Fifteen days after the death of this patient, I was requested to visit Mrs. B. She had been confined three days before of her second child, and went on well until the day before I saw her, when she had an attack of shivering. The patient, when seen, was suffering great agony from abdominal pain. She died on the day following. Both these women were patients of the gentleman referred to. The one who died first was delivered by him; but, although he visited the other, no examination was made by him, and the woman was delivered by his assistant.

It might be supposed that the precautions taken were sufficient to prevent the action of contagion in the second of these unfortunate cases; yet it is impossible to avoid the conclusion that both deaths were in some way due to the same cause—namely, contagion conveyed by the medical attendant or his assistant. Whether these gentlemen had any recent experience of puerperal fever previously to the occurrence of the first case, I am not aware.

ARTHUR LEARED, M.D., F.R.C.P.

CASE OF PUERPERAL FEVER CAUSED BY EXPOSURE TO THE CONTAGION OF ERYSIPELAS.

THE numbers of the JOURNAL containing a report of the Obstetrical Society's interesting debate on puerperal fever have just reached me. In connection with that discussion, the following case, which occurred in my practice only a few weeks ago, may perhaps appear worthy of publication.

During the last two months there have been three cases of erysipelas in this generally healthy village. In two of these cases, the head and face were attacked; in the third, it commenced round a fistulous opening in the abdominal wall. One of these patients, who had a rather severe attack of erysipelas of the head, followed by abscesses below each eye, and a large one in the right forearm, was attended throughout her illness by her daughter, a Mrs. V., the wife of a farmer living about twelve miles from this village. On June 22nd, Mrs. V. returned home, having stayed with her mother, now convalescent, exactly a

month. Mrs. V. was at this time four months pregnant; she was about thirty years of age, had been married seven years, had one child, and thought she had a miscarriage at the second month about a year ago. On June 25th, without any apparent cause, she had a miscarriage, and remained in bed. On the evening of the 26th, she had rigors and complained of great pain and tenderness at the hypogastrium. Next day, she was much worse; I was sent for, and found all the symptoms of peritonitis. I carefully examined the uterus for any pieces of membrane or clots, but found nothing. I was again summoned on the 29th, and found her sinking fast; she died on the morning of the 30th. Mr. V.'s sheep-farm is healthily situated in one of the healthiest districts in this colony. There had been no sickness on the farm previously, and I have heard of no case of puerperal fever occurring within a hundred miles of this for months. When I saw Mrs. V. on the 27th, I noticed lying in the room some of the clothes she had worn while nursing her mother.

The connection between the erysipelas and the puerperal fever in this case can, I think, scarcely be doubted.

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ABDOMINAL PRESENTATION.

ON May 11th, 1875, at 7.45 A.M., Mrs. W., who had had several children, sent for me to attend her with all expedition; she had been in labour for some hours. The medical man whom she had previously engaged had been sent for at 6 A.M., and, not feeling satisfied with the presentation and progress of the case, was anxious for a second opinion. Upon my arrival, he decided to leave the case in my hands, which responsibility I at once accepted. On vaginal examination, I found what I felt assured was an abdominal presentation. The presentation was considerably low down and perfectly immovable, pressure being exerted in various directions without any success; considerable efforts at dislodgement were made until 11 A.M., the patient's strength in the meanwhile remaining little, if at all, impaired. About this time it was just possible to feel the knees, and the hand could be passed sufficiently high up to seize one leg; the other quickly followed, and the child was delivered as in an ordinary case of turning. Unfortunately, the child was born dead from asphyxia, from pressure upon the cord, but the patient made a rapid recovery, and up to the present has suffered from no ill effects.

R. J. MALLAND COFFIN, M.R.C.P.
Valetta, Malta.

PUERPERAL ECLAMPSIA.

I WAS called in at 6.30 on December 26th to see Mrs. P., a primipara, who had been in labour eight hours. I was told she had had three fits of a very severe character, which quite alarmed her friends. A few minutes after my arrival, she had a convulsion, her face becoming suddenly livid and distorted, directed first to the left shoulder, afterwards to the right; the fit ended in opisthotonos, lasting quite five minutes, followed by a comatose condition. After the fit, I made a vaginal examination, and found the head presenting at the brim normally, and the os well dilated. Without unnecessary haste, I delivered with the long forceps, and forcibly removed the placenta, which was adherent. She still continued to have convulsions of a severe character, and I ordered full doses of bromide of potassium and cannabis Indica, combined with diuretics, as, on inquiry, I elicited that no urine had been passed to the knowledge of anyone present. This fact led me to examine the bladder, but I found it empty. I saw her at 11 A.M.: pulse, 100; temperature, 104. At 4 P.M., I saw her again: pulse, 110. She had some more convulsions, and stronger, remaining longer comatose; the pupils were more dilated. I emptied the bladder of five ounces of highly albuminous urine, specific gravity, 1.028. I ordered ten grains of chloral every two hours. At 5 o'clock, I saw her in conjunction with Mr. Knight. Pulse, 120; temperature, 109. I had the bowels emptied by injections and croton oil internally. I ordered nuxipisms to be applied to the calves of the legs and neck, and the chloral to be continued throughout the night. At 10 P.M., she had had no more convulsions since the first dose of chloral. She was still perfectly unconscious under the influence of the drug, as well as comatose. On the 27th, she was much calmer, but not yet conscious; she passed feces and urine in bed. I saw her several times during the day. The pulse was coming down; temperature lower. There was slight consciousness as the effects of the chloral passed off in the evening. She took beef-tea and milk. Temperature, 100. She recognised her husband and myself for the first time since the convulsions commenced. On the 28th, the pulse was 90; temperature, 98. She was improving rapidly, and had no more

convulsions. The immediate effects of the bromide and cannabis Indica were nil. Chloral was a success. This was a very severe attack, with every probability of a fatal issue, judging from the increment of danger in the pulse, coma, and temperature, the latter probably of some interest as being very high. The sinapisms were perhaps of little use; and, as Dr. Robert Barnes has remarked, in his Lumllean lectures on the Treatment of Puerperal Convulsions, it is "a sin against physiology" to cause peripheral irritation when the whole surface is in a state of hyperaesthesia. The improvement in this case was coincident with the restoration of the natural function of the kidneys, and the abatement of the uræmic poisoning.

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Surgeon to the Rotherham Hospital and Dispensary.

SURGICAL MEMORANDA.

CHANCRE WITHIN THE NOSTRIL, FOLLOWED BY CONSTITUTIONAL SYPHILIS.

MRS. G., aged about 23, was sent to me at the South London Ophthalmic Hospital by Dr. Baxter on April 3rd, 1875, for a lacrymal abscess consequent on some obstruction in the left nostril. She was eight months pregnant. Besides the left lacrymal abscess, there was considerable dusky inflammatory swelling of the skin on the corresponding side of the nose and cheek: the left nostril was completely blocked, and as much of the mucous membrane as was visible presented an unhealthy-looking ulcerated surface, which ended below by an abrupt edge at the junction of the nasal mucous membrane with the skin of the prolabium. She complained of much pain in the nose. The appearance of the ulcer was suggestive of a syphilitic origin, but I did not feel able to decide without more evidence whether, if syphilitic, it was a chancre or a tertiary ulcer. A considerable mass of indolent enlarged lymphatic glands was present in front of the corresponding ear and behind the lower jaw, and they were stated to have appeared since the obstruction in the nose began; as, however, there was some degree of similar enlargement, of several years' standing, on the other side, the diagnostic value of the former mass was diminished. The woman said, that the earliest symptoms had begun shortly before Christmas 1874 with a swelling of the left side of the nose below the position of the abscess, accompanied by obstruction of the nostril, and soon followed by the symptoms of acute lacrymal abscess. No other facts corroborative of the suspicion as to syphilis were obtained at this visit. Iodide of potassium and black wash were prescribed. My questions had, however, roused her suspicion, and the next time I saw her she said that she had some sore places on the genitals, which had been present about six weeks; she would not, however, allow an examination. At this date (7th) Mr. Hutchinson saw her, and considered the sore in the nose to be probably syphilitic, but from the evidence then forthcoming, was unable to decide whether it was primary or not. He advised free cauterisation with nitric acid, as he thought that the sore threatened to become phagedænic. I applied this on the 8th, when she also submitted to an examination of the genitals, and I found on the labia several well-marked condylomata, but no ulceration and no inguinal bubo. There was no rash elsewhere on the skin, and no sore-throat. She was quite clear in her statement that she had noticed nothing amiss with the genitals until six weeks previously, *i. e.*, until about two months after the symptoms began in the nose. The acid acted well, and, on the 10th, the sore in the nose was much healthier; mercury was now begun internally, black wash ordered to the nostril, and calomel to the condylomata; the iodide was discontinued. On the 14th, she was confined, and did not attend again until May 5th, when I learnt that the child (a boy) was healthy-looking at birth, but withered away rapidly and died at nineteen days old, the medical attendant giving her to understand that he considered it to be syphilitic. The sore in the patient's nostril had improved, but she now showed a few papular, shiny, dullish-red spots on the back of her neck. Mercury, which had been discontinued since April 14th, was now resumed. On May 8th, there were numerous similar spots on the fronts of the forearms, insides of the thighs, and on the abdomen, while those on the neck had enlarged; the rash was quite characteristic of secondary syphilis. Under the continued use of the mercurial, the rash rapidly diminished, and had almost entirely disappeared on May 19th. She has continued the mercury, with a few short intermissions, to the present time. She is now quite free from secondary symptoms, the ulcer in the nostril has been quite healed for some weeks, and her health has improved very markedly. The opposite sides of the nostril have adhered together, probably owing to the free use of the nitric acid, its channel is, therefore, still quite blocked, and the lacry-

mal fistula continues to discharge muco-purulent matter; there is, however, no inflammation of the nostril whatever, and she experiences so little inconvenience from the condition of things, that she is not very anxious to undergo any operative treatment. With regard to the probable source of her chancre I could learn nothing of any value. Her husband would not admit to her that he had ever had venereal disease, and the woman herself did not know of any accidental source of contagion.

EDWARD NETTLESHIP, F.R.C.S.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

WESTMINSTER HOSPITAL.

CASE OF PYO-PNEUMOTHORAX.

(Under the care of Dr. FINCHAM.)

[Reported by Dr. DE HAVILLAND HALL, Medical Registrar.]

THE following case of pyo-pneumothorax is interesting, as occurring as a sequel to abscesses following pneumonia. It is also worthy of notice that the invasion symptoms were hardly marked at all, the existence of the pneumothorax being first demonstrated by percussion and auscultation, none of the subjective symptoms of the patient having suggested the idea, and it was not till two days later that he made any great complaint, and then he suffered very much from dyspnoea; but there was an entire absence of the sudden, sharp, agonising pain so often met with in these cases. Great relief followed paracentesis thoracis; but it was only temporary, as, two days later, the dyspnoea was as bad as ever.

James C., aged 24, a carman, was admitted on March 12th, 1875. The patient was a well built powerful man. He had always been a great drinker, but lately he had been drinking more than usual. He was at work on March 7th, and felt tolerably well. After he went to bed, he began to retch and felt feverish. He tried to go to work on the morning of the 8th, but was unable to do so. During the course of the day, he had rigors, frontal headache, short hacking cough, and a pain in the right side.

On the afternoon of his admission, the following note was taken. Temperature, 102.4 deg. (Fahr.); face flushed; pulse, 132, very weak and feeble; heart-sounds clear; respirations, 52. The right side was dull posteriorly to the spine of the scapula, anteriorly to the nipple-line. No breathing-sounds were heard, except a little crepitation at the base. The left lung was normal. He was slightly delirious, talking about his horses. Evening temperature, 103 deg. (Fahr.)—March 13th, 10.30 A.M. He was violently delirious all night, so much so that he had to be tied down. He had two fifteen-grain doses of chloralhydrate during the night, but without any effect. He was calling out for his horse, and was perspiring freely. His face was flushed, and somewhat livid. He put out his tongue when told to do so. There was not much cough; the sputa were scanty, not rusty. Respirations, 60, panting. The physical signs were as on the previous day. Pulse, 120, of fair volume; temperature, 104.6 deg. (Fahr.) The bowels were relaxed. He was ordered to have thirty grains of chloralhydrate immediately, and a draught of five grains of carbonate of ammonia in infusion of cinchona every three hours; also wine. At 1 P.M., twenty grains of chloralhydrate were given; and, at 3 P.M., ten grains. Evening temperature, 101.2 deg. (Fahr.)—March 14th. Temperature, 103 deg. (Fahr.); respirations, 36; pulse, 112, feeble. He was very violent up till 4 P.M. on the 13th. He was quiet, and slept for some hours after that time, and awoke at 3 A.M. rational; he afterwards dosed again. He was ordered four ounces of brandy, four eggs, two pints of milk, the same quantity of beef-tea, and the medicine to be taken every four hours. Evening temperature, 103 deg. (Fahr.)—March 15th. Pulse, 108, of better volume; respirations, 36; temperature, 102.3 deg. (Fahr.) Resonance was somewhat improved in the interscapular region, where there was bronchial breathing, with slight rhonchus. The sputa were scanty, viscid, and slightly rusty. Evening temperature, 102.8 deg. (Fahr.)—March 17th. Pulse, 112, dicrotous; respirations, 40; temperature, 102 deg. (Fahr.) He had a troublesome cough; the sputa were somewhat rusty, viscid; the right chest was resonant down to the angle of the scapula; scanty râles were heard all over the chest. Evening temperature, 102.6 deg. (Fahr.)—March 19th. Pulse, 120, very feeble; respirations, 36. Breathing-sounds were heard all over the lung. In the right infra-axillary region, on coughing, a sound like the twanging of a harp-string was to be

head.—March 22nd. Pulse, 120; respirations, 36. He had a very urgent attack of dyspnoea during the night. There was good resonance over the right front, and very feeble breathing. Sibilus was heard all over the left front. Morning temperature, 101 deg. (Fahr.); evening temperature, 101.4 deg. (Fahr.) March 23rd, 11 A.M. Pulse, 110, very feeble; respirations, 44, panting. He had troublesome cough, with mucopurulent expectoration. The right front was more prominent than the left, and moved less. Very distinct metallic tinkling could be heard all over the right front, especially just outside the nipple. Sonoro-sibilant rales were heard all over the left front. The heart's impulse was an inch to the outer side of the nipple-line. He was perspiring freely.—1.30 P.M. He was much distressed. There was a metallic splash on succussion. Pulse, 124. The aspirator was used, and ninety ounces of sweet pus were evacuated, together with a considerable amount of air. After aspiration, the pulse was 112, the face improved, and the breathing was easier.—March 24th. Pulse, 116, of better volume; respirations, 48. He had a restless night, being delirious and trying to get out of bed. He said he felt more comfortable this morning. There was resonance over all the right chest, most marked metallic tinkling, and also loud metallic splash on succussion. No air entered. In the left chest, the mucous rales were much less marked than on the previous day. The heart's impulse was in the nipple-line. Evening temperature, 99.3 deg. (Fahr.)—March 25th. He had great dyspnoea all night, and was almost moribund at times. Pulse, 112, irregular and very feeble; respirations, 36; temperature, 98.6 deg. (Fahr.) There was great lividity of the face. He was perspiring freely. He lay propped up in bed dosing. He was sensible when spoken to. The hands were cold; there were rales in the throat. Rales were heard all over the left chest.

He died on March 26th, at noon. The *post mortem* examination was made by the house-physician, Mr. Basham, twenty hours after death. On opening the thorax, a quantity of air escaped with a rush (no disagreeable smell) from the right side. The right lung was completely collapsed, and pushed up to the upper and anterior part of the thorax. There were considerable adhesions to the upper four ribs and their cartilages. The cavity contained two pints and a half of a thin cream-coloured fluid. The lung sank in water. On the posterior and upper part of the lung was a small aperture about the size of a crow-quill, which on section was found to communicate with an abscess in the substance of the lung about the size of a walnut. Four or five other abscesses were also discovered lined with a thin pyogenic membrane, varying in size from a walnut to a pea. On microscopic examination, no hooklets could be discovered. The left lung was emphysematous; there were no adhesions; it was crepitant throughout, and congested, especially posteriorly. There was a large quantity of frothy mucus in the bronchial tubes. The pericardium was fully distended with gas; it contained the normal amount of fluid. All the cavities of the heart were filled with *post mortem* clots and blood. The valves and substance of the heart were healthy. There was nothing particularly noticeable in the other viscera, except that the liver was much depressed and pushed over towards the left side.

ROYAL INFIRMARY, EDINBURGH.

CASE OF RHEUMATIC FEVER, FOLLOWED BY PNEUMONIA, AND TERMINATING IN ULCERATIVE ENDOCARDITIS, MYOCARDITIS, AND PERICARDITIS, WITH EFFUSION.

(Under the care of Dr. GRAINGER STEWART.)

FOR the following notes we are indebted to Dr. A. M. Cash, Resident-Physician.

J. S., aged 25, ironmonger, was admitted into Ward 7, Medical Royal Infirmary, Edinburgh, under the care of Dr. Grainger Stewart, on March 22nd, complaining of dyspnoea, with swelling of the legs and abdomen. He gave the following history. About the middle of December last, he was in the infirmary for a crushed finger, and, before leaving, he got an attack of rheumatic fever, which obliged him to remain under treatment for about two months. He did not seem to have made a good recovery from this; for, three weeks ago, when his present illness began, he was still suffering from its effects. At that time, he said, he got a severe cold, and shortly had a rigor, pain in the left side, cough, and shortness of breath, with a slight dark-coloured expectoration. Soon afterwards, his feet and abdomen began to swell, and the difficulty of breathing increased so that he could not lie down, but had to be propped up in bed. He was readmitted into the infirmary. On admission, the patient was a powerful, well-made young man. His expression was anxious; his face pale, dusky, and covered with a clammy perspiration. He had orthopnoea. The temperature in the axilla was 100.7 deg. (Fahr.) About the mouth were traces of a slight herpetic eruption. Palpation and percussion of the abdomen

revealed considerable ascites. He suffered from pain and uneasiness in the region of the heart. Distinct, though slight, bulging was visible over the præcordia. No apex-beat could be seen or felt. There was an area of absolute dullness over the heart, somewhat square in form, extending downwards from the third rib on the left side for a distance of five inches, and having a transverse diameter in the intermaxillary line of seven inches. Auscultation simply showed the cardiac sounds to be muffled and indistinct. No murmur could be detected. The pulse was full, strong in its impulse, but suddenly collapsing under the finger. It was irregular and somewhat compressible, and about 120 per minute. There was distinct evidence of the pneumonic condition of the base of the left lung. He had frequent paroxysms of a hard dry cough, which gave him great pain and distress. The urine passed was somewhat reduced below the normal daily average amount. It contained a very large amount of amorphous urates, but no albumen. The chlorides were not diminished.

He was treated in the usual way by expectorants, diuretics, stimulants, and counterirritation to the chest by means of mustard and fly-blisters, with the result of slight improvement in his general condition, though the physical signs remained the same. The possibility of paracentesis of the pericardium becoming necessary was kept in view, and I had instructions from Dr. Stewart to resort to this should the dyspnoea become greatly increased.

On the morning of the 26th (the fourth day after admission), after sleeping quietly for a short time, he suddenly awoke in extreme distress from his breathing. The dyspnoea became rapidly worse; he fell back, and, death being imminent, I introduced the finest needle of a Mathieu's aspirator through the fourth left intercostal space close to the sternum, and drew off fourteen ounces of serum containing large flakes of lymph, a little blood, and a considerable quantity of pus. He was much relieved for the time, and was able to sit up and speak. There was now comparative resonance over a good part of the area which was absolutely dull before. The dyspnoea, however, which had never entirely been got rid of, gradually increased, and he sank a few hours later.

NECROPSY (twenty-four hours after death).—The body was well nourished. There were some purpuric spots scattered over the surface, chiefly on the abdomen. On opening the thorax, the pericardium was found to be thickened and very vascular. Its surface was covered with lymph, and in its cavity were contained a few ounces of fluid. The surface of the heart was in a similar condition. Its walls were thin, soft, and friable, and the microscope revealed numerous fine fatty granules amongst the striae of its muscular fibres. The cusps of the mitral valve were thickened. The aortic valve bore evidence of severe suppurative endocarditis. The corpora Arantii were thickened. The segments of the valve were eroded, torn, and ulcerated, and at the base of one of them the septum ventriculorum was expanded into an aneurismal pouch of irregular shape, into which a probe could be passed for the distance of an inch. The valves were utterly incompetent; the lungs were congested, and the left, at the base, was consolidated and hepatised; the liver was "hob-nailed", and weighed 6½ lbs; the kidneys and spleen were congested and enlarged.

REMARKS.—It would seem that the attack of rheumatic fever from which this man had suffered developed certain cardiac lesions, and these, being followed by a pneumonia, brought him into the extremely reduced state he was in on admission. How long he had laboured under effusion into the pericardium we have no means of knowing, as he was away from notice at the time when it probably came on. Its presence, dulling and muffling the heart's sounds, made it impossible to distinguish whether these were pure, or if any murmurs were present. That some endocardial lesion of a serious nature existed was inferred—1. From the fact that the dyspnoea and distress were out of proportion to the amount of effusion, which was not nearly as great as is often seen in cases where the embarrassment to breathing is far less; and 2. From the character and condition of the pulse. This had the peculiar feel met with in a pulse of aortic incompetence and regurgitation. The diseased valves and weak fatty muscular walls fully accounted for the comparatively slightly relieved state of the patient after the tapping; for, though the mechanical impediment of pressure on the heart by the fluid from without (which must have been very great) was removed, still the exhausted organ could not stand longer exertion, and its function quickly failed. I may remark, in conclusion, that this case exhibited strongly the great value of the aspirator when paracentesis of the pericardium is necessary. The shreds of lymph were of great size, and could be spread out to cover a shilling or a florin, and yet they all came away through a capillary tube of the finest calibre. This could only be accomplished by very powerful suction, and the instrument made by Mathieu of Paris is all that can be desired in this respect.

THE GENERAL HOSPITAL, BIRMINGHAM.

A CASE OF CEREBRO-SPINAL MENINGITIS.

(Under the care of Dr. RICKARDS.)

[Reported by Mr. R. H. NORRIS, Clinical Clerk.]

GEORGE BLUNT, aged 14, glass-cutter, was admitted into the hospital, May 20th, 1875. He was much emaciated and could not stand. When placed on his legs, his body and head were arched backwards; when lying down, he could move his legs and arms freely. There was no evidence of mischief in the chest or abdomen; no paralysis of face or tongue, or of the muscles of the eye. He was intelligent, though he sometimes made curious observations. His eyes were bright; the pupils not quite equal; he could distinguish the number of fingers, though he could not read even large type. There was hyperæmia of both optic discs, with numerous patches of exudation. He complained of severe and constant pain in the forehead and back of the neck, and also of pain in the back. He said he had been subject to fits during his illness. From his mother's account, one day, at the end of April last, he felt cold and ill, and vomited several times. In consequence, he went to bed. The following day, pain in the forehead came on, and light affected his eyes. The vomiting continued. On the third day of his illness, he had pain in the back of his neck and in his back, and an eruption appeared in the right leg; the latter fading in a few days. He had two epileptiform fits, each of which lasted about ten minutes. His head became drawn backward, as was his whole body, though in a less degree. The pain in the forehead, back of the neck and back, the vomiting, photophobia, fits, emaciation, retraction of the head and arched condition of the body, continued. The vomiting, which was unaccompanied by any feeling of nausea, and at first constant after taking food, subsequently occurred three or four times in the course of the week, and now came on after every meal. The pain in the head and neck, and the spasm in the muscles of the neck, had been constant. The fits, which at first numbered three or four in the week, were now of almost daily occurrence, sometimes four or five in the day. In them he became livid in the face, swore, and would tear up his shirt. His body was stiff, and arched backwards. He could sometimes answer questions during the fits, but when they were over he did not know what had occurred. They lasted from ten to thirty minutes. Throughout the illness, there had been occasional involuntary micturition. Six months ago he had a blow on his forehead, which caused him to leave off work for three days, and left a scar which seemed non-adherent to the skull.

June 3rd. All the previous symptoms continued, and emaciation increased. He had occasional twitching of the right side of the face, and there was slight loss of expression on the left side. The tongue deviated a little to the left side, and he grasped more firmly with his right than his left hand. The vomiting was constant after food, which he took greedily. It was acid, and contained no sarcinae. He had six fits yesterday. He had slept well till last night. The temperature varied daily from 97 to 99 degs. Fahr. Pulse 80 to 100. Respiration about 22. Urine scanty, acid, non-albuminous, without sugar, of specific gravity from 1025 to 1030; it contained oxalates and phosphates of lime.

June 8th. The threatening paralysis of the left side had disappeared. The twitching of the right cheek remained. He sometimes passed the day without vomiting. He had fish daily, and generally kept it down. The other symptoms were worse. He was becoming weaker.

June 12th. He had frequent vomiting. His mind was clear, but his remarks were peculiar; he was noisy at night. In the fits there was usually opisthotonos, and to day slight trismus.

June 14th. He gradually sank and died.

Mr. F. F. Hopkins of Birmingham, who saw the case on the third day of his illness, states that, in addition to the symptoms described, there was pyrexia with a tendency to delirium, but no jactitation; that for the first ten days the patient seemed in some respects to improve, but subsequently, until his removal to the hospital, he suffered much pain in the course of the cerebro-spinal centre.

Treatment.—Iodide of potassium and bichloride of mercury were given, and seemed to allay the vomiting, but not to improve the head symptoms. Chloral and bromide of potassium were given with good effect to prevent restless nights.

POST MORTEM EXAMINATION twenty-four hours after death.—On removing the skull, no fluid escaped. The convolutions of the brain were very much flattened; the vessels of its surface were very full of blood. There was distinct fluctuation over the ventricles. The brain-substance was of ordinary consistency, but very anæmic. All the ventricles were much dilated, and contained over seven measured ounces of colourless, almost transparent fluid. The septum, fornix, and

surface of the ventricles were softer than usual, had lost their brilliancy, and the lining membrane appeared to have undergone a gelatinous degeneration. This change was most noticeable in the fourth ventricle, where the distension by the fluid was great. There was fluctuation over the spinal sheath, which, when opened, was found to contain over three ounces of fluid similar to that found in the ventricles. The surface of the cord was hyperæmic, its substance anæmic. The ophthalmic veins and veins of Galen were all pervious; the venous sinuses were also pervious and quite empty. The optic tracts seemed much flattened. The viscera of the chest and abdomen were healthy. The right side of the heart was full of fluid blood, the left side empty. The abdominal viscera were also full of blood. The fluid found in the ventricles, and in the subarachnoid space of the brain and cord, contained one third albumen; no sugar. The sediment from it contained granule-globules and granular matter. There was no effused lymph, purulent infiltration, or inflammatory thickening in any part of the brain or cord.

REMARKS.—Dr. Rickards remarked that, while pain in the head, vomiting, epileptiform attacks, disease of the optic discs, emaciation, eruptions, involuntary micturition were symptoms found in many head-affections, the sudden onset of symptoms, pain in the back of the neck, the stiffness of the muscle of the neck, and retraction of the head, were sufficient to separate cerebro-spinal meningitis from hydrocephalus acquisitus, basilar meningitis, and tumour of the brain, diseases to which in its symptoms it was nearly allied. While the disease often rapidly terminated fatally, its chronicity and the absence of jactitation were probably due to the character of the fluid effused, and the absence of purulent infiltration. Microscopical examination of the hardened brain-substance did not reveal any morbid change.

BRADFORD INFIRMARY.

CONTRACTED KIDNEYS: HYPERTROPHY OF LEFT VENTRICLE: CEREBRAL HÆMORRHAGE.

(Under the care of Dr. ALEXANDER.)

MARTHA L., aged 33, married, drawer, was admitted at 11 A.M. on the 26th of January, 1875, with the statement that, whilst at work about an hour before admission, she had suddenly fallen down insensible. On admission, she was a somewhat spare woman, with face more furrowed than was compatible with her years. She was profoundly unconscious; both pupils were strongly contracted and insensible to light; the left pupil, however, was slightly less contracted than the right; the conjunctivæ were injected, and insensible to the touch. The breathing was not stertorous. The pulse was irregular, now above, now below, the normal frequency. There was no response on pinching the arms strongly; and, when raised, they fell heavily; but, on raising the legs, some resistance was met with. Every few minutes, there were slight convulsive movements of the body and limbs. Flipping the breast with the wet corner of a towel was followed, in a minute or two, by restlessness and moaning cries, and gradual dilatation of the left pupil, the right remaining contracted. She made several attempts to vomit before she ejected two or three drachms of brownish "slimy" matter. The cardiac sounds could not be clearly heard, on account of the noisy respiration. At 1 P.M., both pupils were widely dilated and insensible to light, and there was no response on touching the corneæ. The right angle of the mouth opened on expiration, and the right cheek flapped slightly, the left remaining motionless. There was complete loss of sensation and motion in the arms, but she lay with her legs somewhat drawn up, and on pinching her feet the legs were drawn away. She moaned frequently. Pulse 102, regular, and of moderate volume and firmness. There was incontinence of urine, which was very pale, barely acid, and contained about three-eighths of albumen. She was not seen again by the resident medical officer before her death, at 4 P.M., five hours after admission.

The following particulars were obtained after death:

Family History.—Her father was living, aged 60; he had been a "hard drinker", and suffered from "rheumatism" in his legs and feet. Her mother died at the age of forty-eight; the cause of death was unknown. One brother, a soldier, who had been a "heavy drinker", died of apoplexy. "All the family are heavy drinkers."

Personal History.—She had been married fourteen years, and had had six children. She had enjoyed moderate health up to about seven months ago, when she sought medical advice for the first time. She had not drunk more than a daily average of one or two glasses of whiskey. For the last two or three years her appetite had been variable, with occasional vomiting and attacks of frontal headache. There had been occasional nocturnal micturition, and she remarked frequently that she passed a good deal of urine. Latterly, she had slight occasional

attacks of lumbar pain. These symptoms, which were regarded as trivial, and which did not prevent her from following her occupation of spinning, were only elicited on close inquiry. More than seven months ago, when nearly seven months advanced in pregnancy, she had an attack of hemiplegia. The left arm and leg were partially paralysed, the mouth "was drawn to the left side", and her speech was thick and indistinct. She recovered but slowly, till her confinement prematurely five weeks afterwards, when her recovery became much more rapid. The child died anasarctous, aged fourteen weeks, four days after vaccination. For the last nine or ten weeks, her sight had been becoming weaker. She was in good spirits the evening before her death, and ate a very hearty supper of somewhat indigestible materials. She went to work feeling quite well early the following morning; but, between nine and ten o'clock, complained of sickness, and vomited; and with the exclamation, "Oh dear, I'm going to die!", she fell back insensible. She was removed to the infirmary in about an hour.

The diagnosis was hæmorrhage into the pons Varolii. The necropsy was made twenty-two hours after death. On examining the base of the brain, a large black clot of gelatinous consistence was seen entangled among the arteries and nerves about the circle of Willis. The pons Varolii had a flattened appearance, and was soft and boggy to the touch; on removing a thin slice from its inferior surface, the whole of the interior was found to be occupied by a large, soft, black clot, mixed with shreds of cerebral substance; the clot extended into and ploughed up the crura cerebri, and also reached slightly into the fourth ventricle. On making a vertical section of the right corpus striatum, a cyst of the size of a fibert was discovered near its outer surface, containing a dirty yellowish fluid; the substance of the corpus immediately surrounding the cyst had a more granular and less compact appearance than the rest of the corpus striatum. No clot nor any abnormal appearance was discovered in any other part of the brain. The heart seemed larger than normal. There were a few pieces of decolorised clot in the right auricle. The right ventricle was of normal size, and empty. The left ventricle was large, hard, and contracted, and, on section, presented walls about an inch in thickness; it was quite empty; the muscoli papillares were very thick, and the chordæ tendinæ strong. There was no valvular disease. The heart weighed $14\frac{1}{4}$ ounces. The kidneys were small; the surface rough and irregular; the capsules thickened and adherent, removing the kidney-substance when stripped. The cortical substance was much diminished, of greyish colour, and very hard, requiring great pressure before the finger nail could penetrate it. There was a cyst the size of a pea on the surface of the right kidney. The weight of the right kidney was $3\frac{3}{4}$ ozs., the left $4\frac{1}{4}$ ozs. The liver was a little enlarged; its surface was smooth, its substance soft and very friable.

REMARKS.—The symptoms suggesting the diagnosis of hæmorrhage into pons Varolii were: 1. The extremely contracted pupils; 2. The profound unconsciousness. The succeeding dilatation appears to have corresponded with the extension of the lesion into the crura cerebri and the implication of the third nerves. It is worthy of notice, that the long-standing kidney-disease had affected the general health so little as to permit her continuing her work up to the day of her death.

REVIEWS AND NOTICES.

I. PAU, THE PYRENEAN WINTER-SEASON: HYGIENIC APPRECIATION OF ITS CLIMATE. By the COMMISSION SYNDICATE OF PAU. Translated into English. Pp. 114. 1874. 2. ANSWER TO DR. CHARLES TH. WILLIAMS, F.R.C.P., Physician at Brompton Hospital, London. By Dr. E. CAZENAVE DE LA ROCHE, Physician at Pau and Eaux-Bonnes. Pp. 12. 1875.

PAU has long been a favourite winter resort for invalids, but its advantages lie not so much in the warmth of its climate, as in the still mildness of its air, and in the absence of high winds and sudden changes of temperature, which are often very trying on the shores of the Mediterranean. If to these advantages we add the attractions of the beautiful scenery of the Pyrenees, the excellent roads, and the agreeable society of Pau, there is little chance of its charms being overlooked. Of the pamphlets above named, the first compiled by an association in the town, the second by a resident physician, both seem to be issued with a view to diminish this chance; and their translation into English (which, by the way, is more in words than in idiom) indicates the anxiety of the writers to attract English visitors.

The first pamphlet is chiefly composed of the materials common to all

guide-books; laudatory descriptions of the place, surrounding scenery, and historical associations. The "hygienic appreciations" are contained in a dozen pages, and consist chiefly of quotations from the late Dr. Louis, Dr. Cazenave de la Roche, and Sir A. Taylor. M. Louis passed a few months at Pau on the occasion of bringing thither his only son in the last stage of consumption. The melancholy issue of his visit in this case did not prevent him from estimating the benefit to be derived from the still air and soft climate of Pau in cases less advanced, and in those of pulmonary catarrh. M. Cazenave de la Roche and Sir A. Taylor, in more laudatory terms, dwell on the complete exemption of Pau from the mistral, tramontana, and sirocco winds, which are the scourges of the Riviera and of the Italian places of resort; and, although the latter may be more favoured in temperature and sunshine, these writers maintain that Pau is safer and more salutary for invalids. On the other hand, if the doctors of Hyères, Cannes, Nice, Mentone, Rome, &c., were appealed to, they would give a still more favourable verdict on behalf of their respective localities.

From such competing authorities it does seem desirable to look out for an impartial judge, with facts rather than opinions to guide him; and the paper by Dr. Theodore Williams, On the Effects of Warm Climates in Pulmonary Consumption, in the fifty-fifth volume of the *Medico-Chirurgical Transactions*, did appear to be a contribution to this end. Out of 1,000 cases occurring in his father's and his own practice, selected for statistical comparison, he found that 251 had, in addition to other treatment, spent one or more winters at one of the places in question; and, by a numerical comparison of the resulting condition of the patients, whether improved, stationary, or worse, he formed some estimate of the amount of benefit to be derived from a winter's residence in these places respectively. Thus, of 152 patients who wintered in the South of Europe on the borders of the Mediterranean, 62.50 per cent. were improved; 29.39 stationary; and 31.91 worse. Of 70 sent to Madeira, 53.81 per cent. were improved; 14.28 stationary; and 17.10 worse. Of 44 at Pau, 50 per cent. were improved; 4.55 stationary; and 45.45 worse. In other words, half improved, a few remained stationary, and the remainder became worse. This cannot be called a very unfavourable result, although inferior to that of the Mediterranean. The paper of Dr. T. Williams has been translated into French by Dr. Duranty of Marseilles, and seems to have excited much interest in France. It has now drawn forth a reply from Dr. Cazenave de la Roche, which has been widely circulated, and now appears in English in the second pamphlet at the head of this notice. But, instead of opposing Dr. Williams's conclusions by facts and figures, he begins by denouncing altogether the use of the numerical method in medicine. "In my opinion, which is now-a-days the opinion of nearly every one, the application of figures in the practice of medicine, is a method subject to serious mistakes, and which ought to be rejected as anything but philosophical" (p. 4). He then charges Dr. Williams with the grave error of omitting all mention of the form of tuberculosis in his cases; and, assuming that the unfavourable results were due to the disease being of the torpid kind, and therefore not suited to the climate of Pau, he repudiates the accuracy of the conclusions.

Dr. Cazenave's summary condemnation of the use of numbers in medicine will not carry much weight, and is not consistent with the deference which he professes for his eminent countryman Louis, the great champion of the numerical method; who, even in the letters quoted in the first pamphlet as eulogistic of Pau, says, "the only *therapeutique* which has a right to persuade us, is that derived from well observed and numerous facts".

If Dr. Cazenave's charge were just, that Dr. Williams "does not mention in the least the morbid form which characterises the 251 cases", his objection to the conclusions would be reasonable; but, on referring to Dr. Williams's paper in the *Medico-Chirurgical Transactions*, we find not only the form specified in each case (inflammatory, catarrhal, serofidous, &c.), but there are separate paragraphs and tables in which the several forms and stages of the disease, and the influence of the different climates on them, are expressly discussed. And when M. Cazenave ascribes the less favourable results at Pau to the wrong cases being sent there, he should bear in mind that the relative qualities of its climate have long been made known by the writings of Sir James Clark and Sir A. Taylor; and it is not likely that the Drs. Williams, father and son, who have so long made climates for invalids a special study, would have failed to exercise a due discretion in selecting the fittest cases for each locality.

If, instead, Dr. Cazenave de la Roche would bring forward statistical facts from his own experience on the influence of the climate of Pau in consumptive cases, he would furnish the proper materials for a reply to Dr. Williams's numerical conclusions. At present, they remain unanswered; but they only amount to this, that, although many patients do well at Pau, a still larger proportion do well in some other places.

FERNERE MITTHEILUNGEN ÜBER DAS ENDRESULTAT DER RESEKTIONEN IM KRIEGE 1864 IN DER DANISCHEN ARMEE. Von Professor Dr. ADOLPH HANNOVER. Copenhagen: 1875.

IN the first volume of the BRITISH MEDICAL JOURNAL for 1870, at page 61, there appeared a review of some published remarks by Professor HANNOVER of Copenhagen on the final results of the resections of joints which had been performed on Danish soldiers during the war of 1864. These results Dr. Hannover showed to be so unfavourable, that the general conclusion was to condemn resection of joints for gunshot injury in military practice altogether, and to recommend the practice of amputation instead. The strictures of Professor Hannover were shortly afterwards answered in Germany, where they attracted considerable attention, by Surgeon-General Dr. Loeffler, Professor of Military Surgery at Berlin, and the author of the *Medical History of the Danish War of 1864*, and also by Professor von Langenbeck. Dr. Loeffler's reply to Dr. Hannover was noticed at page 551 of the volume of the BRITISH MEDICAL JOURNAL above mentioned. But the dispute did not end with these replies. At the congress of the German Society of Surgery held in Berlin the year before last, Professor von Langenbeck read a paper on the Final Results of Resections of Joints in War, and again disputed the correctness of the statements and conclusions of Dr. Hannover; while Professor Esmarch, at the same congress, stated that the Danish military surgeons had exhibited a decided opposition to the practice of resection during the first Schleswig-Holstein war as well as in later campaigns, and that apparently this prejudice against the operation, and a certain amount of political antipathy, had influenced Dr. Hannover in publishing the strictures which he had done against the resections performed by the German surgeons on the Danes wounded in the war of 1864.

These remarks by Professors von Langenbeck and Esmarch have called forth another reply from Dr. Hannover, which we have now before us, and the title of which is placed at the head of these remarks. Dr. Hannover meets the charges made against him very fully, and we must allow, after reading his pamphlet, that he refutes them most thoroughly. Not long after the discussion at the congress of the German Society of Surgery in 1873, Dr. Hannover mentions, he received a request from Professor Gurlt of Berlin to procure for him copies of the invaliding certificates respecting the Danish soldiers who had been disabled for service, and pensioned, on account of gunshot wounds of joints in which resection had been performed. He asked for these statements, as he was engaged in composing an extensive work on the final results of resections of joints. Dr. Hannover at once, in order to obtain the latest news of the condition of the men for Dr. Gurlt, requested various medical practitioners to furnish him with precise detailed statements of the condition of the limbs of the pensioners who had been subjected to resection, and who were living in their respective neighbourhoods. These were after a time all furnished, and are now printed in the pamphlet before us. The detailed reports thus obtained show the condition of the resected Danish officers and soldiers after a lapse of more than ten years, and include fifteen cases of resection of the shoulder-joint, fifteen of the elbow-joint, one of the knee, and three of the ankle-joint. Certainly these reports, communicated as they are in most instances by civil surgeons living in various parts of Denmark, cannot be regarded as having been furnished otherwise than in good faith and with professional accuracy; and it is impossible to read them without coming to the conclusion that the results of the practice of resection in these instances, to whatever cause it may be attributed, whether to the operation having been performed in unsuitable cases, or to defective after-treatment, have been most unfavourable and unfortunate. Dr. Hannover denies that any prejudice against resection has existed in the minds of Danish surgeons beyond what has naturally followed observation of its results in these cases; and, as to the accusation of political feeling influencing the remarks by himself or other Danish surgeons on the operation, he treats it as an absurdity. He frankly admits that, both in 1848 and in 1864, a natural and strong antipathy prevailed against Germany, but denies that this ever intruded itself into matters of professional practice.

Dr. Hannover accuses Professor Langenbeck of doing him injustice by asserting that he had condemned resection, and had instead advocated conservative treatment, or treatment by amputation, in all cases of gunshot wounds of joints. We must, however, say that the impression made on our own mind, on reading Dr. Hannover's two previous pamphlets on the subject, was the same as appears to have been made on the mind of Baron Langenbeck in this respect; and we could not help feeling at the time that the sweeping condemnation of resection by Professor Hannover was an unwarrantable one, however unfavourable the results of the operation might have been in the instances of the wounded Danes which had come under his notice. We have

now Dr. Hannover's statement that it was not his intention to condemn resection of joints in general, but to limit himself to the assertion that the experience of this operation furnished by the Danish soldiers in whom it had been performed was condemnatory of it. So far, we cannot help agreeing with him.

ERYSIPELAS AND CHILD-BED FEVER. By THOMAS MINOR, M.D. Cincinnati: 1874.

THERE are few subjects of greater interest in medicine than puerperal fever; any addition to our knowledge on this obscure subject will be gladly received by all inquirers into this disease. Dr. Braxton Hicks did good service by taking the investigation of this disease out of the old beaten tract of *type*, and replacing *cause* as the basis of classification; this method has done much to further inquiry. If advance is to be made in our knowledge of this affection, it will be perhaps sooner obtained by carefully investigating its etiology, much of which is at present enwrapped in mystery. A thoughtful study from this point of view we feel convinced will rapidly dissipate any preconceived idea of puerperal fever being a fever *sui generis*. Amongst the many now well known causes, the poisons of erysipelas, scarlatina, and typhus, the aggregation of parturient women, coupled with defective ventilation and drainage, stands chief and foremost. A connection between this disease and erysipelas would seem to have been observed by our "father of medicine," Hippocrates, who, when speaking of an epidemic of puerperal fever, relates that erysipelas of a more or less malignant type existed at the same time. Peauteau revived the idea in 1755; which was further insisted upon by Clarke of London, and still later by Gordon of Scotland (1795). Since then, many authors have endeavoured to show that puerperal fever *par excellence* is erysipelas. Chief amongst the advocates of this theory stands Professor Virchow. It is the form of puerperal fever, or rather the puerperal fever engendered from this virus, that has been so often mistaken for a puerperal fever *sui generis*. That puerperal fever and erysipelas are frequently rife at the same time has been repeatedly shown, as also that the most malignant epidemics of the latter have been accompanied with the most severe of the former. The Report of the Registrar-General for Scotland for the year 1860, called particular attention to the great increase in the number of deaths from erysipelas and from puerperal fever in that year. Partial surveys of this connection between puerperal fever and erysipelas have been from time to time abstracted from the Registrar-General's Reports, but Dr. MINOR's work is the first with which we are acquainted that has given a really comprehensive view of the subject, as the two diseases have sporadically prevailed over a vast area of territory. The idea of making such a vast research arose, he states, from the variance of opinion that seemed to prevail in Cincinnati upon the propriety or non-propriety of attending labours whilst visiting cases of erysipelas. It was undertaken for the purpose of satisfying his own mind upon this moot point. All scientific inquirers must feel that they owe him a debt of gratitude for the amount of valuable information he has obtained; and this essay will come, we feel certain, to be regarded as the standard work on this subject. We strongly recommend its perusal to all those who still hold to puerperal fever *sui generis*, or ignore the contagiousness of erysipelas. For the purpose of carrying out his inquiry, he divided the whole of the United States into four sections: New England States, Middle, Southern, and Western States; carefully noting the climatology, the character of the country, sectional topography, etc., of each individual State that composed these four larger subdivisions.

After a most careful analysis of the whole subject, he comes to the following conclusion: That erysipelas is confined to no particular geographical section, nor subject to any particular climatic influences. The disease is more prevalent amongst men than women: the reverse being the generally received notion. In an admirable table, the mortality from erysipelas and puerperal fever in the different States and Territories, is shown for each month of the year 1870.

In the New England States, the season of greatest mortality was found to be spring, and the month April; of puerperal fever, the same season, but the month May. There were about 3½ millions of inhabitants in this division, and the total number of deaths from erysipelas were 306 and 86 from puerperal fever.

In the Middle States, with a population of nearly 9 millions, the mortality from erysipelas was 811, against 353 from puerperal fever. The season of the greatest mortality was spring in each case, and the month in the former disease April, and in the latter March. The Southern States, containing 8½ millions of people, lost 499 from erysipelas and 450 from puerperal fever. The seasons of greatest mortality was spring in both cases, and the month May in the former, and April in the latter. The Western States, having a population of about

17 millions, had 1,520 deaths from erysipelas and 923 from puerperal fever. In both instances, the season of greatest mortality was spring, and in the former affection March, and in the latter February. There was a grand total of 3,162 fatal cases of erysipelas, and 1,828 of child-bed fever. No general epidemic of either disease prevailed; the bulk of the cases seemed to be sporadic. The month of greatest mortality among men was March, among women April; of puerperal fever March; the latter month had the most deaths from erysipelas. The latitude and longitude of each State are given, with a geographical sketch, a monthly record of temperature, and a quarterly report of the rainfall from two or more points of observation, together with a brief history of the inhabitants. There is also, as it is called, a study of the table, in which the sex and the race of those who died from both these diseases, are given; and, lastly, we have reflections where any facts of particular note are recorded, and the sporadic, endemic, epidemic type of the disease, is discussed. But, to revert back to the general deductions: it is found that the coloured population have a remarkable immunity from erysipelas, only 1 in 39,000 dying from that disease, whereas we have 1 in 10,500 among the native white population. From puerperal fever there is rather an excess of deaths among the coloured women, the proportion being 1 in 12,000 against 1 in 11,500 in native born white women.

The mortality from both affections is very large amongst the Irish and Germans, particularly the latter, from puerperal fever; from which fact Dr. Minor concludes that these races bring with them an hereditary predisposition for the disease, as not only is the mortality great among immigrants, but even among their descendants.

The immunity of the blacks from erysipelas he attempts to explain on a similar hypothesis, and believes that a mean average of temperature of 70 degs. and upwards acquires a diathesis inimical to erysipelas.

The effects of altitude on the two diseases is carefully considered, and the author concludes, 1. That it rather favours the development of any erysipelatos tendency that may exist; and, 2. That it tends to diminish the tendency towards puerperal fever. A high altitude seems very favourable to scarlet fever; in one State, with an altitude of 4,500 feet, one quarter of the deaths were from that disease.

Both diseases prevail whether the season be wet or dry. Again, the ages of those dying from erysipelas are given, showing that persons at the extremes of age are the most liable to be victims of the disease. The maximum mortality from puerperal fever occurs at the age twenty to twenty-five.

In conclusion, he gives an inquiry into the connection between puerperal fever and erysipelas, as viewed from an epidemic that lately attacked Cincinnati.

He comes to the following conclusions, from a thoughtful study of the whole subject. 1. Erysipelas and puerperal fever seem to prevail together throughout all the States. 2. Any marked increase in one locality of one disease seems to be accompanied by a corresponding increase of the other. 3. Where histories of great epidemics of either disease are obtainable from any of the States, the seeming connection of the two diseases was noticed by the physicians at the time of the epidemics. 4. For these reasons, we are justified in concluding that an intimate connection exists between the two diseases; and, in fact, in any place where erysipelas is found, there will be found puerperal fever.

We are sorry we cannot make longer abstracts of the work; but the whole is so worthy of thoughtful and careful study, that to make a really faithful abridgment is impossible. Those interested in the subject will find ample material for reflection, and its perusal will repay them the trouble. The superior claims of erysipelas in connection with epidemic puerperal fever are ably, and we think conclusively, argued. At this particular period, when there seem to be some doubts about the infectiousness of erysipelas, the perusal of that portion treating of the epidemics of puerperal fever in Cincinnati can be strongly commended to the notice of doubters or disbelievers. Although not agreeing with all the views enunciated in this thesis, we can candidly say few works on the subject have given us greater pleasure in reading, or display more honest conscientious work. *Facta non verba* would appear to have been the author's principle, and he has ably carried it out.

A DESCRIPTION OF THE HUMAN BODY; ITS STRUCTURE AND FUNCTIONS. Illustrated by 11 Physiological Diagrams, containing 240 Coloured Figures. By JOHN MARSHALL, F.R.S., F.R.C.S. Third edition, enlarged. London: Smith, Elder and Co. 1875.

THE above work is a reduction of the author's well-known life-sized diagrams of the human figure, which were originally prepared at the request of the Department of Science and Art. For the convenience

of pupils and teachers, and the public generally, for all whom the work is well adapted, a smaller edition was prepared; and the success of this reduced copy is apparent in the fact that the third edition is now before us. The diagrams in the new edition are all carefully coloured, and drawn minutely to scale, and the volume is a portable and convenient one for study and reference. The plates have all been redrawn, and the illustrations are in accordance with the latest scientific discoveries. They have also the rare merit of combining strict scientific accuracy of detail with artistic beauty. The combination forms an excellent, clear, and complete presentment of human anatomy, valuable alike both to the artist, the medical student, and the teacher; whilst the price is such as will bring the work within reach of a large class.

NOTES ON THE TREATMENT OF SKIN-DISEASES. By ROBERT LIVEING, A.M. and M.D. Cantab., F.R.C.P. Lond., Physician to the Middlesex Hospital in charge of the Cutaneous Department. Pp. 116. London: Longmans, Green and Co., 1875.

THE third edition of this handy little volume will be welcome to many, dealing as it does specially with the practical treatment of skin-diseases. It has been thoroughly revised and somewhat enlarged, the character of the book remaining unchanged.

The chapter on eczema is especially worthy of notice, as giving a full and clear account of the treatment of that disease in all its forms and phases.

Speaking of *tinea decalvans*, the writer points out that it is an error to believe in the existence of a disease "*tinea decalvans* as distinct, on the one hand, from alopecia areata, and, on the other, from *tinea tonsurans*". He further remarks, that the mistake has probably arisen from the fact that *tinea tonsurans* sometimes produces perfectly smooth patches, exactly like alopecia areata; and, further, that common ring-worm and area occasionally occur together.

The chapter on the morbid anatomy of the skin, and the accounts of xanthoma, lichen planus, pityriasis rubra, and epithelioma, have been introduced into this edition for the first time.

The fact of the work having so soon reached a third edition is sufficient guarantee of its merit. We can safely recommend it as a most instructive pocket companion for senior students and junior practitioners. It supplies a want that is often experienced. The *formule* at the end will prove of much service to every one who is called upon to prescribe for skin-diseases.

SELECTIONS FROM JOURNALS.

THERAPEUTICS.

TREATMENT OF HYSTERIA BY CHLORIDE OF GOLD AND SODIUM.—Dr. Martini, in the *Pabellon Medico*, vaunts the efficacy of this drug in the hysteria symptomatic of functional changes in the uterus and its appendages. He says that it is indicated in congestions and obstructions of the neck or of the body of the uterus, in doses of from one-fifth to nine-tenths of a grain. In five cases of congenital atrophy of the neck of the uterus, causing sterility, the use of chloride of gold and sodium produced excellent effects; the neck of the uterus acquired size as well as consistence; and in three cases the treatment was followed by pregnancy. According to Dr. Martini, chloride of gold and sodium has an elective action on the nutrition of the uterus; and it may be employed with advantage for the prevention of abortion and premature delivery, when these accidents are dependent on weakness alone of the womb. This drug should be given in pills only, on account of its disagreeable flavour. Dr. Martini gives a formula for pills, in which it is associated with the extract of dulcamara, in the proportion of one *gramme* of the extract to one *centigramme* of salt.

GELSEMINUM SEMPERVIRENS AS AN ANTINEURALGIC.—In the *Centralblatt für die Medicinischen Wissenschaften* for July 10th, Dr. A. Jurasz of Heidelberg has a contribution on the therapeutic action of gelseminum sempervirens. After some introductory remarks on the drug and its preparations, he gives a brief record of five cases of neuralgia in which he used it with success. In the first case, a strong man aged 30 had suffered for some weeks from neuralgia of the first division of the fifth nerve, which was only temporarily relieved by the internal use of quinine and the external use of veratria ointment. All other treatment being omitted, tincture of gelseminum was given in five-drop doses three times a day; and the patient was quite cured in three days.

In a second case, a sempstress aged 30 had had partial neuralgia for more than a year and a half. It had been treated by spirituous applications, also by liniments, and by iodide of potassium internally, with only transient benefit. The patient was cured in six days by the tincture of gelseminum, given in four-drop doses three times a day. In a third case, the patient was a man aged 64, who had for some days had severe neuralgia of the left supraorbital nerve. A cure was produced in four days by the use of ten drops of the tincture three times daily. The fourth patient was a healthy woman aged 38, with neuralgia of the first and second divisions of the fifth nerve on both sides. The affection had lasted eight weeks, and was becoming more intense. Perfect recovery followed the use of five drops of the tincture daily for two days. In the fifth case, a strong man aged 60 was confined to bed by severe sciatica on the right side. On the eighth day, various remedies having been tried in vain, all other treatment was omitted, and the tincture of gelseminum was given in doses of eight drops three times a day. In fifteen days, the pain had nearly left him, and he was able to walk with a stick. Recovery was quickened by the use of the constant electric current and warm baths. Dr. Jurasz has also given gelseminum without result in a case of hemicrania of long duration, and in two cases of muscular rheumatism. He has not been able to observe any special effect to be produced on the organism by the gelseminum.

THERAPEUTIC USES OF SALICYLIC ACID.—The *Wiener Medicinische Wochenschrift* for April 10th gives a summary of the observations made on the physiological and therapeutic properties of salicylic acid, including those of Professors Kolbe and Thiersch, which were noticed at page 25 of this JOURNAL for February 20th. Professor Wunderlich gives salicylic acid in an almond emulsion with syrup of almonds and orange-flower water, by which its taste is completely concealed. After ten minutes' immersion in a bath of about 69 gallons of water at 102.75, in which nearly 9 ounces of salicylic acid had been dissolved, Kolbe could find no trace of the acid in the urine. W. Wagner has used salicylic acid externally in cases of contused wound and recent burns, by strewing a thin layer over the surface, and covering it with cotton-wadding. The healing process appeared to be accelerated. He has found an ointment (salicylic acid 1.5 parts, dissolved in 3 parts of spirit of wine, and rubbed with 15 parts of hog's lard) very useful in atonic ulcers of the foot, and especially in obstinate eczema of the face and head. He also praises a salicylic acid mouth-wash and gargle in cases of ulcerated gum, in sore-throat with abscess, in various forms of stomatitis, and in diphtheria. In the last named disease, Wagner treats children who cannot gargle with a solution of 0.15 to 0.3 gramme of salicylic acid in water every two hours; for other children, he uses a gargle of salicylic acid 1.5, spirit of wine 15, distilled water 150. If small crystals fall down, the solution must be warmed before being used. Wagner has treated fifteen cases of diphtheria with salicylic acid, with very encouraging results even when the trachea was affected. None of the cases died. He also used salicylic acid internally with benefit in a case of cancer of the pylorus attended with frequent vomiting of masses of readily fermenting matter—the acid having in this case more effect than creasote; and in a case of chronic gastric catarrh with foetid eructation and in two cases of violent diarrhoea with much decomposition of the contents of the intestines. Wagner has observed that the medicine is well borne, and that a portion is passed unchanged with the stools; also that it soon passes into the urine, in which it can be found at the end of two hours (giving a dark violet colour with solution of salts of iron). Dr. Langfeldt relates a severe case of diphtheria of the larynx in a girl aged two years, in which the obstruction of the larynx, which threatened life, was overcome by salicylic acid. The child, however, died of suffocation in consequence of obstruction of the larynx by the membranes that were coughed up from the bronchial tubes. Dr. Forthheim (*Memorabilien*, vol. xix) has treated thirty-one cases of diphtheria with salicylic acid, without one death. The duration of treatment in the most severe cases was eight days; in the slighter cases, two to four days. None of the cases were attended with diphtheritic nephritis (albuminuria); in one, there was paralysis of the soft palate. In the severe cases, Dr. Forthheim applied to the diphtheritic membrane every three hours a sponge dipped in a solution of salicylic acid, giving at the same intervals a teaspoonful of the solution internally. The solution consisted of salicylic acid 2 parts, spirit of wine 9.1 parts, distilled water 200 parts.—E. Stephanides writes in the *Wiener Medicin. Presse* (No. 14, 1875) on the use of salicylic acid in dysentery and chronic diarrhoea. Dysentery has been very prevalent during the winter, as a result of overcrowding, in the Lower Austria Lunatic Asylum, of which Dr. Stephanides is one of the medical officers; it has caused four or five deaths each month. He appears to have given the acid in two cases, one of dysentery and the other of diarrhoea, both internally and in the form of enema, with marked good

effect—all other treatment having failed.—Dr. Paul Fürbringer, assistant in the medical clinic at Heidelberg, describes in the *Centralblatt für die Med. Wissensch.* (No. 18) the results of some experiments on the action of salicylic acid given internally and subcutaneously. In sixteen experiments (ten on rabbits, six on men), the administration of 0.1 gramme of salicylic acid to rabbits, and of 0.25 to 0.5 gramme to men, did not produce any change of the variations of temperature that had been carefully noted for some days. In nine experiments in which septic fever was artificially induced, salicylic acid produced a distinct lowering of the temperature and a rapid reduction of the fever. The dose of salicylic acid used in these experiments (on rabbits) varied from 0.05 to 0.2 gramme; it was given in three cases in starch-enema; in two, by the stomach, dissolved in water; in three, by subcutaneous injection (dissolved in alcohol or in warm water); and in one, by both subcutaneous injection and enema. Dr. Fürbringer is making further researches in Professor Friedreich's wards on the use of salicylic acid in febrile affections.—Dr. Butt of St. Gall reports briefly in the same number of the *Centralblatt* that he has found salicylic acid to be a valuable antipyretic remedy in cases of enteric fever, erysipelas, acute articular rheumatism, etc. He promises further details on the subject.—Professor Thiersch of Leipzig has published an elaborate article in Volkman's *Sammlung Klinischer Vorträge* (Nos. 84 and 85, 1875) on Lister's treatment of wounds and on the substitution of salicylic acid for carbolic acid. He speaks highly of the salicylic acid dressing, especially when used with jute, as being both less irritant and cheaper than Lister's carbolic acid dressing. Dr. Hanow (*Berliner Klinische Wochenschrift*, No. 20) has for some months given salicylic acid in a number of cases of diphtheria, and strongly recommends its use in this disease. He uses a solution of 1 part of the acid and 1 of phosphate of soda in 300 of water, giving a tablespoonful to adults and a teaspoonful to children every hour. The medicine is to be swallowed slowly.

PROPHYLAXIS OF PUERPERAL FEVER.—Dr. J. H. Miller Moberly (*New York Medical Record*) formulates the chief points for practice as follows. 1. The most scrupulous cleanliness must be observed by all concerned. 2. Unremitting vigilance on the part of the physician. 3. The antiseptic treatment by carbolated oil, and by salicylic acid and by thymol. 4. The early condensation of the uterine walls by means of ergot. 5. The thrice daily employment of the thermometer. 6. Large doses of quinine in the incipency of the disease.—*Brit. Med. Jour.*

A PROPHYLACTIC FOR SORE NIPPLES.—Dr. Julius Fehr writes (*New York Medical Record*, August 21st):—The curative, as well as the palliative, treatment of sore or cracked nipples being well known to be futile, my aim for a long time was directed to the finding of a reliable prophylactic. After trying a good many formulas of others, and combinations of myself, I came at last to the use of tannate of lead, the "cataplasma ad decubitum" of the *Pharmacopoeia Germanica*, with the addition of a little glycerine to modify, in some degree, the excessive drying properties of that preparation. This "plumbum tannicum pulvisforme" I had applied, for about one month before parturition, two or three times a day, directly to the nipples. This, I found, "tanned" the nipples in so thorough a manner that they were perfectly able to withstand all suckling and all pulling on the part of the infant successfully. At the same time, I use a piece of cotton felt, about one inch and a half in diameter, and half an inch in thickness, with an aperture in the middle large enough to give free access to the nipple. This will not only prevent the pressure of the garments on the nipples, but will give, at the same time, to the nipples a chance to develop themselves better, which is often so much needed.—*Brit. Med. Jour.*

COLUMN FOR THE CURIOUS.

A "TOAD DOCTOR."—A correspondent of *Notes and Queries* says: "A lady informed me the other day that in the month of July, 1822, she was staying at Haselbury Brian, near Blandford, and that while she was there a man came in a gig, who was known as 'the toad doctor'. He brought with him a number of small bags, and the people flocked to him from far and near with toads. The 'doctor' cut off the hind legs of these toads, and put the severed portions into the bags, and hung them around the necks of his patients, the newly cut-off limbs quivering on their naked chests. This was held to be a certain remedy for the king's evil. An old woman, whom my informant knew, told her that 'it turned the blood wrong side up'. The bags had to be worn around the patient's neck until the legs inside were quite decayed away. The 'doctor' charged seven shillings each for those bags; and at that time, I believe, the farm-labourers in the neighbourhood were not receiving more than six or seven shillings per week."

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W. C.

BRITISH MEDICAL JOURNAL.

SATURDAY, SEPTEMBER 18TH, 1875.

THE MORTALITY AMONG EUROPEAN SOLDIERS' CHILDREN IN INDIA.

THIS subject is, we are glad to see, at length beginning to attract some share of public attention in India and in England, as is evidenced by a portion of the press of both countries, by a discussion which recently took place in the House of Lords between Lord Waveney and the Secretary of State for India, and by a speech delivered at this year's meeting of the British Association by Sir G. Campbell, M.P., late Lieutenant-Governor of Bengal. It occurs to us, therefore, that it may not be inopportune to lay before our readers a succinct account of the present aspect of affairs regarding this important topic.

A reference to the annual report of the Sanitary Commissioner with the Government of India for 1873, published last November, shows that out of a total of 59,839 European soldiers serving in that country on the 1st of May of that year, 6,736 were married and the fathers of 11,878 children of all ages up to sixteen years, all of them resident at the same stations as their parents. Out of this number, 714, or 60.11 per 1,000, died in the year, a mortality which, as the Sanitary Commissioner observes, is "much less than usual"; and when it is added that, in 1872, 99.08 per 1,000 children succumbed to disease—thus escaping decimation by a decimal point only—and that the average annual death-rate of the eight preceding years was over 94 per 1,000, Dr. Cuninghame's observation will not be considered too forcible. Prior to the accession to office of the present Sanitary Commissioner, no detailed official record of the mortality among soldiers' children in India generally appears to have been published; but the subjoined figures, gleaned from different sources, may be accepted as authentic; and, dealing as they do with unselected groups of years extending back to 1851, will indicate that the sanitary improvements effected in Indian stations during late years, to which so large a share of the reduction in the mortality rates of our soldiers is generally attributed, have signally failed to make any favourable impression on the death-ratios of the children. Soldiers are, however, when their health breaks down, sent to England in large numbers (2,434 were, for instance, invalidated home in 1873), whereas children are never invalidated.

Average death-rate of children per 1,000 per annum. { 68.83, four years 1851-54, Dr. H. Macpherson.
94.41, six years 1864-69, Sanitary Commissioner.
94.58, five years 1868-72, Dr. Bryden.

These data refer to Bengal alone, more comprehensive statistics, dealing with comparatively lengthened periods, not being, so far as we are aware, available. But the deficiency is not of any real importance, because not only is the great majority of the European army of India stationed in Bengal, but the condition of things with which it is our purpose to deal is, there is every reason to believe, much the same in the three presidencies. The significance of these figures will, perhaps, be more readily appreciated if we take the mortality of one year, and compare it with that which prevailed among children of the same age, during the same year, in London, as calculated from the tables contained in the annual summary of the Registrar-General. We select 1872, the mortality at all ages for which approximates within 5 per 1,000 to the average of the eight preceding years, and may, therefore, be taken as fairly representative.

Death-rate per 1,000, 1872.

	Under 1 year	1-5 years.	5-16 years.	5-20 years.
India	314	104	20	—
London	185	35	"	5

The residence in India, therefore, during 1872, of a certain number of infants under one year of age involved a sacrifice of 129 in every 1,000 lives, which would doubtless have been saved had these infants been located in London. At ages between 1 and 5 years, the death-rate is almost exactly three times as great in India as in London; and, although a divergence which occurs in the grouping of subsequent periods adopted by the Indian Sanitary Commissioner and the English Registrar-General precludes the institution of a precise comparison, it is probable that the Indian death-rate increases comparatively in proportion to increase of age. It is, at all events, quite certain that children in India between 5 and 16 years of age die with four times the rapidity which obtains among individuals ranging between the ages of 5 and 20 years in London. Having proved that the mortality among our soldiers' children in India is absolutely and relatively very excessive, and, moreover, that there appears to have been no permanent change for the better since 1851—the evidence, indeed, so far as it goes, seeming to point altogether the other way—we shall proceed to an examination of the practical questions, To what is this enormous mortality attributable? and, What measures should be taken to prevent, or even to mitigate, it?

As most people are aware, our Indian military stations are, from a health point of view, divisible into two classes, namely, those situated on the mountain ranges and those on the plains; the former being as conspicuous for their natural salubrity of climate and coolness as the latter are for the reverse. Of course, we are aware that the late advices from India have brought intelligence that serious outbreaks of cholera have this summer occurred at Simla and Mussourie, the most populous of our Himalayan stations; but the knowledge of this fact does not alter the high opinion we entertain as to the natural salubrity of these hill sanitarium, because the most favoured climates cannot expect immunity from cholera if their general sanitary condition—more especially their water-supply—is not in a very different state to that which obtains at Simla and Mussourie. Taking 1873 as a fair example of what the geographical distribution of our soldiers' children is, and has been during the last few years, we find that in that year in Bengal, 1,082 were located on the hills, and 5,671 on the plains, the death-rate among the former being 50 per 1,000, while among the latter it was 71. In 1872, the death-ratios on the hills and plains were respectively 93 and 117 per 1,000. The statistics of the four years previous to 1872, for which alone particulars have been published, show that about the same proportionate mortality existed in these years. Climate excepted, soldiers' children on the hills and plains are similarly circumstanced as regards their health, wherefore the inference is beyond all doubt that rather more than 20 per 1,000, or about 110 out of 5,671 children in Bengal, die annually, simply from exposure to the pernicious climate of the plains. We think it highly probable that another cause of ill-health and loss of life is the frequent inability experienced on the part of the parents to purchase a sufficient amount of appropriate nutriment for their children. There must be some cause for the very great increase which has taken place in the rates of mortality since the time referred to by Dr. Macpherson's statistics which we have quoted above, and we find it impossible to assign any other than the one just mentioned. The age and parentage of the children, as well as the climate in which they live, are the same as they were twenty years ago, while their abodes and general sanitary surroundings have been materially improved. But, on the other hand, the Government allowance of five shillings *per mensem* for each child is unaltered, the value of money has deteriorated in India quite as much as in England in late years, the allowance, if all expended on milk alone, would not now provide each child with one pint and a half daily, and the nature of the climate and other circumstances deter the parents from contributing by the earnings of manual labour to the support of their offspring, as is done at home. Statistics bearing

on this point are not procurable, but we think we are justified in arriving, by the method of exclusion we have adopted, at the conclusion that it is highly probable that the death-rate of the children is augmented by the poverty of the parents.

Residence in a pernicious climate and, very probably, a deficient supply of proper food being, then, to our minds the chief factors in the production of the excessive mortality prevalent among our soldiers' children in India, what preventive measures should be adopted? Three alternatives appear to present themselves, and these are: 1. The total abolition of matrimony amongst the rank and file in India; 2. Sending the mothers and children, without their fathers, to the hills during the hot season and rains, *i.e.*, for about seven months in each year; and 3. Locating permanently the whole of the married privates (who number 4,810 out of 6,736 men on the married strength of the Indian European army), together with their families, on carefully selected sites on the mountain ranges. The first alternative, which we have heard suggested by kind-hearted men driven almost to despair at witnessing the condition in which these poor little children now exist, may, we apprehend, be summarily dismissed with the observation that, pending the formation of a local European army for India—of which we see no immediate, if any, prospect—the abolition of matrimony in our regiments serving in that country, would necessarily involve the application of a similar measure to our army as a whole, a step which, if we are not much mistaken, no Government would, in our time, be prepared to take. The second proposal, which, by the way, is not without its advocates in the Indian press, strikes us as being morally and financially inadmissible; and, accordingly, we gladly endorse the language used with reference to it by the Marquis of Salisbury in the parliamentary debate already alluded to, when he remarked that "he could at once say that he did not think encouragement should be given by the Government of India to any proposal for separating the women from their husbands".

The third alternative seems to be so commendable and, withal, so feasible that we have no hesitation in recommending that it be carried into effect without delay. We are not, however, blind to the fact that certain objections are raised to the adoption of this plan, but we do not anticipate much difficulty in showing that they are, to say the least, superficial. We will endeavour to state, and briefly reply to, each objection. In the first place, it is asked, "Why should you give to a certain number of men the privilege of a residence on the hills because they happen to be married, and when, moreover, the absence of these married men from their regiments on the plains causes an additional amount of duty to devolve on their single comrades?" We answer that, putting motives of humanity aside, as, fortunately in the present case we can afford to do, marriage in the army is rightly regarded as one of the rewards for long service and good conduct; that the soldier who does not aspire to qualify at one time or other for matrimony is a rare exception; and to the single man the knowledge of the fact that, when his own turn for marriage comes, his progeny will also be placed in a good climate instead of a bad one, would be a powerful incentive not only to discharge a little extra duty cheerfully, but, by good conduct, to earn the privilege of being himself allowed to get married as soon as possible. Then, again, we are asked, "Why should privates only be sent to the hills, while married non-commissioned officers, equally, if not more, deserving men, are still to be retained on the plains?" Again we answer: Privates can be spared from their regiments, non-commissioned officers cannot. The married private, so long as he is in India, would, stationed on the hills, contribute quite as much towards the maintenance of our empire, as he would if quartered on the plains. According to our idea, he would form one of a reserve, and be liable to be directed to rejoin his regiment only in the event of its being about to leave the country, or go on active service, or in case he should be promoted to the rank of sergeant—an unusual contingency at the married private's time of life. Besides, the non-commissioned officer being, pecuniarily, tolerably well off, he can afford appropriate nourishment and many little necessary comforts for

his children, and thereby assist them in tiding over the baneful influences of the climate of the plains. Lastly, it is objected that even on the hills the death-rate of soldiers' children living with their parents, as contradistinguished from those in the Lawrence and other asylums is very high. We have shown that, in a series of years, the difference in the death-rate in favour of the hills is about 20 per 1,000 *per annum*; and this we submit is a great deal. But we are convinced that this by no means represents the saving of life which might be fairly anticipated if the system we propose were carried out, and we base our opinion on the following grounds: Children are now sent to the hills very often because they are in a delicate state of health. They go up suddenly from the heated plains, and arrive at their destination early in spring, when the weather is yet very cold. Their parents' resources, more than ever attenuated by the expenses incidental to a march of many days' duration, are inadequate to provide proper food and clothing to enable their children to cope to advantage with this sudden change of climate, and the result, as might be foreseen, is a large mortality. How different things are in the Lawrence asylums on the hills, where soldiers' orphans are permanently located and liberally fed and clothed. It is a notorious fact that the inmates of these institutions would, as regards health, compare favourably with those of our best English schools. If, therefore, instead of hurrying a limited number of married privates and their families to the hills when their health breaks down, and allowing them to remain there only for a few months as is now the system, we were to adopt the plan we advocate of permanent location on well-selected sites, a great change for the better would undoubtedly come about. Settled in a climate much the same as their own in England, with judicious management and distribution, the parents could, and doubtless would, profitably pursue agricultural and other industrial avocations, and thus be in a position to provide more liberally than they now can for the maintenance of their offspring. The latter would in time develop into hardy, healthy, intelligent youths, most of whom would probably be induced to become soldiers, and so contribute to lessen the drain to which the mother country is continually being subjected by India for recruits, as well as the great expense attendant upon transporting them thither. The small huts which would be admirably adapted for the housing of their families in the hills would cost very little indeed, and land fairly adapted for agriculture is not difficult to be found on the Himalayas and other mountain ranges. These soldier settlements, carefully fostered, might gradually become the nuclei of larger and more self-sustaining colonies which, especially in the Himalayas, could not fail to materially strengthen our hold upon our empire in the East. We commend this subject from this latter and more comprehensive point of view to the attention of Indian statesmen; but, in the meantime, we earnestly hope that needless delay of any kind may not occur in rescuing the 7,000, or so, children of privates among whom death is at present making such sad havoc on the plains, by locating them, together with their parents, permanently on the hills.

THE assessment of St. Thomas's Hospital has been reduced by the Lambeth Vestry Assessment Committee from £10,900 to £7,000.

SIR JAMES PAGET will preside at the distribution of prizes to the students of the Dental Hospital of the London Medical School on Monday, October 4th, at 4 P.M.

SURGEON-GENERAL C. A. GORDON, M.D., C.B., is said to be engaged on a work on Burma, he having recently visited the country in conjunction with Lieutenant-General Sir F. P. Haines, K.C.B., on whose staff he is serving at Madras.

It was stated at an inquest held this week in Clerkenwell on an old woman who had died in an epileptic fit that the body had been allowed to lie for three days and nights in a small room occupied by another old woman. The jury made a strong representation as to the want of proper provision for such cases in the parish.

THE President of the Metropolitan Counties Branch, Dr. Barnes, has issued cards for a *conversazione* at Willis's Rooms on Wednesday, the 6th October.

MR. RICHARD JONES, F.R.C.S. Eng., having resigned the post of surgeon to the Warneford, Leamington, and South Warwickshire Hospital, has been appointed consulting surgeon, and received a cordial vote of thanks for his "very valuable gratuitous services during a period of nearly half a century".

THE annual report of the Royal Westminster Ophthalmic Hospital just issued, states that, during the past year, 631 operations have been performed on in-patients, and 1,803 operations in the out-patients' department. The accommodation being inadequate to meet the demands made upon it, the surgeons have suggested the addition of another storey to the building.

THE Wrexham papers contain glowing accounts of an interesting public ceremonial on the occasion of the presentation of a portrait and address to Mr. T. T. Griffith of Wrexham. This venerable practitioner, "the father of the profession" in Wales, is held in the highest esteem by his townsmen as by his professional brethren. The presentation was made in eloquent terms by Sir Watkin Wynn; the portrait will be placed in the infirmary, of which Mr. Griffith was the founder. He was the first president of the North Wales Branch in 1849, and again president in 1872. He founded the ragged schools and the infirmary, to which he has presented nearly £1,000. Mr. Griffith has been fifty-seven years in practice, and has earned universal regard and esteem.

THE HOSPITAL SUNDAY FUND.

MANY fears have been expressed that the difficulties through which the Metropolitan Hospital Sunday Fund had passed would lessen its popularity, and cause a falling off in the amount collected. We regret to find that these predictions have been to some extent realised; but we trust that the unpopularity will be only transient, and that the judicious measures which have been adopted by the Council will speedily re-instate the movement in public opinion. The fund, including interest, now amounts in the aggregate to £26,703 7s., as against a total of £29,817 3s 9d. received last year. It will be divided within the next fortnight among 122 institutions—namely, 17 general hospitals, 4 chest hospitals, 8 children's hospitals, 4 lying-in hospitals, 5 hospitals for women, and 21 other special hospitals, including dental and homœopathic hospitals, 7 convalescent hospitals, 1 fever hospital, 3 cottage hospitals, 48 dispensaries, and 4 infirmaries and sanatoria. The arithmetical bases of distribution have been provisionally settled by the committee, but these may probably be affected by the verbal statements which the managers of the special hospitals may make in explanation of their accounts and position. Deputations from 20 of such institutions have been received, and the delay in distributing the Fund has arisen through the difficulty in getting people together in the holiday season.

DR. F. W. HEADLAND.

THE announcement this week of the death of Dr. F. W. Headland in his forty-sixth year, will be received by many with great regret. Dr. Headland had very early given promise of uncommon distinction. His university career was brilliant, and his Fothergillian prize essay on the action of medicines in the system was far above the average of such productions. It quickly took rank among the standard works of the day, and evinced a power of original research and clinical skill, which marked its author as a man capable of taking a high place as an investigator and a practitioner. Dr. Headland early became connected with Charing Cross Hospital, and his promotion there was sufficiently rapid. His tastes, however, led him rather into literary than into medical pursuits; and, after a time, he gave his chief energy to political writing for the conservative papers of the day. The

scientific instincts and the love of research faded before the interest of his new pursuits, and for many years Dr. Headland had been at least as much a political journalist as a practising physician. For the subjects which specially relate to the advancement of public health and social welfare he did not show any peculiar proclivity, and he connected himself but little with medical interests or societies. He was, however, always desirous to aid social reforms; and, although the form of usefulness and activity which he chose was one in which the individual is effaced and only his work is seen, it is a kind of work which exercises now a vast and potent influence. Political journalism is a huge power in this day, and men of culture, precise knowledge, and high principle, such as Headland, are those by whom the power has been chiefly created, and to whom it may most safely be trusted.

AN INTERESTING DISCOVERY.

AN interesting discovery has been made at Greenwich. Owing to some excavations which had been made for building purposes in the grounds of the Royal Naval School, it became necessary to remove several coffins which had been committed to the earth for upwards of thirty years. In one part of the grounds several coffins were found intact, the brass nails and the coffins themselves looking as bright and fresh as on the day they were made. On opening these coffins, the bodies were found to be in an equally good state of preservation. The embroidery on one of the dresses was as unruined and complete as if it had only just left the hands of the dressmaker; even in the minutest particulars, the bodies and their surroundings were as perfect and undisturbed as they had ever been. To use the words of an eye-witness, the infants were as perfect as if they had just been born. The reasons for this anti-septic action of the earth are worthy of investigation by Mr. Seymour Haden.

TYPHOID MILK.

A SEVERE outbreak of typhoid fever, a counterpart of the Marylebone epidemic, has occurred at Jarrow. It has been discovered by Mr. John Spear, medical officer of health, to have arisen from an infected dairy, his suspicions of this farm having arisen from the fact that fourteen of the infected families received their milk from that source. On visiting the farm, Mr. Spear found that six of the farmer's family, including himself, were laid up with typhoid. The water used in the dairy was derived from a well eighteen yards distant from a privy and cesspit, a hole in the ground unprotected by any brickwork. An analysis of the water revealed the fact that it was contaminated with sewage to a very great extent; the analysis showing—

Total solids	106.3	grains per gallon
Chloride of sodium	12.6	" " "
Free and saline ammonia . . . . .	.031	" " "
Organic ammonia . . . . .	.053	" " "

An analysis of the milk, while it showed a poor quality, did not prove any adulteration by water. The washing of the cans with water from a contaminated source is quite sufficient to render it infectious. The peculiar system also by which each customer has his own tin bottle containing his daily supply, each bottle having, in addition to the usual cork, a piece of rag wrapped round it for the purpose of making it fit tightly, the piece of rag being passed from hand to hand must increase the danger of infection immensely. Besides the water-pollution of this particular place, the whole arrangements were of a most disgusting kind. There was direct communication between the dairy and the rooms in which some of the fever patients were lying, whilst the dairy itself did double duty as a washhouse, and clothes from the fever patients had actually been washed there. The girl who milked the cows, a daughter, was in constant attendance on her sick relatives. The first patient was the boy who delivered the milk, and his case rapidly gave rise to others. Of twenty-seven families who received their milk-supply from this one source, eleven suffered. The aggregate number of cases amounted to twenty-five. To the prompt and efficient action taken by Mr. Spear and his staff of sanitary

inspectors is due the fact that the fever was stayed. The polluted milk-supply was at once cut off, and disinfectants were freely used. Mr. Spear also ascribes the rapidity with which in some instances the disease extended, to the unwholesomeness of the houses, and the abominable state of some of the privies and ashpits attached to them. One of the chief conclusions which Mr. Spear draws from this outbreak, is the necessity which exists for some radical alteration in the mode in which the milk trade is carried on, and in this we cordially agree with him. In some of the best London dairies, a rigid sanitary inspection of all the farms which supply them with milk, and an analysis of the well-water in which the utensils are cleansed, are insisted on; and had some such inspection been made in the case of this particular farmhouse, we may safely assume that this epidemic would have been prevented.

INTERNATIONAL BULLETINS.

THE Signal Service Bureau of the American War Department have issued the first number of a bulletin containing an international exchange of weather reports. There could be no more significant illustration of the recent rapid advances in meteorological science than this record of observations taken simultaneously at numerous stations throughout the great northern hemisphere. Algeria, Austria, Belgium, Sweden, Switzerland, Turkey, Great Britain, France, Germany, Italy, Canada, and the United States, here contribute a uniform system of weather records, comprising data of barometric pressure, temperature, humidity, wind-movements, clouds, and rainfall. These observations will in future permit the study of atmospheric changes the world over, enabling storms and other disturbances to be traced from their origin throughout their course, until they disappear. The *Boston Medical Journal* observes, it is a source of national pride that their own government observers, of whom General Myer is the chief officer, have put the work into practical operation, and established the form which we have before us. It indulges the sanguine hope that the system of meteorological observations above described may presently point the way to a similar scheme applied to the record of epidemic movements and prevalent diseases. It is not too much to expect that sometime we may have an international bulletin setting forth officially the movements of "waves" of epidemic disease from their initiation to their decline, medical "signal officers" becoming the counterpart of the weather observers. The practical advantages of such a general system in its relation to the public health are obvious; while the obstacles in the way of its accomplishment are not more insurmountable than were those that seemed a few years ago to stand in the way of the present admirably managed signal service at Washington.

CRIMINAL RESPONSIBILITY.

THE extent to which medical knowledge can contribute to the determination of criminal responsibility was discussed in an interesting paper by Dr. John Sibbald, Deputy Commissioner in Lunacy, at the recent Edinburgh meeting of the British Medical Association. Dr. Sibbald first pointed out that the question of criminal responsibility is a strictly legal question, and that it is neither necessary nor desirable to introduce into it abstract ethical theories. As it involves the question of the sanity of the individual, it has been found necessary to resort to the aid of the medical practitioner in investigating certain cases. But the present position of this branch of the subject is very unsatisfactory. The definition of irresponsible insanity given by the fifteen judges, and still looked on as the most authoritative legal statement on the subject, is disapproved of both by legal and by medical writers. Dr. Sibbald considered that the attempt which has been made by the latter to suggest theories of responsibility has failed, and that the best solution of the difficulties involved in the subject would be to leave the legal side of the investigation entirely to the lawyer, and to keep the medical side entirely to the physician; that is, to let the one deal with responsibility, and the other with insanity. He proposed that attempts to define legal insanity should be given up, and that it should be laid down as the legal

doctrine that responsibility does not attach to any act which can be shown to be the result of disease. The medical witness would have to show whether the accused was affected by any disease of which the act in question was the natural outcome. The question whether persons labouring under such a disease are to be looked on as either wholly or partially responsible, would be removed from his consideration.

ISOLATION OF INFECTIOUS CASES.

In the *Gentleman's Magazine* for the present month, Mr. McCullagh Torrens, M.P. for Finsbury, discusses the question whether it is better that members of the labouring and poorer classes of society who happen to be suffering from any of the infectious diseases should, for their own good as well as the general welfare of the community, be treated in their own homes, or removed to the large hospitals which are established for these maladies. Mr. Torrens decides for the former plan of treatment, which he would combine with small local hospitals and dispensaries. Members of the medical profession who are interested in this question will do well to examine Mr. Torrens' paper.

THE WORCESTER INFIRMARY.

DR. INGLIS writes to us in reference to the subjects at issue as follows:

"I observed in the *BRITISH MEDICAL JOURNAL* of August 28th, a letter headed 'The Worcester Infirmary', and signed 'One of the Executive Committee'. I trust you will allow me to answer a few of the remarks made in that letter.

"The Committee feel that they have got themselves into a difficulty; but what is more to be deplored, they have placed the infirmary in a critical position, and, as drowning men will clutch at a straw, so they are anxious to lay hold of anything for their justification, and have seized upon the one of *urgency*, and blame me, because I omitted to state in my letter of explanation, that the case I went to was urgent. Every member of the Committee knew that I had been called to see a patient twelve miles from Worcester. It is not usual for people to send a special messenger so far for a physician unless the case is urgent, or at any rate those sending suppose it to be so. I think there are very few who will accept this miserable plea put forward by the Committee, as any justification for the vote of censure they passed upon me.

"I infer that the author of the letter considers that the Committee ought to have some statement of exceptional circumstances, or some plea of justification, on every occasion when the exigencies of private practice prevent an honorary officer from attending to his hospital duties. In my opinion, such ought to be the exception, and not the rule; and that it is only where there is continued infringement that should require the Committee to put an honorary officer on his defence. If matters are ever to go smoothly, the medical men ought to be able to feel that they can rely upon the Committee for support instead of censure, and without that feeling their duties cease to be a labour of love, and become irksome and harassing. In my case, the Committee had the letter I addressed to the house-surgeon before them, which was an ample reply to the Rev. Martin Amphlett's grievance.

"We are all aware that there are a certain number of people so constituted mentally, that grievances are necessary for their existence. A county hospital is at all times a fruitful source whence to obtain them. The Committee are every now and again obliged to investigate into these complaints, but in nine cases out of ten they are of a frivolous character, and a satisfactory explanation can be given by the Committee without troubling the medical staff. The Committee ought to make it part of their duty to curb rather than foster the zeal of grievance-mongers.

"It appears like mockery for one of the Executive Committee to talk of rules being *prudently* and *wisely* understood, and that they do not impose upon the honorary medical staff any *rigid* or *inflexible* yoke. It is just that want of prudence and wisdom, combined with the rigid and inflexible manner in which the laws have been construed, that the medical staff have had to complain of. At the meeting on the 21st of June, when I sent in a letter of remonstrance, the Rev. John Pearson is reported to have spoken as follows. 'He could not allow a letter like that to pass altogether unnoticed, because he could not at all agree with Dr. Inglis. He could not agree that they had taken a narrow view of the rule. Nothing could be more plain and distinct than it was. Where was there anything in it which said that he could get the house-surgeon to perform his duty? It was not hinted at. He (Mr. Pearson) could not understand what was meant by a liberal view. He

could not see that the letter or the spirit of the rule could allow of it.' To these remarks none of the members present offered any opposition. The Committee seem afraid to face the governors, and in order to avoid that, at a special meeting held on August 30th, they passed the following resolution as a sop to the medical staff. 'That the Executive Committee, in acknowledging the letter of the honorary medical staff, are glad to find that the difference of opinion between them is so much reduced, and they are persuaded that fairness and liberality of construction of the circumstances which may occasion an infringement of the rules, will always be extended to the honorary medical staff, if the Committee are treated with the confidence to which they are justly entitled.' *Tempora mutantur et nos mutamur in illis.* But two months seem much too rapid for such a change in principles to appear genuine, and, as the fairness and liberality is only conditional on the honorary medical staff confiding in the Committee, it leaves then a wide loophole; so the would-be tempting bait has been respectfully declined.

'A meeting of governors will be summoned as early as possible to take into consideration an amendment of rule 59. It is to be hoped that all subscribers who wish well to the Worcester Infirmary will attend the meeting, and assist in rendering the rule equitable, and so put it beyond the power of this or any future Committee, to again construe it as they have done. A line of practice such as the Executive Committee have carried out for the last six months, if persisted in, would effectually put an end to gratuitous medical services, so far as Worcester is concerned.'

THE INTERNATIONAL MEDICAL CONGRESS AT BRUSSELS.

THE past experience of these "international" congresses appears to have been sufficiently satisfactory to prolong their existence till this the fourth session, which is about to be opened on September 19th at Brussels, under the presidency of M. Vlemingck. The conditions of admission are very light, and they are practically within reach of all comers. The general secretary of this meeting is M. Warlomont, Avenue de la Toison d'Or, 74, and all information and assistance are given to strangers by Dr. Delecosse, Rue de l'Hôpital, 14. Hitherto, however, these congresses have been in effect rather national than international in their character. They are managed on a system in many respects different from that which prevails at our British medical meeting. A number of sections are arranged; a "bureau" of affairs is appointed, and a series of questions for discussion are determined in each section. Each of these questions is some months before a meeting referred to a committee for report, and the "reporter" appointed prepares an elaborate document, setting forth what he conceives to be the actual state of knowledge on the subject, and ending by a series of "conclusions"; the said report becomes the order of the day each day in the section. The "provisional conclusions" of all the reporters are printed in a "programme", which is issued to the members for preliminary study; the report is discussed, and the "provisional conclusions" are submitted to the sections for adoption, and on them the debate turns. Such discussions are often formal, and the whole proceeding has a cut and dried official character very repressive of originality. But when, as is often the case, the reports are able, and the conclusions are sharply contested or cleverly supported by members who have obtained the programme before hand, and prepared themselves for the debate, the discussion assumes an interesting shape. The whole of the "bureau" and of the reporters are Belgian this time. The subjects treated, however, are very interesting, and the conclusions seem to us well calculated to provoke valuable discussions. They include—prophylaxis of cholera; alcohol in therapeutics; the inoculability of tubercle; surgical anaesthesia; the dressing of wounds after operations; maternities; the vaso-motor nerves and their modes of action; the value of experiments, founded on artificial (schematic) circulatory apparatus; the sanitation of workshops in which phosphorus is used; the organisation of the service of public hygiene; the manufacture of beer; defects of vision from the point of view of military service; the means of registering hearing power, and registering it in an uniform manner in all countries; defects of hearing from a military point of view; the moral and legal position, and the disposal of criminal and dangerous lunatics; should the medical use of chemically defined immediate principles be

extended, and the preparations of them be multiplied in pharmacopœias? the establishment of an universal pharmacopœia. Here is material for all tastes and food for all appetites. We are assured that any English physician or surgeon proposing to attend this congress will have a courteous welcome.

THE ANTI-VIVISECTIONIST AND THE LATE DR. JOHN REID.

A STATEMENT has lately been industriously circulated by the "Society for the Abolition of Vivisection", that the late Dr. John Reid, Professor of Medicine at St. Andrew's, during the painful illness (cancer of the tongue) from which he died, stated on several occasions that the pain which he suffered was "a judgment on him for the sufferings which he inflicted on animals", in his researches on the eighth pair of nerves. The words referred to are attributed to Dr. Reid in his biography by Dr. George Wilson. In the *Edinburgh Medical Journal* for the present month, Sir John Rose Cormack, one of Dr. Reid's most intimate friends, publishes a letter in refutation of the statement made by the antivivisectionists. He says that, during the recent meeting of the Association, in Edinburgh, he was several times asked by professional friends who knew his close and intimate friendship with Dr. Reid, and who remembered that they had worked together in physiological research, whether he believed that Dr. Reid used the expression attributed to him. He says: "I do not believe that my dear departed friend ever said in seriousness, or even thought, that the pain he experienced from cancerous disease of the tongue and pharynx was a judgment for the sufferings he had inflicted on animals. John Reid was, I firmly believe, a sincere Christian, but also a man of robust common sense." Sir John Cormack refers also to a visit of four days' duration which Dr. John Reid paid him in 1848, after he had undergone removal of the greater part of his tongue. He was then completing his volume of collected works; and, although the subject of physiological experiments was several times discussed, "neither then", says Sir J. R. Cormack, "nor at any other time, did Reid speak to me regretfully of his experiments on animals. . . . John Reid was too conscientious a man, and too frank and true in his friendship to me, to have stopped short on that occasion in disclosing his altered views as to experiments on animals had there been any alteration to communicate." Sir John Cormack states also that, during his recent visit to Edinburgh, he discussed this and other subjects relating to Dr. John Reid with Professor Spence, who was also one of Reid's closest friends, and one of his assistants in his experiments; and that Mr. Spence agrees with him in not believing that Dr. Reid ever entertained or expressed the opinion attributed to him. There is, then, the strongest reason for believing that Dr. Reid never held the idea attributed to him by his amiable but injudicious biographer, unless, perhaps, as Sir J. Cormack remarks, when he was "in a condition of delirious mental enfeeblement engendered by pain and morphia". Possibly, Sir John Cormack suggests, the statement may have originated in the fact that, during Dr. Reid's life, a sermon was delivered before the Edinburgh Society for the Suppression of Cruelty to Animals, in which the preacher had the bad taste and impicity to inform his audience that a great physiologist was then suffering agonising pain in the very same nerves on which he had experimented in dogs; and that this was a special judgment for his horrid cruelties!

RECENT URBAN MORTALITY.

DURING last week, 5,547 births and 3,723 deaths, equal to an annual rate of mortality of 25 per 1,000 persons living, were registered in London and twenty other large towns of the United Kingdom. The annual death-rate in each town was as follows: Portsmouth, 20; Glasgow, 22; London and Edinburgh, 23; Dublin, Sheffield, Sunderland, Oldham, and Birmingham, 24; Norwich and Nottingham, 25; Wolverhampton, 26; Bristol, 27; Leeds and Leicester, 28; Manchester and Newcastle-on-Tyne, 30; Bradford, 32; Liverpool, 33; Salford, 36; and Hull, 39. Scarlet fever prevails in Bristol and Bradford; and diarrhoea in Birmingham and Norwich. In London the

births were 88, and the deaths 77, above the average for the week. The deaths referred to the principal zymotic diseases were 388, and included 2 from small-pox, 25 from measles, 71 from scarlet fever, 5 from diphtheria, 69 (30 above the average) from whooping-cough, 26 from different forms of fever, and 190 (25 above the average) from diarrhoea. A child, aged twelve years, died in St. Bartholomew's Hospital, from "hydrophobia from the bite of a cat, about seven weeks". In outer London, the general and zymotic death-rates were 19.0 and 4.7 per 1,000 respectively, against 22.6 and 5.9 in inner London. At Greenwich, the mean reading of the barometer during the week was 29.91 inches; the average temperature of the air was 60.8 degs., or 2.5 degs. above the average of the week. No rain fell during the week.

THE LATE DR. DEMPSEY.

WE regret to announce the death of Dr. J. M. Dempsey of Charterhouse Square. The deceased gentleman was probably best known as a microscopist; and his collection of microscopic objects was very large and valuable. It contained numerous preparations of injected tissues; of which those of the brain formed a large proportion. For the past eighteen months, Dr. Dempsey's health had been failing; and about six weeks ago, under medical advice, he went to Carlsbad. After his return on Wednesday, the 8th instant, he took to his bed, and died of hepatic disease on Tuesday last, aged 53. He was in general practice, and has left two sons and a daughter. His eldest son succeeds to the practice. Dr. Dempsey was a genial, unobtrusive, hardworking member of the profession, who will be deeply regretted by all who had the privilege of his acquaintance.

ETHER AND CHLOROFORM.

THE *Boston Medical Journal*, referring to the recent discussion opened by Mr. Pollock's letter, observes that it hopes that the comments of the medical press "indicate that our more conservative British colleagues are beginning to realise the position in which they have placed themselves. Should prejudice still blind them, however, we have strong hopes from the revivalists represented by such men as Mr. Pollock and many other prominent English surgeons who have received valuable support from the BRITISH MEDICAL JOURNAL. In conclusion, we would simply caution our friends against the use of an impure article. Avoid everything but pure ether, such as is obtained in this country from Squibb, or Powers and Weightman; follow the simple directions laid down by Dr. H. J. Bigelow in an article in the *Journal* of November 20th, 1873, which appeared shortly afterwards in the BRITISH MEDICAL JOURNAL, and such cases as have appeared in late numbers of the English journals will cease to be reported. Give ether simply a fair chance, and the most stubborn and ignorant of its opponents will surely be obliged to acknowledge its superiority."

SCOTLAND.

THE Royal Commission appointed to inquire into the operation of the Factory Acts met this week at Glasgow, under the presidency of Sir James Ferguson. A deputation from the Drapers' early closing Association waited upon the Commissioners and urged the necessity of legislative enactments to meet the evils of late hours and improper sanitary arrangements, especially in reference to the health of women and children.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

THE first meeting of the session was held on the 3rd instant. The following office-bearers were elected. *President*: Dr. James Morton. *Vice-Presidents*: Dr. D. Richmond (Paisley), Dr. Robert Perry. *Council*: Dr. R. Stewart (Coatbridge), Dr. James Scanlan, Dr. Alex. Patterson, Dr. James Dunlop, Dr. D. Taylor (Paisley), Mr. A. Macfarlan, Dr. T. Reid, Dr. T. McCall Anderson. *Secretaries*: Dr. J. Coats, Dr. Gavin P. Tennant. *Treasurer*: Dr. Hugh Thomson. At

the conclusion of the private business, Dr. Fergus gave a discourse on "Sanitary Hints on Domestic Drainage". He referred to the defects of cesspools and traps, in respect chiefly to the absence of any proper system of ventilation, and suggested a variety of devices for their improvement. It is well known that Dr. Fergus objects altogether to the water-closet system, and only suggested these as palliatives of what seems at present to be a necessary evil. A somewhat prolonged discussion followed the remarks of Dr. Fergus.

THE NEW MEDICAL SCHOOL IN GLASGOW.

A LETTER has appeared in one of the Glasgow daily papers, which purports to give a correct view of the history of the proposal to found a new school of medicine in Glasgow in connection with the Royal Infirmary. The writer is an Andersonian student apparently, and has naturally a great regard for his own school, while he strongly resents the determination of the Glasgow University not to recognise its classes. It appears to him, that the University is afraid of the Andersonian becoming a formidable rival, and has devised this scheme of a Royal Infirmary school in order to check the growing popularity of the Andersonian; and that this has been done by means of the University professors, two of whom have a seat on the board of directors. We have taken care to inform ourselves of the facts of the case, and can state, that one of these professors strongly opposed the proposal for the formation of such a school; and the other stated publicly, that he had not been present at the meetings at which it had been discussed. This theory of the Andersonian student is, therefore, quite devoid of foundation, and is only worthy of notice because it may possibly be held by a number of other students who cannot be expected to be informed of the facts. There is nothing more certain than that the Glasgow University has had nothing whatever to do with the origination of this scheme, which, if properly carried out would, we think, confer a great benefit on the whole of the medical profession of Glasgow, by raising its tone and giving an open field for any young man who had an ambition to become a teacher of medicine.

IRELAND.

AT a late meeting of the Thurles Board of Guardians, the salary of Dr. Russell, dispensary medical officer, was increased by £20 per annum.

SIR JOHN ARNOTT, proprietor of the *Irish Times*, has executed a deed of gift vesting the large sum of £20,000 in trustees for such charitable institutions in Cork as he shall afterwards designate. The sum so vested consists of shares in the City of Cork Steampacket Company, and the dividends will be applied to the purpose intended.

Dr. J. J. CHARLES of Belfast, whose accomplishments as an anatomist are well known, is a candidate, we hear, for the professorship of Anatomy in the Queen's College, Cork. Mr. Charles has been for six years demonstrator in the Queen's College at Belfast. His contributions to science, of which some have been published in these pages, afford satisfactory evidence of fitness for the office which he now seeks.

Dr. H. MACNAUGHTEN JONES, Cork, is, we learn, a candidate for the chair of *Materia Medica*, in the Queen's College, Cork. Dr. Jones has given evidence of great industry and varied ability, and has all the qualifications for such a post. As the honorary secretary of the South of Ireland Branch of the British Medical Association, he has rendered valuable professional services to his brethren, and we trust he may receive the appointment.

MATER MISERICORDIÆ HOSPITAL, DUBLIN.

Dr. FARRELL has been appointed by the Superiress and Sisters of Mercy of Baggot Street, Assistant-Physician to this institution, in the place of Dr. Browne, who has left for New South Wales.

HEALTH OF IRELAND: QUARTERLY REPORT.

DURING the quarter ending June 30th, there were registered 37,393 births, a number equal to an annual birth-rate of 28.2 in every 1,000; and 25,375 deaths, representing an annual mortality of 19.1 per 1,000. These returns show that the birth-rate is again under, and the death-rate over, the average for the corresponding quarter for the previous five years. The deaths from small-pox numbered 225, and abundant evidence is forthcoming that the disease has been widely spread by the beneficial practice of inoculation. Measles produced 202 deaths, being a considerable increase as regards the corresponding quarter of last year. Scarlatina caused 913 deaths, a decrease of 194 from the previous quarter; but, in some districts, it was of a most malignant character. The deaths from diphtheria amounted to 111, and from whooping-cough 305, whilst fever proved fatal in 756 instances, and 397 deaths were ascribed to diarrhoea. Several registrars speak with approval of the effects of the Sanitary Act, whilst others consider that but trifling results so far have followed; all are agreed, however, that in too many districts there is room for improvement, and much to tax the energies of sanitarians.

DANIEL TOLER THOMAS MAUNSELL, M.B.

IT was with much regret that we lately announced the death of Dr. Maunsell, the able and well known Secretary of the Irish Poor-law Medical Officers' Association. Dr. Maunsell was the son of the late Rev. Thomas Maunsell, of the County Tyrone, a clergyman of the Irish Church. Having obtained an extensive and careful preliminary education, he entered Trinity College, Dublin, of which College he was a distinguished student. In 1859, he graduated A.B. and M.B. at Dublin University. While a student, Dr. Maunsell devoted special attention to the scientific subjects ancillary to medicine, and was a distinguished member of the anatomical, botanical, and chemical classes of Trinity College; in the latter subject, he obtained high honours. Dr. Maunsell was also a Licentiate in Surgery and Midwifery of the Royal College of Surgeons in Ireland. Early in his career, Dr. Maunsell was appointed Demonstrator of Anatomy in the Ledwich School of Medicine. Subsequently, he was appointed to the chair of *Materia Medica*, and at the time of his death held the chair of Botany in the same school. Dr. Maunsell was Physician to the High Street Division of the South City Dispensary District of Dublin. His occupation of dispensary physician soon directed his attention to the organisation of the important public service in which he was employed, and to a great extent determined his future career in medical politics and literature. From henceforth Dr. Maunsell became the most prominent writer in Ireland upon subjects connected with the Poor-law Medical Service, the relations between sickness, pauperism, and disease; and latterly devoted his pen almost entirely to sanitary reform, especially in its relation to the Poor-law and the Poor-law Medical Service. Dr. Maunsell was the author of the various pamphlets and articles well known as written by "Dispensarius". His *Sketch of the History of the Poor-Law*, and his pamphlet on the *Irish Dispensary Medical Officer, his Work and his Pay*, at once made him the leader of the Poor-law medical officers, and ultimately contributed to the foundation of the Irish Poor-law Medical Officers' Association, of which Dr. Maunsell was the unanimously elected Secretary. The various annual and other reports and circulars issued from time to time by the Secretary to the members of the Irish Medical Officers' Association form a complete record of the different phases of the discussions on Public Medicine in Ireland during the past ten years. Many of these reports involved an immense amount of work, especially of a statistical character. One of these reports, entitled "An Analysis of the Population, Acreage, and Expenditure, under the Sanitary and Medical Charities Acts in Ireland," published in 1873, involved an amount of labour, in compilation and arrangement of statistics, seldom undertaken outside a Government-office. We have seen this paper quoted over and over again in parliamentary discussion, and we believe few who employed the figures ever believed that the work was the result of the

almost unaided efforts of a single unpaid officer. It will be remembered by those who attended the Public Health Section of this Association at its London meeting in August 1873, that a paper entitled "Observations on State Medicine and Public Health in Ireland", by Drs. Grimshaw and Maunsell, was brought forward at that meeting; and that Dr. Grimshaw, in reading the paper, had to apologise for the absence of Dr. Maunsell, owing to his having met with a serious accident. That accident was serious injury to the knee, caused by the upsetting of a carriage. The effects of this accident for a long time disabled Dr. Maunsell from active work, and so seriously impaired his health, that we believe it tended much to lay the foundation of his last fatal illness. While still suffering from the effects of this accident, Dr. Maunsell worked hard at his portion of the paper on State Medicine and Public Health. The suggestions in this paper, and the energy with which they were afterwards urged upon the Government, tended much to the production of the Irish Public Health Act of 1874. Our space will not permit us to point out the many ways in which Dr. Maunsell has left his mark on medical politics and legislation. We believe he has done more than any one ever did gratuitously to improve the Public Medical Service of Ireland, not only for the benefit of his own profession, but for the welfare of the public. The genial and happy manner of "Tom Maunsell", as he was called by his familiar friends, of whom he had many, will long be remembered. His life was not unchequered by the troubles and annoyances usually encountered by reformers; and we much fear that these troubles, combined with the effects of the accident previously referred to, tended not a little to the fatal result, which occurred rather unexpectedly on August 18th, at his residence in South Richmond Street, Dublin.

AN IRISH SPA.

LISDOONVARNA Spas are coming into notice. These mineral waters are situated in the County Clare, and recent analysis of the waters has been made in the laboratory of the Royal College of Science at Dublin. One of the waters examined contained, like Harrogate and Aix-la-Chapelle, sulphur in the form of sulphuretted hydrogen; whilst another possessed iron and a small quantity of manganese. The Lisdoonvarna water also contains a small proportion of lithia, and less common salt than the other varieties. The visitors at the Spas have this year been exceedingly numerous, and the hotels and boarding-houses, as a necessary result, have been inconveniently crowded. Dr. Mapother of Dublin has written a pamphlet descriptive of these mineral waters, and speaks highly of their efficacy in various diseased conditions.

DEATHS IN IRELAND.

ON March 14th, 1874, we noticed the volume on the Status of Disease published by the Irish Census Commission. That volume was dated October 31st, 1873. We have now before us the second volume, dated March 31st, 1875, containing the statistics of deaths in Ireland collected by the Irish Census Commissioners of 1871. When are we to have the rest of those statistics? we hope some time before the issue of the next Census Commission in 1881.

A first glance at this volume almost inclined us to lay it aside and merely announce its appearance. It is too late to be of much value, and is extremely imperfect, and not certainly drawn up in accordance with the spirit of the times. We should remind our readers that death-registration in Ireland commenced in the year 1864, that is, less than three years after the short period of taking of the census of 1861. The want of registered information with regard to deaths for the thirty-three months out of the decade of 1861-1871, is made one reason by the Irish Census Commission for resorting to the clumsy and old-fashioned system of collecting death-statistics through queries on the census forms. Why should the Irish Census Commission not have availed themselves of the registered deaths for the time during which death-registration existed, and merely collected the records for the odd thirty-three months by hearsay? We might then have had a fairly accurate return, but, as it is, the census-returns differ so much from the Registrar-General's returns, that the inaccuracy of the former is but too manifest. The Commissioners, referring to previous reports, state, "In these several

reports, extending over the decade ending in 1841, and concluding with that ending on April 7th, 1861, the Commissioners adopted, with some modifications, a nosological arrangement of diseases originally published in accordance with the most distinguished scientific authorities on such subjects in Great Britain, the Continent of Europe, and America". And again, "Since the taking of the census of 1851, several changes in the matter of nosological arrangement have been made in the tables of deaths annually presented by the Registrar-General of England. Believing, however, that the plan now presented for the fourth time is based upon scientific principles, and has been approved of by many distinguished medical statisticians; and because we think it *more adapted to Ireland than that published by the English Registrar-General*; and, likewise, because it affords a means of comparing one decade with another, with what has already been presented by us on previous occasions, we have, with some additions and modifications, continued the arrangement formerly pursued". The italics are ours.

Upon what grounds do Commissioners Donnelly, Abraham, and Wilde (or rather the latter, whose name stands at the head of the table), believe that their system of nosology is more suited to Ireland than the system adopted by the English Registrar-General? We have yet to learn that Irish and English diseases so differ that they will not fall into the same classification. We are at present unaware of any disease which is not common to both countries, and to all divisions of the United Kingdom; moreover, Mr. Donnelly, who is the Irish Registrar-General, uses for registration purposes the same classification as his English *confère*. When the Irish Census Commissioners write of comparison with "what has been previously presented", do they forget that a more important comparison is to be instituted with what is yet to come, and that, in judging of the comparative health of places and towns in the United Kingdom, an uniform classification is essential? We pointed out in our notice of the first volume, that Government had not utilised Dr. Burke, the Medical Superintendent of Statistics at the Irish Registration Office, and pointed out how Dr. Burke's supervision would have added much to the accuracy of the census returns of the status of disease. In the present instance, the want of Dr. Burke's direction is more than ever visible—in fact, such a mass of badly arranged figures would not have been allowed if Dr. Burke had been a Census Commissioner. A table of equivalents is indeed given at the beginning of the report, by which anyone who chooses to spend hours over the work, can partially convert the Irish census nosology into modern nosological equivalents. Having thus cautioned our readers against being over credulous in accepting the figures given in the report under consideration, we shall proceed to put before them some of the more reliable of the results.

It is stated that the annual rate of mortality per 1,000 for the decade was only 13.8 against 14.8, 17.5, and 13.7, for the decades ending 1841, 1851, and 1861 respectively. We need scarcely say, that all these figures are much under the real rates. We know that the registered death-rate for Ireland is, for the last ten years, 17 per 1,000 *per annum*, and this is somewhat under the mark. We believe, however, that the relation between the number for the several decades is correct.

There has been a remarkable increase in the number of inquests held, being 27,291, or 1 in 28.1 of all the deaths registered; against 1 in 58.4, 1 in 46.5, and 1 in 30.8 in the former decades. This is attributed to the increase in sudden deaths from apoplectic and cardiac affections; but we think it may, with greater truth, be ascribed to increased vigilance on the part of coroners and police-officers. Medical evidence was given in only 70.2 per cent. of the inquest cases. This, however, is an increase on former decades, showing a farther tendency to increased exactness in the management of inquests. The number of inquests held on "unknown infants" has considerably decreased, proving a decrease in the crimes of concealment of birth, desertion, and infanticide. There has been a steady decrease in the number of deaths from "homicide"; but, we are sorry to say, a rise in murders. There has been a steady increase in the number of suicides during the past decade. Accidental deaths have also increased in frequency, from 1 in 1,013 of the population for 1841, to 1 in 521 for the last decade. Deaths from the "immoderate use of ardent spirits" have, according to the Census Commissioners, diminished to a very great extent, being 1 in 11,443 of the population in the last, against 1 in 6,508 in the preceding decade. The increase in the proportion of deaths among females from this cause is not encouraging.

With regard to hospitals, it is pleasant to learn that a great increase has taken place in the amount of "general hospital accommodation in Ireland". In the decade 1841-51, there were 105,040 admissions to "general" hospitals; in 1851-61, there were 128,370; in 1861-71 there were 155,954, showing an increase of one half in the accommoda-

tion for the sick poor during the past thirty years. This increase is in addition to the extra accommodation provided for the sick in the workhouse infirmaries. By the increased provision for the sick in the workhouse hospitals, the general hospitals have been much relieved of the burden of incurable cases, and have thus had their usefulness considerably augmented.

In the portion of the report which refers to the general mortality of Ireland, a table is given, which shows the relation between the number of deaths registered and the number returned upon the census-papers for the seven years during which registration had continued. The registered deaths were 639,068, the number returned on the census-papers 579,734, being 59,334 less, or an error of 9.3 per cent. This seems to satisfy the Commissioners, as they say the "comparison will be found to give very favourable results as to the accuracy of the census returns". We cannot think that, when there is an error of 9 per cent., the results are favourable, especially as in some years the error is more than double this amount. We regret that for all these seven years the detailed tables are compiled from the less accurate returns and not from the registration returns, so that all the deaths are underestimated to the average extent of 9 per cent. at least; and, allowing for the probable deficiencies in registration, we cannot estimate the error at less than 10 per cent.

The grouping of diseases in the tables is of such a confused character that we shall not attempt to lay any conclusions derived from the totals of each group before our readers, but confine ourselves to some of the more important diseases individually.

The mortality from *small-pox* has steadily decreased in the last four decades, the deaths returned having been for that ending 1841, 58,006; for 1851, 38,275; for 1861, 12,727; and for 1871, only 4,113; being respectively 1 in 20, 1 in 36, 1 in 64, and 1 in 187 of the deaths from all causes. In the year 1870, there were only 163 deaths from small-pox returned. The greatest prevalence of small-pox was in the years 1863, 1864, and 1865; especially in 1864. The disease has been much more prevalent in Connaught than in any other of the four provinces. Thus the death-rate from small-pox for the decade was in Connaught, 10.7; Munster, 8.1; Ulster, 7.0; and in Leinster, 5.1 per 10,000 of annual average population. In other words, vaccination has been less common and possibly inoculation more frequent, just in proportion as we recede from the great centres of active life and education.

The mortality from measles is stated to have decreased, while that from scarlatina has as steadily increased. Although the Commissioners seem to think that the symptoms of measles are popularly so well known that but few mistakes could have occurred, yet we rather incline to the opinion, that the apparent decrease in measles and increase in scarlatina is, in a great degree, owing to a more accurate recognition of the difference between the diseases by the non-medical public, from whom the census-returns are collected. It is pretty clear, however, that there is a very considerable increase in the mortality from scarlatina, and this, the report states, is "almost exclusively in civic districts". The mortality from whooping-cough has diminished. Dysentery and diarrhoea have decreased.

Only one cholera epidemic is recorded in the decade, and that the slight one of 1866, causing together, with "sporadic" cases, 2,923 deaths during the decade; of which, 2,062 occurred in Leinster, 486 in Munster, 311 in Ulster, and only 64 in Connaught.

The class fever, comprising all forms of continued fever "returned on the census-forms", shows a marked diminution. To show in what an extraordinary way classification has been carried out, we find gastric fever (which most nosologists know generally means *enteric* fever), included among the diseases of the digestive organs. Such being the case, we need scarcely say the figures in the fever class are even more incorrect than the others contained in this volume. We think it scarcely necessary to consider in detail the other forms of disease mentioned in the returns, as very little reliance can be placed on their accuracy, and as they throw but little light upon the state of the general health of the Irish people.

An elaborate report on the sanitary condition of Dublin is included in the report. As this report on Dublin is much inferior to that to be found in Thom's *Directory* for the present year, page 1,408, *et seq.*, we think it unnecessary to make further remarks thereon. We heartily endorse the concluding remark of the Commissioners, that they conceive "that, in future census compilations, it will not be necessary to publish so many tables of deaths and to report thereon", in consequence of the general registration of deaths in Ireland under the Act of 1864. If the Commissioners had availed themselves of the registration-returns which already exist, they might have, even in 1871, found that it was not "necessary to publish so many tables of death and to report thereon", and might have furnished a much more accurate and valuable report than they have done.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

The Sewage of Paris.—Increased Duration of Life in France.—Prize of the Academy of Sciences.

To render a city salubrious and to maintain it so, is a problem that has tried the wits of many a sanitarian and engineer, particularly when that city is densely populated, as are London and Paris, Vienna, St. Petersburg, etc. M. Dubourg, a civil engineer, lately submitted to the municipal council of Paris a plan, according to which the contents of the sewers and latrines may by means of canals be emptied into the sea. But this has not been received with much favour, owing to the enormous expense it would involve, and the great objection that would certainly be made against it by the inhabitants of the tracts through which the offensive matters would pass. M. Charbonneau, another civil engineer, proposes to suppress all cesspools and to have the refuse matter carried away out of the walls of the city. This system already exists in Paris; but the advantage that M. Charbonneau's plan has over it consists in the refuse matter being removed in a dry state, to which it is reduced by a peculiar apparatus invented by this gentleman, as well as by the action of chemical agents. This matter would thus lose none of its properties as manure, and would realise an annual revenue of nine or ten millions of francs; but the enterprise itself would cost at least fifty millions of francs, which the financial state of the country cannot at present afford. Moreover, I do not see in what respect it is an improvement on the present system, which, to say the least, is one of the most objectionable ever conceived by man, and the only wonder to me is that, in spite of these repositories of human dejections, Paris can, in a sanitary point of view, bear comparison with any other city in the world. There is, moreover, another serious objection to M. Charbonneau's plan; it deals simply with the solid portion of the dejections, but he does not state how the liquid portion is to be disposed of. From what I can gather from his report, he would have the liquid dejections emptied into the sewers, but he forgets that these may contain elements even more deadly than the solid parts, and that they may thus disseminate their dire influence as they pass along the sewers. To obviate this, the use of disinfectants has been proposed by others interested in the matter, but these have been found utterly useless and too expensive. It is, however, high time that something should be done in this direction, for the present system of removing the dejections is not only most offensive to the olfactory nerves, but cannot be free from danger to the public health. For the information of those who have not resided any time in Paris, I may here state, that the contents of the privies are emptied into cesspools, with which the former communicate directly by means of pipes. The cesspools are generally sunk in the courtyard, but, in the older houses, they are under the building itself. These cesspools are of good masonry and perfectly waterproof; and, as soon as they are full, the filth is pumped up into huge casks and carted away outside the walls of the city. Here the matter is made to dry, and, after having been reduced to powder, is sold as manure under the name of "poudrette". The operation of carting off the contents of the cesspools is always performed about midnight, so as to render it as little offensive as possible; but, notwithstanding this, I consider the whole system defective, and not to be compared with the system of sewage in London. The sewers in Paris are perfect models of their kind, but the difficulty is, how to dispose of their contents so as to render them not only innocuous but of some utility.

Flourens, the celebrated French physiologist, and others, have expressed the opinion that, constituted as man is, his tenure of life in this world is more than a hundred years. Although Flourens himself did not live much beyond three score years and ten, it would seem he had some grounds to justify such an assertion, from the number of centenarians we hear of on all sides. We are not prepared to say that human longevity has been really increased; but one thing is certain, that, within the last fifty years at least, the average duration of human life has been considerably on the increase; for, according to a statistical report recently published, the mean average in France, which in 1817 was 31 years and 3 months, has attained the respectable standard of 39 years and 8 months for each individual inhabitant. Indeed, for the last five or six centuries the average duration of human life has been slowly but steadily increasing; and this may be attributed to a combination of circumstances: 1. The intelligent extension and application of the principles of the healing art, including vaccination; 2. The general extension of wealth and comfort; 3. A better understanding of

the principles and advantages of public and private hygiene; 4. The dissemination of elementary instruction.

The Academy of Sciences has awarded to M. Paul Bert, Professor at the College of France, the biennial prize of 10,000 francs (£400) for his researches in physics and mathematics.

BIRMINGHAM.

[FROM OUR OWN CORRESPONDENT.]

Epidemics.—The Medical Staff of the Workhouse.—Out-patient Reform.—Children's Hospital.—Medical Education of Women Question.—Cases of Tetanus.—The Institute.

DIARRHŒA may be said to be always prevalent here. Last year, it caused almost as many deaths as small-pox—more than 600—but, for the last two or three weeks, it has been epidemic, especially amongst children. It has been usual to blame the water-supply, and this became a strong point, and rightly enough, against surface-wells in the recent Parliamentary proceedings which have given to our corporation the control of the waterworks; but, in our experience, the open "middens", which are still numerous, are a much more direct source of mischief, especially under present climatic conditions. The small-pox epidemic is reduced at length to small proportions. Only two new cases were returned last week, and seventeen remain in our wards. The total mortality in the last four years is given as 1,300 out of 8,000 cases.

In the Birmingham Workhouse there are nearly 2,000 persons. The average weekly number of sick, including bed-ridden, is over 600. There are, in addition, 200 lunatics; there are three or four births weekly, and about ten deaths. There are about 100 admissions per week, each one to be examined and classed; and a proportionate number of discharges to be certified. Will it be believed that, for all the work and responsibility represented by these figures, there is only one medical officer? A few advanced thinkers are beginning to inquire how much longer such an injustice may continue. We believe it is not generally known that the Local Government Board pay half the medical salary, and undertake to pay half of that of any fresh medical officer required.

In a recent number of the JOURNAL (August 21st) is an account of the efforts of the managers of the Great Northern Hospital in London towards the reform of their out-patient department. The somewhat similar action desired by the authorities of the Queen's Hospital, and referred to in my last letter, was hindered at the public meeting called to consider the question by the action of a "working men party", who objected to give up the ticket system, and were indignant at the idea of an inquiry and the payment of a "registration fee". There can be little doubt, however, that the public opinion of the large majority of subscribers is in favour of a free system with inquiry; but, in order to conciliate, the decision of the points at issue was adjourned until November. It has been remarked that, if this important reform be really frustrated by the votes of working men who object to an independent inquiry into the circumstances of applicants, the result to the subscription list will be disastrous. The public like to be assured that they are not imposed upon, though they will seldom take the trouble to assure themselves, and to forbid inquiry has an ugly look. We think, moreover, that the profession has equal, if not greater, right and interest than the public to insist upon inquiry whether certain patients are real objects of charity or no. A case in point may be found in the *Medical Times and Gazette* for August 28th. The income of the patient's mother was over £1,000 a year, and the patient's own £300. The Birmingham Ear and Throat Infirmary has held its annual meeting, and reported financially that its subscription list was diminishing. It was said by one of the speakers that the "criterion of the usefulness of a charity was an increasing subscription list", and his proposition was to make this institution also free and abolish privileges; but the question was reserved for consideration.

At the Children's Hospital, extensive improvements have been set on foot. The out-patient hall is to be enlarged, a separate room is to be built, and a separate officer to be appointed to see new cases and separate infectious ones. At the in-patient department, land has been bought for new and separate fever, croup and diphtheria, and quarantine wards, which, to judge from plans before us, will really be models of hospital construction in every sense. An appeal for £6,000 has been addressed to the public, and a large portion of this sum received, including a donation of £1,000 *in memoriam*, so popular is a well managed charity.

An influential deputation, including the mayor and several councillors and clergymen, have requested an interview with the Council

of the Queen's College on the subject of possible facilities for the medical education of women.

Amongst interesting cases recently observed at the Queen's Hospital are two of traumatic tetanus treated by hydrate of chloral and diaphoresis. The first followed a compound fracture of the hand, the second of the elbow, with exposure of the ulnar nerve. The former recovered, but the latter proved fatal in twelve days. Both cases were in Mr. Jordan's practice. At the same hospital, Mr. Priestley Smith has been unanimously appointed as ophthalmic surgeon, after having conducted an Eye Department for some time past on a temporary basis, which has proved a valuable acquisition to the hospital resources.

I understand that the programme of the Medical Institute is being well developed. A very good nucleus of a library has been formed, and will, it is hoped, be made available in rented rooms before very long, and without waiting for a permanent location.

ASSOCIATION INTELLIGENCE.

NORTHERN COUNTIES (SCOTLAND) BRANCH.

THE annual meeting will be held in Gray's Hospital, Elgin, on Saturday, September 18th, at 12.30 P.M.; Dr. VASS, of Tain, President-elect.

The following papers have been promised.

1. Address by the President-elect.
2. Cases of Monstrosities. By Dr. Duff.
3. The Sanitary Condition of our Villages and Rural Districts. By Dr. R. S. Turner.

Luncheon in Gordon's Arms Hotel, at 2.30.

J. W. NORRIS MACKAY, M.D., *Hon. Sec. and Treasurer.*

Elgin, September 8th, 1875.

SOUTH MIDLAND BRANCH.

THE autumnal meeting of the above Branch will be held in the Council Chamber of the Guildhall, Northampton, on Wednesday, September 22nd, at 2 P.M.; HENRY TERRY, Esq., President-elect.

Gentlemen intending to read papers are requested to forward their titles forthwith to Dr. Bryan.

J. M. BRYAN, M.D. } *Honorary Secretaries.*
W. MOXON, Esq. }

Northampton, September 1st, 1875.

SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT.

THE next meeting for the above District will be held on Wednesday, September 22nd, at the Burlington Hotel, Eastbourne, at 3.30 P.M.; T. F. SANGER, Esq., of Alfriston, in the Chair.

Dinner at 5.30 P.M. Charge, 5s., exclusive of wine.

Notice of intended communications is requested by Tuesday, the 14th instant, in order that they may be inserted in the circular convening the meeting.

THOMAS TROLLOPE, M.D. Cantab., *Hon. District Secretary.*

35, Marina, St. Leonards-on-Sea.

SHROPSHIRE SCIENTIFIC BRANCH.

THE annual meeting of the above Branch will be held in the Museum, Shrewsbury, on Wednesday, September 22nd, at 2 o'clock; WILLIAM MATHEWS, Esq., President-elect.

Dinner at the George Hotel at 5 o'clock, exact time.

Gentlemen intending to read papers are requested to communicate with the Honorary Secretary.

SAMUEL WOOD, *Honorary Secretary.*

Shrewsbury, September 8th, 1875.

NORTH OF ENGLAND BRANCH.

THE autumnal meeting of this Branch will be held at the Queen's Hotel, Sunderland, on Thursday, September 23rd, at 3 P.M.; S. E. PIPER, F.R.C.S., President.

The following papers have been promised.

1. Dr. J. W. Eastwood. The Prevalent Practice of Advertising Medical Works in the Non-Medical Press.
2. Dr. C. Gibson. Certain Forms of Blood-Diseases.
3. Dr. G. Y. Heath. Some of the less noticed complications of Prostatic Disease.

4. C. S. Jeaffreson, Esq. Remarks on some of the recent Advances in Surgical Pathology and Therapeutics.

5. Edward Jepson, jun., Esq. The Mechanical Treatment of Intestinal Obstruction.

6. Edward Jepson, jun., Esq. Case of Tumour of the Neck.

7. Dr. Byrom Bramwell. Report of a Case of Hydatid Disease of the Liver.

8. Dr. Ayre Smith. Report of a Case of Femoral Aneurism; also, exhibition of patient.

9. G. B. Morgan, Esq. Case of Removal of Cystic Tumour (Hydrocele?) of Neck, treated Antiseptically.

10. E. A. Maling, Esq. Report of a Case of Femoral Aneurism, treated by Pressure.

Gentlemen who are desirous of reading papers will oblige by communicating with the Secretary.

Dinner at the Queen's Hotel, at 4.45 P.M. Tickets, exclusive of wine, seven shillings and sixpence.

G. H. PHILIPSON, M.D., *Honorary Secretary.*

Newcastle-upon-Tyne, September 14th, 1875.

MIDLAND BRANCH.

A MEETING of the above Branch will be held at Matlock Bath, on Thursday, September 23rd. Several papers have been promised. Further information in next week's JOURNAL.

F. W. WRIGHT, *Honorary Secretary.*

Derby, September 1st, 1875.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE autumnal meeting of this Branch will be held at Tenby, on Thursday, September 30th.

Nomination-papers must be sent to one of the undersigned by the 9th instant.

ANDREW DAVIES, Swansea. } *Hon. Secs.*
ALFRED SHEEN, M.D., Cardiff. }

September 2nd, 1875.

YORKSHIRE, AND EAST YORK AND NORTH LINCOLN BRANCHES.

It having been decided by the respective Councils of the above Branches that the autumnal meeting shall be held conjointly at the York Museum on October 13th, 1875, members of these Branches intending to read papers or cases are requested to forward the title to either of the Secretaries on or before the 27th instant, so that a notice thereof may be included in the circular convening the meeting.

Dinner at the Station Hotel at 5 o'clock. Tickets (exclusive of wine) 7s. 6d. each.

W. PROCTER, M.D., York, } *Hon.*
R. H. NICHOLSON, Hull, } *Secs.*

York, September 18th, 1875.

WEST SOMERSET BRANCH.

THE autumnal meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, October 14th, at 5 o'clock.

The following question has been settled by the Council as the one on which members should be invited to express their opinion at the said meeting after dinner:—"Is the disuse of Bloodletting in the Treatment of Disease in accordance with the principles of Pathology?"

Dr. Cordwint proposes to read a paper "On Tissue-Change in Fevers".

Dinner (on the table at 5 o'clock), 4s. a head, exclusive of wine.

W. M. KELLY, M.D., *Honorary Secretary.*

Taunton, September 16th, 1875.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETING.

A SPECIAL meeting, to consider the adjourned discussion as to the foundation of an Ethical Committee for the District, was held in the Library of the County Hospital, Canterbury, on September 2nd; Mr. WACHER in the chair.

The following resolutions were introduced by Mr. REID, and carried.

1. That subjects intended for the consideration and report of the Committee shall have relation only to the general interests of the profession in the district; and all subjects in any wise having a mere personal or individual character shall be excluded.

11. That any subject to be considered shall be proposed, seconded, and approved of by a majority of a general meeting, to which notice of it has been given beforehand. When thus approved, the Committee shall, as soon as may be convenient, consider it and report to another general meeting, which shall deal with it as the majority agree.

12. When such report of Committee has been confirmed by a general meeting, it shall be considered as a general recommendation for the members of the district.

13. The Committee shall be composed of seven members, selected, as far as possible, from the several places at which the meetings of the district are ordinarily held, and shall be elected annually (after its first appointment), at the meeting when the arrangements for the ensuing year are made.

14. That the Committee be now formed, and that the following gentlemen be requested to act upon it: Dr. Wilks (Ashford), Mr. Reid (Canterbury), Mr. Rigden (Canterbury), Dr. Parsons (Dover), Dr. Bowles (Folkestone), Mr. Thornton (Margate), and Mr. Hicks (Ramsgate).

It was then resolved that these resolutions be forwarded to the Executive Council of the Branch for their approval.

Mr. REID proposed, and Mr. OSBORN seconded, that the Committee take into consideration—

I. The formation of a Medico-Chirurgical Tariff, to be recommended to the District.

II. To consider and report on the usages and customs of attending funerals.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

GREAT confusion having been caused at various times from the existence of two Sedgley Local Boards, Upper and Lower, the name of the latter has been altered to Coseley.

The salary of Dr. John F. W. Tatham, Medical Officer of Health for the Salford Urban Sanitary District, has been increased from £400 to £500 *per annum*.

SUPERANNUATIONS.—Mr. William P. Cullen, late medical officer for the St. Luke District, Holborn Union, has been granted £70 *per annum*, and Mr. William Stedman, late medical officer for the Bedhampton and Hayling Districts, Havant Union, £40 *per annum*.

PAYMENT FOR SICKNESS RETURNS.

SIR,—I have received a letter from the Local Government Board, dated September 13th, 1875, acknowledging my report, in which the following statement occurs, which will, I think, be received with satisfaction, both by district medical officers and medical officers of health, as it points out the wish of the Local Government Board to interpret the new Public Health Act in a just and liberal spirit.

“Adverting to your remark on page 28 of the Report, that there seems to be no means in the present law of giving a district medical officer remuneration for information respecting sickness in his district, which he may furnish to the medical officer of health, I am directed to state that the Board consider that it is competent for urban sanitary authorities, if they think proper to do so, to enter into an arrangement to pay district medical officers reasonable remuneration for supplying the medical officer of health with information which he requires for the efficient discharge of his duties.”

The portion of my report which has elicited this decision is as follows.

Prevalent Diseases.—“I can only speak on this subject from the small amount of personal observation I have had since May, and from the Registrars' and Union Returns, the medical men in this town refusing to give me any information. This is from no want of courtesy to myself, but they say that, from a matter of principle, they ought not to give any assistance or do any work beyond their contract as district medical officers without increased pay, and argue that, as the district subregistrars are allowed payment for information of death to the medical officers of health, so ought they to be remunerated as district medical officers. I regret there seems to be no means in the present law of giving these district medical officers any extra remuneration. The 1875 Act, sec. 6, provides that the Local Government Board may appoint district medical officers to assist the medical officer of a

constituent district, and that he should receive remuneration for so doing, but I fear this will only apply to large conjoint districts.”

Feeling that the refusal of the district medical officers, both in the urban and rural sanitary districts, was purely a matter of principle, in which I myself sympathised, I thought it right to mention the matter in my report, and it gives me much pleasure to find that it has elicited so important a decision.—Yours faithfully,

HORACE SWETE, Medical Officer of Health,
Droitwich Rural and Urban Sanitary Districts.

5, Newbold Terrace, Leamington, September 14th, 1875.

THE IRISH POOR-LAW MEDICAL OFFICERS AND THE PUBLIC HEALTH ACT OF 1874.

THE great demand upon our space at this time of the year has up to the present prevented us from referring to the very important question of the position and pay at present allotted to the Irish Poor-law medical officers under the Public Health Act of 1874. Great things were expected from the working of the Irish Public Health Act of 1874. All the advocates of sanitary reform in Ireland, who at the same time held the interests of the Poor-law Medical Service and the public in view—for both these interests are identical—advocated the utilisation of the well-organised Poor-law Medical Service as the leading feature in any sanitary organisation which might be adopted for Ireland. The Government adopted the view that Poor-law and Public Health services should be the same; and the medical officers of the service, with few exceptions, cheerfully accepted the position advocated by men whom they knew to be their best friends, and compulsorily imposed upon them by Parliament. While the dispensary medical officers of Ireland accepted these duties without a murmur, they did so believing the Government would honestly and sufficiently remunerate them for their work. What, therefore, are the surprise and disappointment of the medical officers to find that Government, having obtained their services and power to remunerate them for those services, deliberately fixes salaries which, for the most part, are merely nominal, when compared with the duties to be performed! Many complaints and protests were made to Sir M. Hicks-Beach, the *nominal* President of the Irish Local Government Board, but all in vain. The Board pursued the extraordinary course of issuing an order that the maximum salaries of the officers should be *one-fourth* of their present salaries for their duties as dispensary medical officers. This means that the average salary would be about £25 *per annum* as a maximum. Now, what can be expected from a Public Health Service where the salaries are paid at such a nominal rate? Our answer is distinctly, “Nothing”. The Poor-law officers have been for many years underpaid for their attendance on the sick poor. Their payments as registrars of births and deaths have been merely nominal—namely, *one shilling* for each registration; whereas in England the registrar is entitled to half-a-crown for each twenty births and deaths in every quarter, which, if carried into effect in Ireland, would amount to £12 a year additional salary. In vaccination, the same policy has been followed, and but *one shilling* is allowed for each vaccination.

The Irish Public Medical Service, having conducted itself in an exemplary and patient manner, and having shown a good and at the same time humble public spirit in the carrying out of registration and vaccination for the Queen's shilling, and having taken care of dangerous lunatics “without fee or reward” for a considerable number of years, is rewarded for its long-suffering by being paid at the same rate for its sanitary services. How has this payment been fixed? It is well that a Blue-book—namely, the Report of the Irish Local Government Board for 1874-75—has furnished us with the information; otherwise we might never have found out. It seems that on October 14th, 1874, the Irish Local Government Board, having been tormented by various questions from local authorities, medical officers, Irish medical corporations, and others, discovered suddenly that it must ask the Treasury for money to pay salaries to the officers of the new Public Health Service. Accordingly, a letter was written from the Local Government Board in Dublin to the Treasury in London, asking for the sanction of the Treasury for the nominal salaries proposed, and for a grant of some £20,000 as the Treasury contribution to the expenses of the working of the Irish Public Health Act. The result was, that the Treasury *took no notice* of the communication. Then came an extraordinary roundabout pulling of redtape and writing of letters, and pounding of the political buffer known as the Irish Government, the smooth front of which is situated in Dublin Castle, and the more intricate portions of its machinery in the Irish Office in London. The result of all this work was, that on November 23rd, 1874, the Secretary of the Treasury declared that the proposed

increase of salaries "does not strike my lords as exorbitant"; and, after more redtape and more action of the Irish Government buffer, on February 5th, 1875, months after the Act had come into force and the appointments had been made, the Lords of the Treasury "confirmed their assent, which they understood to be already given". Now, we submit that the approving of salaries because "not exorbitant", and the ignorance of the Treasury as to whether those salaries had or had not been already sanctioned, show an amount of carelessness of the public welfare which is quite inexcusable, and well calculated to promote the discontent which has arisen in consequence of the maladministration of the Irish Public Health Act.

Dr. O'Leary, the member for Drogheda, brought the matter under the notice of Parliament, and, we must say, met with but an evasive answer from the Solicitor-General for Ireland, who, we presume, was instructed by the office of the Dublin Board. The Solicitor-General said that the Act had only been in operation for two months. We at first thought there was an error in reporting; but, on inquiry, we find this really was the statement of Mr. Plunket; and of course he believed his statement to be correct. The fact was, the Act had been in operation for nearly a year. Mr. Plunket also tried to cast the blame of the small salaries upon the local, not the central authority; and, as a proof thereof, stated that the Local Government Board had increased some salaries which had been fixed too low by the local authorities. Yes, so the Board did; but the Board also reduced some salaries which, in our opinion, were low enough before. This the Solicitor-General probably did not know, as he has no connexion whatever with the Local Government Board, which he was defending. Unless the Government immediately take measures to remove the grievances of the Irish Public Health and Poor-law Medical Service, that service, which has long been the most efficient civil medical service in the world, will gradually dwindle away, and become a reproach instead of a pride to the British Government.

MR. J. A. WOISLEY.—In the metropolis, the medical officers of health are appointed by the district boards and vestries, and are removable at their pleasure under the 132nd section of the Metropolis Local Management Act. In the provinces, under the Public Health Act (1872), the medical officer of health in urban sanitary districts is appointed by the local authority, which may be either the town council of a borough, a body of improvement commissioners, or the local board of a local government district; in rural sanitary districts, he is appointed by the boards of guardians. There are certain exceptions and qualifications, which do not affect the answers to your questions. The medical officer of health must be a legally qualified medical practitioner, and he is appointed for a period not exceeding five years. A medical officer of an union may be appointed medical officer of health, and the medical officer of health may hold two or more districts. The Local Government Board can exercise authority where a portion of the salary is paid out of moneys voted by Parliament.

MR. HAILEY AND THE NEWPORT PAGNELL UNION.

SIR.—Being compelled on one occasion to put a question to a poor fellow, an applicant for a charity, "Have you ever been in a workhouse, or taken parish relief?" the answer being in the affirmative, and the candidate disqualified, I was struck with his reply: "It is a hard thing, sir, not to be able to take relief from your richer neighbour, when sick, without being degraded as a pauper. The man who has been in prison for a crime is not so treated."

I think the few remarks I am about to record would convince my poor friend that he is not the only person maltreated by this degrading system; but that the man who, for a trifle, undertakes to relieve the sufferings of his fellow creature, is treated much worse. For some years (more than a quarter of a century), I held the office of medical officer to the Newport Pagnell Workhouse, and two districts. The former office I resigned in 1874, owing to some disagreement between the Local Government Board and myself respecting the keeping of the medical relief book. On February 24th, 1875, being board day, and Mr. Henley present, a relieving officer sent a paper to the Board to the effect "that he had on several occasions met the public vaccinator, and he had promised to forward him a certain duplicate certificate or certificate, but he had not done so; and he could summon him, and obtain a fine of twenty shillings." The Board (it is stated, at the advice of Mr. Henley) directed him to summon the public vaccinator; and, on the 25th, I received a letter from the clerk to that effect. I immediately called upon that gentleman, and explained the case; and he assured me, if I sent the lost certificate by that evening's post, he would write and tell the officer, as he now had all he required, that he should not get the summons signed until after the Board met again, and the public vaccinator would explain the matter to the satisfaction of the Board. On the 26th, the officer received the certificate and the clerk's letter. Late on the 27th, he went to a magistrate, a friend of mine, and got the summons signed. On March 1st, at 10 A.M., a policeman served the summons upon me. I then called upon the clerk, and stated that I could not get my solicitor in so short a period, viz., between 11 A.M. on the 1st, and 11 A.M. on the 3rd, when the magistrates met. He, therefore, wrote to the officer again, and told him he was not to come with his witnesses on the 3rd; the case would be postponed to the next bench day, to enable the public vaccinator to obtain advice. I heard, just as I was leaving town on the morning of March 3rd, that the officer was at the bench with his witnesses; and rather an insolent letter addressed by him to the clerk to the board of guardians was placed in my hands. The result was that, in my absence, he got his case heard, and I was fined £2. This case was not a solitary one of the kind; and it was the common conversation among persons conversant with union matters in this locality, that the relieving officer was placed be-

fore the medical officer. After this officer insulting me, and actually treating the clerk to the board in the same manner, I resigned all my offices so far as he was concerned; and, on March 24th, wrote a letter to the board of guardians, based upon documents in my possession, complaining of these and other insults, and politely telling the board that I considered these the *fons et origo mali*. The truth was too apparent; for, after a few minutes' consultation, they came to the conclusion that the Local Government Board should have one copy, and the relieving officer another, of my letter. On April 19th, I received the following letter from the Local Government Board, which I will give *verbatim*.

The Board observe with regret the spirit of hostility you have displayed towards the guardians, your employers, in impeaching their conduct as a public body; and, having regard to the highly improper tone of your letter to the chairman, the Board cannot avoid the conclusion that the amicable arrangements that should subsist between the guardians and each of their officers cannot, in your case, be maintained, and therefore request you to place the resignation of your office in the hands of the guardians."

This letter, observed a critic, is amusing from the fact that a public body send down one of their staff to direct an inferior to insult a superior officer; and, when the latter kicks, they tell him to resign on account of a want of brotherly feeling. Upon the receipt of this letter, it was my intention to resign; but, at the same time, I received an answer to a letter sent by me to the Chairman of the Board of Guardians, who said: "I gladly accept your disclaimer that you intended nothing offensive to me personally in your letter of the 24th of March." Under these circumstances, my solicitor advised me (as many of the guardians were my friends) to write a letter of explanation to the Local Government Board. This I did; and although they at first refused to change their decision, when I positively refused to resign on the ground that I had not violated the consolidated order, they sent, on June 6th, my letter to the Newport Board of Guardians for their consideration. I deputed a gentleman to inform the Board it was not my intention to hold the office, but to resign as soon as the subject was satisfactorily settled. The Board met on June 16th, no notice of the meeting having been given, and only sixteen or seventeen guardians being present (out of sixty). The subject was put to the vote, when fourteen voted, six being for a recommendation in favour of my letter, and eight against it, or for not interfering. On June 17th, I received a letter from the clerk of the board saying that "he was instructed by the guardians to write to the Local Government Board to inform them that the board declined to make any recommendation on my correspondence." On the 20th, I wrote to the Local Government Board, stating what took place at the board on the 16th, and asking them "to allow a full meeting of the guardians to consider my reply, and that due notice be given of such meeting to each guardian; and that I made this application at the request of a great number of the said guardians." On the 22nd, I heard from them (no mention of my letter of the 20th being made) that, "as the Newport Board of Guardians had declined to make any recommendation on my letter, they had directed an order for my removal to be issued under seal." On the 26th, I heard again that they had received my letter of the 20th, "but declined to reopen the case to which it referred"; and, on the 27th, the order for my removal came by post.

Dr. Lush, M.P., at the advice of Dr. Joseph Rogers, presented a petition to Parliament based on the foregoing remarks, and asking for further inquiry; and, on July 26th, Mr. Scater-Booth stated in the House of Commons that "Mr. Hailey was not removed solely for writing the letter complained of; but his conduct had been the subject of complaint for years past." Now, with regard to this excuse on the part of the local inspectors, after being told I must resign on account of the "improper tone of my letter to the chairman," I can most positively assert that, in the office I was called upon to resign, I never received a single complaint of my conduct, professional or otherwise, from the board of guardians or Local Government Board during the whole twenty-seven years I held office; and, in the office I resigned in 1874, nothing but the dispute respecting the keeping of the medical relief book, recorded in the early part of this letter. My conduct during the time I held office can be summed up in a few words. 1. I suggested and obtained a new fever-ward for the workhouse, which now is the only part of the building capable of accommodating the sick. 2. When I found, after twenty years of service, that I was worse paid than any of my neighbours, after twelve months' labour I succeeded in obtaining an increase of salary, which I hope my successors will enjoy. 3. I strongly opposed a proposed scheme of redistribution of the medical districts, because I knew it was not done to benefit the poor or the profession, but simply to place the union (or the principal part of it) in the hands of one officer. This event has since taken place; and the poor, in the place of having a medical man within reach, have to go five or six miles for one, and a journey of ten miles to obtain their medicine. 4. I wrote a letter, based upon facts, to prove that the medical officer was not treated as a gentleman; that letter my opponents have strongly opposed my defending. In conclusion, I beg to assure my late union medical brethren that until they write and obtain a Court of Appeal in cases of unjust or oppressive conduct on the part of boards of guardians and the Local Government Board, their situations are no better and less secure than those of their domestic servants, the Local Government Board having the discretionary power given them by Parliament to remove any paid officer whom they may deem unfit; and law has decided that there is no appeal against their decision.—I am, sir, yours truly,

Tickford, Newport Pagnell, August 16th, 1875.

HAMMETT HAILEY.

POOR-LAW MEDICAL APPOINTMENTS.

- LATTEY, Arthur, M.R.C.S. Eng., appointed Medical Officer and Public Vaccinator for the Southminster District of the Maldon Union, *vice* T. C. Wigg, M.R.C.S. Eng., resigned.
- LEACROFT, John William, M.B., appointed a Public Vaccinator for the Alcester Union, *vice* J. H. Hiron, M.R.C.S. Eng., resigned.
- PALMER, T. S., M.R.C.S., appointed Medical Officer for the Mortlake District of the Richmond (Surrey) Union, *vice* A. Crichton, L.R.C.P. Ed., deceased.
- SMITH, F. A., M.D., appointed Medical Officer to the Workhouse of the Mere Union, *vice* Wilton Provis, L.R.C.P. Ed., deceased.
- STAFFORD, John Francis, L.R.C.P. Ed., appointed Medical Officer and Public Vaccinator for No. 4 or Windlesham District of the Chertsey Union, Surrey, *vice* E. Kough, M.B., resigned.
- STEDMAN, Fredrick, M.R.C.S. Eng., appointed Medical Officer for the Castleton District of the Chapel-en-le-Frith Union, *vice* A. O. Haslewood, M.R.C.S., resigned.
- STONE, Valentine, F.R.C.S. Eng., appointed Medical Officer and Public Vaccinator for the Parish of Fettercairn, *vice* W. Stephen, M.D., resigned.

OBITUARY.

J. M. GILLESPIE, M.D.

At Accrington, on the 7th instant, died John Morris Gillespie, a gentleman very much respected in the town. He was born in Glasgow in 1826, took his M.D. degree in 1850, and L.R.C.S. in Edinburgh the same year. He had been established in practice in Accrington since 1860, and at the time of his death was union medical officer, police doctor, and medical officer of health. The members of the Local Board, Poor-law guardians, medical profession, police, etc., paid their last tribute of respect by attending his funeral on the 9th instant, his remains being interred in the Accrington cemetery. The cause of death was congestion of the brain.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, September 2nd, 1875.

Angove, William Thomas, Mount Pleasant, Cambourne
Grimwood, Harry Charles, Snowmarket, Suffolk
Lendon, Edwin Harding, Maidstone, Kent
Whitmore, William Tackle, West London Hospital
Wickham, Henry, Tetbury, Gloucestershire

The following gentlemen also on the same day passed their primary professional examination.

Boodle, George Adolphus, St. Bartholomew's Hospital
Boswell, Alexander, St. Bartholomew's Hospital
Nundy, Edward, University College
Paul, Reginald, Middlesex Hospital
Webster, John, University College

The following gentlemen passed their examination in the science and practice of medicine and received certificates to practise, on Thursday, September 9th, 1875.

Dowding, Alexander William Woodman, Leighton Buzzard
Duke, Herbert, 321, Clapham Road
Mapei, Luigi Vincenzo, Golborne, Lancashire

The following gentlemen also on the same day passed their primary professional examination.

Baker, Thomas, St. Bartholomew's Hospital
Tweedale, James Taylor, Owens College, Manchester

MEDICAL VACANCIES.

The following vacancies are announced:—

BRISTOL GENERAL HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications on or before the 23rd instant.
BRISTOL HOSPITAL FOR SICK CHILDREN.—House-Surgeon. Salary, £100 per annum, with furnished rooms, coal, gas, and attendance. Applications on or before October 7th.
CAISTON UNION.—Medical Officer and Public Vaccinator for the Tealby District. Salary, £50 per annum, and fees. Applications on or before Oct. 1st.
COLCHESTER UNION.—Medical Officer for the Second District. Salary, £75 per annum.
ESSEX and COLCHESTER HOSPITAL.—House-Surgeon and Apothecary. Salary, £60 per annum, with board and lodging. Applications on or before October 7th.
GATESHEAD UNION.—Medical Officer for the Township of Winlaton. Salary, £75 per annum.
HENLEY UNION.—Medical Officer for the Nettlebed District. Salary, £80 per annum.
INVERNESS DISTRICT ASYLUM.—Assistant Medical Officer. Salary, £70 per annum, with bed, board, and washing. Applications on or before the 14th prox.
LIVERPOOL DISPENSARIES.—Assistant Resident House-Surgeon. Salary, £105 per annum, with furnished apartments, coals, gas, and attendance. Applications on or before the 27th instant.
LONDON HOSPITAL.—Assistant Obstetric Physician. Applications on or before the 27th instant.
MEDICAL AID SOCIETY, Macclesfield.—Medical Officer.
NORWICH DISPENSARY.—Salary, £120 per annum, with unfurnished residence and apartments.
OSWESTRY INCORPORATION.—Medical Officer for the Llansilin District. Salary, £35 per annum.
OWENS COLLEGE MEDICAL SCHOOL.—Sub-Curator of the Anatomical Museum. Applications on or before the 27th instant.
PAISLEY INFIRMARY.—House-Surgeon. Salary, £80 per annum, with board. Applications on or before October 1st.
PEMBROKE UNION.—Medical Officer for the First District.
QUEEN'S HOSPITAL, Birmingham.—House-Physician. Salary, £50 per annum, with board, lodging, and washing. Applications on or before the 23rd instant.
QUEEN'S UNIVERSITY, Ireland.—Professorship of Materia Medica. Applications on or before the 20th instant.
ROYAL UNITED HOSPITAL, Bath.—House-Surgeon. Salary, £60 per annum, with board and residence. Applications on or before the 22nd instant.
ST. GILES-IN-THE-FIELDS and ST. GEORGE, BLOOMSBURY, Parishes.—Medical Officer. Salary, £250 per annum.

ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester.—Medical Officer. Salary, £60 per annum, with board and residence. Applications on or before October 1st.
SCARBOROUGH DISPENSARY and ACCIDENT HOSPITAL.—House-Surgeon. Salary, £75 per annum, with apartments, coals, gas, and attendance. Applications on or before the 20th instant.
SHEPTON MALLITT UNION.—Medical Officer for the Fourth District. Salary, £30 per annum.
SOUTHILL UNION.—Medical Officer for the Yardley District. Salary, £17 per annum, and fees.
SOUTHPORT INFIRMARY.—House-Surgeon. Salary, £100 per annum, with board, lodging, etc. Applications on or before the 23rd instant.
STAINES UNION.—Medical Officer for the Stoughton District.
STROUD GENERAL HOSPITAL.—House-Surgeon.
TEWKESBURY RURAL HOSPITAL.—Assistant Surgeon.
WARWICK COUNTY LUNATIC ASYLUM.—Second Assistant Medical Officer. Salary, £100 per annum, with board, lodging, and washing.
WESTMINSTER HOSPITAL.—Physician and Assistant Physician. Applications on or before the 20th instant.
WIMBORNE and CRANBORNE UNION.—Medical Officer for No. 1 and District Workhouse. Salary, £5 per annum for No. 1, and £7 for No. 2, with £20 additional for the Workhouse. Applications on or before the 23rd instant.
WORCESTER GENERAL INFIRMARY.—Physician. Applications on or before the 25th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

PARKER, Adams, L.D.S.R.S., to be one of the Consulting Surgeon-Dentists to the Birmingham Dental Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 5s. 6d., which should be forwarded in stamps with the communication.

BIRTH.

BIRD.—On September 14th, at St. Leonard's Place, York, the wife of William Bird, M.D., of a daughter.

MARRIAGE.

HOLLINGSHEAD—MUCKLOW.—On Sept. 16th, at Holy Trinity Church, Coventry, by the Rev. F. Beaumont, M.A., Vicar, Francis Hollingshead, M.R.C.S. Eng., L.S.A. Lond., of Selly Oak, Birmingham, to Amy, second daughter of the late Thomas Mucklow, of Birmingham.

DEATH.

GILLESPIE, John Morris, M.D., L.R.C.S. Glasgow & Edinburgh, in his 50th year at Accrington, Lancashire, on the 7th instant, deeply regretted.

TESTIMONIAL.—Dr. John M. Atkin of Virginia, co. Cavan, has been presented with an address and a gold watch and chain upon his retirement, after practising for half a century.

The deaths of two centenarians are reported, one an inmate of the Yeovil Workhouse, John Chatterly, Bradley, Dorchester, who is said to have attained his 104th year, and the other a man named Egan belonging to Urra, on the banks of the Shannon, who is stated to have been 102 years of age.

COMMUNICATIONS, LETTERS, &c., have been received from:—

Dr. John Whitmore, London; Dr. W. M. Kelly, Taunton; Mr. G. H. Darwin, Manchester; Dr. Church, London; Dr. Percy Boulton, London; Mr. T. Ralph, London; Mr. Thomas J. Denton, Bridlington; Mr. R. Eaton Power, Dartmoor; Mr. J. Sutherland, Berwick; Dr. James Ellis, California; Mr. John M. McDiarmid, Murtle; Dr. Joseph Coats, Glasgow; Dr. W. H. Jalland, York; Mr. Edward Bellamy, London; Dr. E. West Squires, Skipton; Dr. W. M. Dobie, St. Andrew's; Dr. J. Ashburton Thompson, London; Dr. S. W. Smith, Pershore; Dr. Goldie, Leeds; Mr. Hammett Hailey, Tickford; Mr. J. Vose Solomon, Birmingham; Mr. J. J. Charles, Belfast; Dr. W. Farr, London; Mr. Edward W. Thurston, Ashford; Dr. George Barkley, Prizington; Mr. H. C. Burdett, Greenwich; Dr. Horace Swete, Leamington; Mr. Adams Parker, Birmingham; Mrs. Carlil, London; The Medical Secretary of St. Thomas's Hospital; Mr. John Ingpen, London; Mr. J. O. Snowdon, Haltwhistle; The President of the Metropolitan Counties Branch; Mr. Thomas R. Fraser, Knutsford; Mr. A. D. Kettle, Aboyne; Mr. H. A. Allbutt, Leeds; Mr. E. Honslet, Leicester; Dr. W. Procter, York; Mr. W. J. Haram Wood, Boston; Dr. R. J. Wolfe, Glasgow; The Registrar-General of Ireland; Dr. Cornelius B. Fox, Chelmsford; The Secretary of Apothecaries' Hall; Dr. H. Macnaughton Jones, Cork; The Registrar-General of England; Mr. Eastes, London; Dr. T. W. Grimshaw, Dublin; Dr. Bradbury, Cambridge; Dr. J. Milner Fothergill, London; Dr. Edis, London; Dr. T. Claye Shaw, Leaveness; Mr. A. Bender, London; Mr. T. H. Smith, Alcester; Dr. John M. McKendrick, Edinburgh; Mr. E. A. D. Akerman, Cheltenham; Mr. Sydney Chater, Boulogne; Dr. John Haddon, Manchester; Dr. De Haviland Hall, London; Dr. Patrick Heron Watson, Edinburgh; Our Dublin Correspondent; Dr. J. Crichton Browne, Wakefield; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. Thomas Skinner, Liverpool; Dr. Septimus Gibbon, London; Mr. Thomas Jones Dyke, Merthyr Tydfil; A Correspondent; Mr. W. Fairlie Clarke, London; Mr. H. G. Howse, London; etc.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAYGuy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAYSt. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.
FRIDAY.....Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.
SATURDAY ...St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Women, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

FRIDAY.—Quekett Microscopical Club (University College), 8 P.M. Mr. James Fullagar, "On the Development of *Actinophrys Sol.*"

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.
PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with *Duplicate Copies*.
AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.
CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.
WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.
COMMUNICATIONS respecting editorial matters, should be addressed to the Editor: those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

MR. SNOWDON (Haltwhistle, Carlisle).—We have not seen the pamphlet mentioned, and can therefore give no opinion on it.

MEDICAL CERTIFICATES.

SIR.—Will you kindly, in Answers to Correspondents, inform me on a point of law in reference to registration of deaths. 1. Is the district registrar entitled to give a burial order without a certificate? 2. Must not a certificate of death proceed from either a medical man or the coroner? 3. If it is contrary to law to give a burial order without medical or coroner's order, ought not such practice to be submitted to the notice of the Registrar-General? 4. On whom falls the disagreeable duty of reporting to the Registrar-General?—I am, sir, yours faithfully, X. E. G.
 *According to the Births and Deaths Registration Act (1874), one of three documents should invariably be produced to the officiating minister at each burial. A "certificate" from the local registrar, to the effect that the death of the deceased person has been duly registered; a "notification", also supplied by the local registrar, stating that he has received due notice of the death, and that it will be registered within fourteen days of the death; and, thirdly, an order from the coroner. A registrar is required to obtain a medical certificate of the cause of death in every case of death in which a registered medical practitioner has been in attendance during the last illness of the deceased; but in cases where there has been no medical practitioner in attendance, the registrar cannot refuse to register the death, unless he have reason to believe it to be a case which should be referred to the coroner. In cases where no medical certificate of the cause of death can be obtained, and in which an inquest appears to be, or is pronounced by the coroner to be, unnecessary, the particulars to be inserted in the "Cause of Death" column of the Death-Register are supplied by the ordinary informant of the death; the words "certified by", etc., are, however, then omitted. A "notification", which allows burial to take place previously to registration, can only be issued by the registrar if he have received a medical certificate of the cause of death, signed by a registered medical practitioner, although a certificate of registration can be issued even if registration have been completed without the production of a medical certificate. In many parts of Wales, and in some sparsely populated districts of England, a considerable proportion of deaths occur without any medical attendance; and the law, as it stands at present, directs that all such deaths must be registered, notwithstanding this fact, without the intervention of medical expert or coroner. It is much to be regretted that recent legislation on this subject should have left matters in so unsatisfactory a condition, as the cause of every death not certified by a registered practitioner should be inquired into by the coroner, or by some medical expert with analogous powers.

STUDENT.—Mr. Edward Bellamy's *Text-Book of Surgical Anatomy* is, we think, a very good one.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Powke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

OFFENSIVE DISCHARGE FROM CANCER.

SIR.—In reply to a query by "Triceps" in the JOURNAL of August 28th, as to the best deodorant in cases of cancer, I would strongly recommend the use of "terebene", which not only deodorises effectually, but substitutes a smell of pine-wood, which is at once pleasant and refreshing. The terebene may be used as a wash, or as a covering to other dressings. I have found it the greatest comfort in many cases of infectious disease, and believe it to be a very valuable disinfecting agent. I am, yours faithfully, EDWARD T. WILSON, M.B. Oxon., F.R.C.P.
 Westal, Cheltenham, September 2nd, 1875.

SIR.—In the JOURNAL of August 28th, your correspondent "Triceps" asks for a good disinfectant for a case of cancerous breast. Allow me to inform him that I have lately used in such a case Dr. Bond's "terebene", and have found it to answer perfectly. The odour of "terebene" is very agreeable, and in marked contrast to the stinking carbolic acid lotion generally used in such cases.

In one case under my care, there was considerable hemorrhage from the ulcerated surface; and I found the "terebene" acted so well as a styptic, that I required no other application. As a disinfectant lotion, I used one fluid-ounce of terebene to four ounces of water. As a styptic, I applied it undiluted to the bleeding surface. I have used the terebene for a number of other purposes, and found it answered admirably as a deodorant and disinfectant, the only drawback being that it mixes badly with water.—I am, sir, yours faithfully, WM. H. PAINE, M.D., Physician to the Stroud General Hospital.
 Stroud, September 2nd, 1875.

SIR.—In answer to "Triceps", in your JOURNAL of August 28th, as to the best disinfectant for cancerous discharges, I would recommend him to use a solution of hydrate of chloral (3ivj to 3xv), which in my practice has proved efficacious, both as an anodyne and disinfectant. The parts must be thoroughly cleansed with a weak solution of chloride of zinc, and then three or four folds of lint, or plugs of cotton wool saturated with the chloral lotion applied. It may then be covered with oiled silk. The dressings to be changed two or three times in the twenty-four hours.—I am, etc., T. S. DOWSE.
 Upper Holloway, N., September 3rd, 1875.

M.D..—In the present state of the law, it is not an offence for a chemist to act as a bone-setter; nor does a bone-setter require a diploma. It is only illegal for him to pretend to be "legally qualified"; that is, to have a qualifying diploma, if he have not one.

ARREST OF SPEECH AND HEARING AFTER ACCIDENTS OR CONVULSIONS.

SIR.—I have not met with a case exactly corresponding to the interesting one reported by Mr. Glissan in the JOURNAL of September 4th, where he describes the case of a child eighteen months old, who, after a blow on the left temporal region, lost all ability and inclination to speak; but I have now under my care a child, four years old, who, after convulsions six months ago, became dumb, whom on examination I found to be also absolutely deaf. Not improbably, Mr. Glissan's little patient is also deaf; and, if so, the prognosis must be considered very unfavourable. It is very common to find that after concussion, there ensues entire deafness, or, if the blow on the head be localised, the deafness frequently exists on one side only; in the latter case, it will generally be found that the deafness in the ear implicated is complete, and that the patient cannot hear a watch or tuning fork, either on contact with the cranium or close to the ear. In many of these cases, the membrane appears entirely healthy, and without a trace of rupture, though in some cases there is a history of blood having issued from the ear. If no improvement take place in these cases within two months of the injury, I believe them to be very hopeless. Occasionally, severe tinnitus ensues, which renders the case still more distressing. It is difficult to determine, with any degree of accuracy, whether the injury produces paralysis of the auditory nerve, or actual rupture of its structure, or of the cochlea or labyrinth, or separation of the ossicula. In those cases which recover, they were probably owing to paralysis from concussion. Most practitioners must have met with cases of absolute deafness following various fevers, especially typhus, without any injury to the membrane, ulceration or otorrhoea. The only treatment which appears to offer any hopes of success, is the application of galvanism, which would certainly do good if the affection were only functional.—Yours truly, LLEWELYN THOMAS, M.D., Surgeon to the Central London Throat and Ear Hospital.
 44, Weymouth Street, W., September 4th, 1875.

DR. SMITH (Pershore).—We will await further communication.

SPINA BIFIDA.

SIR.—In the JOURNAL of April 17th, 1875, is a letter from Dr. Henry P. Drummond on the above affection. He relates the case of a patient who "attained the age of twenty-five years", and says, "I have never met with any record of such longevity". The following seven cases, taken at random from articles on the subject, will, I trust, be sufficient to prove to him that his case is by no means unique. Camper relates a case that lived to the age of twenty-eight years; and Swagerman mentions an individual thus affected who lived fifty years (Churchill's *Diseases of Children*). In Druitt's *Surgeon's Vade Mecum* is given the case of a woman aged twenty-seven years. A case is recorded by Behrend as having reached the age of fifty-one years; another died at forty-three of stone in the bladder, after having recovered from a previous operation. A case of Mr. Haynes Walton's lived twenty-nine years. . . . Moulmie of Bordeaux met with a man aged thirty-seven years (Cooper's *Surgical Dictionary*).—I remain, sir, yours faithfully, ST. VINCENT, W. I., August 9th, 1875. OTHO GALGUY, L.R.C.S.I., etc.

A YOUNG MEMBER.—Under the circumstances stated, we think it would not be necessary to insist on a consultation. But, of course, in particular cases it might be; and the newly summoned medical man would always reserve his right to make that a condition of his attending the case. In many instances it would be painful to all parties.

MR. E. A. D. AKERMAN (Cheltenham) will find in any "charities' list" the names of several hospitals for diseases of the lungs—prominent among them, the Brompton Hospital, the Victoria Park Hospital, and the Hospital for Diseases of the Chest in the City Road. Fortunately, there is not yet any special hospital for "diseases of the liver".

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

THE CONTAGIOUS DISEASES ACTS.

SIR,—It is refreshing to find so earnest a supporter of the Contagious Diseases Acts as Mr. P. H. Holland acknowledging that a "compulsory examination, not for the benefit of the woman examined, cannot be justified unless a very important public benefit be not otherwise attainable"; and also to read his confession "that many doubt if it would be justifiable even then". His suggestion, however, that surgeons should be "relieved from such disgusting duty" by the preliminary substitution of women examiners, is already carried out. Many of your readers are doubtless unaware that, by a special clause in the Acts, young girls who are menstruating are first examined by a woman, who generally suggests that, "if not so very bad, they had better undergo the ordeal, even in that condition, rather than submit to imprisonment".

The editor of the *Medical Times and Gazette* remarks "That nothing would tend more to deprive medicine of the rank of a respectable calling than the fact that practitioners could be found willing to lend themselves to the dirty work of examining prostitutes, in order to enable them to carry on their trade"; and adds, "If the heads of colleges wish to protect their members from degradation, here is an opportunity". This feeling is evidently shared to some extent by Mr. Holland; and I must say that I sympathise with his desire that the burden and disgrace should be shifted on to other shoulders than those of members of our noble profession. The class of women who would undertake such a duty would be, doubtless, old brothel keepers, who, when suffering from age and infirmity, could be thus conveniently pensioned by the Government to which, we are told, they now render essential service by maintaining an *entente cordiale* with the police, by supplying information, and denouncing such females as may in any way offend them. I fear, however, that, in his zeal against women, Mr. Holland overlooks the great difficulty of detecting disease. Mr. Henry Lee, in his Lettomanian Lectures for 1873, remarks, "That if the exact nature of a discharge in man is difficult of diagnosis, the difficulty in woman is increased tenfold"; and he adds a remark which I commend to Mr. Holland's notice: "There is here matter for the serious consideration of any medical man who undertakes to advise Her Majesty's ministers with respect to the working of the Contagious Diseases Acts."

Dr. Aitken, in his *Science and Practice of Medicine*, remarks that the true syphilitic sore can rarely be detected in the female; and that it is readily overlooked, even when searched for with great care, aided by a vaginal examination with a speculum. Mr. Simon also declares that "the various local states which most habitually spread the infection of true syphilis are often overlooked in examinations made expressly for their discovery." M. Le Fort has declared that the laws against syphilis in Paris amount to nothing, because the examinations of the *filles publiques* do not answer their end.

Mr. Holland further argues that diminishing the fear of disease does not increase profligacy; that the fear of punishment does not check vice; and that if disease were stamped out by the Contagious Diseases Acts, men would have more dread of disease than they have now. He says that, if as many people died of hydrophobia as die of fever, we should not dread it any more. He might as well say that people fear to take prussic acid much more than alcohol; yet alcohol kills far more people than prussic acid; therefore, if accidental deaths from prussic acid were as frequent as those occasioned by alcohol, we should have as little dread of prussic acid as we now have of brandy and water. There is no fear, however, of people coming to dread disease because it has been stamped out by the Contagious Diseases Acts; on the contrary, true syphilis, as shown by the army returns last published, has increased, and gonorrhoea has considerably increased; while venereal sores, which fell off very considerably without the Acts, have only decreased very slightly with them. The opponents of the Acts do not, as Mr. Holland states, object to treat disease; they do not object to voluntary hospitals; but they do consider it wrong to tempt men into sin, misery, and disease, by providing securities (however false) beforehand for the safe commission of vice. The women, driven to the examining house by the police, are not proved to be prostitutes; they have committed no crime, and are not suspected of any legal offence whatever; they are, with rare exceptions, not suffering from disease; and not above four in one thousand ever see a magistrate. The women thus treated and outraged by periodical violation with the speculum, have their rights at common law just as Mr. Holland has; those rights are deliberately trampled under foot; and yet he asserts that the fact that humane men should oppose such laws is to him "most wonderful".—Your obedient servant,

Peachey Terrace, Nottingham.

THOMAS WORTH, M.R.C.S.L.

A TRUSTEE (Ashford).—We cannot give an opinion without personal inspection. We should advise a reference to the Medical Officer of Health, or other independent authority, who can view the site.

MALFORMATION OF THE PALATE.

SIR,—I cannot remember having ever seen or heard of a case of complete absence of the uvula in the usual position in the middle of the soft palate. Perhaps such a malformation may be common, but I have never seen it; and I should like to know, through the medium of our JOURNAL, if such is the case. The subject of the malformation I now speak of was born some weeks ago; and lately the mother asked me to see if there was anything wrong with its throat, as it frequently appeared as if suffocating. On examination, I was surprised to observe complete absence of the usual uvula, and, in its place, an unusually tense and oval cartilaginous soft palate, but no vestige of uvula. However, on further inspection of the pharynx, I discovered that the deficiency there was atoned for, as the child had undoubtedly a perfect uvula on each side, but hanging from between the arches of the palate, close to the base of the tongue, and unusually long for an infant. These uvulae were, no doubt, the cause of the frequent suffocating fits. They were not, as some will say, only enlarged or odd-looking tonsils, as I am quite satisfied, from frequent examination, that they were misplaced, but perfect, uvulae, and nothing else. I have also looked in vain for the epiglottis; and, if present, it must be very rudimentary.—Yours faithfully,

W. ARNOLD THOMSON, F.R.C.S. Ireland.

Southall, Middlesex, September 4th.

MR. MADDEN.—The celebrated Radcliffe bequeathed to St. Bartholomew's Hospital for ever the yearly sum of £500 towards mending the diet of patients, and the further yearly sum of £100 for buying them linen.

A. A. D.—Copies of the temperature charts, drawn up by the late Dr. Franklin Gould, for daily use in the clinical wards of hospitals, may be obtained of Messrs. Widderspoon and Shaw, of Serle Street, Lincoln's Inn Fields.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than Thursday, twelve o'clock.

AN ILL-CONSIDERED VERDICT.

THE *Bradlington Free Press* of last week contains a report of an inquest held on a farm-servant who had been suffering from heart disease for some time, had been ill for a week without medical attendance, and died. His master, during the night of his death, sent a groom to two medical men in succession, to request their attendance. One was, however, attending a labourer; and the other was worn out with fatigue, and indisposed, and therefore unable to attend. In the absence of the medical men in question, and upon *ex parte* statements which were in various respects incorrect, the jury appended to their verdict a resolution of censure for "inhumanity". It appears to us, however, that this censure rests rather on those who allowed the poor fellow to remain without medical attendance during the week, and only sent for the doctor in the middle of the night, when the man was dying. In any case, the medical men, whose reasons for non-attendance appear to be perfectly valid, have reason to complain that the inquest was not adjourned to give them the opportunity of explanation. The resolution of the jury appears to be entirely unfounded and extremely unjust.

CASES IN DELIRIUM TREMENS.

SIR,—In answer to Dr. Holley concerning the treatment of delirium tremens by capsicum, after giving it a fair trial in three cases, I came to the conclusion that the drug in question proved itself of very doubtful value. Its administration, however, in several cases of semi-habitual drunkenness, was attended by remarkably beneficial results. The prescription that I have always ordered was, to take the common red capsicum, mixed with Marsala wine sufficient to cover the drug, the whole being placed in a bottle; the patient, when feeling the depression and craving for stimulants, merely having to shake from the bottle, through a quill, a few drops of the wine into a tumbler of water; the effect being temporary stimulation, with a genial feeling of warmth at the epigastrium so self-satisfying as to temporarily remove the alcohol craving for alcoholic stimulation. So pleasant has been the effect, that one of the patients in question would drink as many as a dozen glasses during the day. A suggestion that I would make is, that an opiate should invariably be given at night to procure sleep.—I am, Sir, yours truly,

CHARLES CHITTENDEN, Surgeon R.N.

Constantinople, August 1875.

DEGREES OF EDINBURGH AND ERLANGEN.

SIR,—If your correspondent William Hitchman, M.D., will again look over the regulations for the Edinburgh M.D. degree, he will see that the provision for the bestowal of the degree *in absentia* refers only to candidates who have taken out the M.B. degree of the University, which, as he doubtless is aware, is neither an honorary degree nor one bestowed without residence.—I am, etc.,

Liverpool, September 6th, 1875.

M. D. EDIN.

SIR,—A correspondent in the JOURNAL of the September 4th, under the above heading, makes statements which, unless corrected, are calculated grossly to mislead. There is no analogy between the M.D. of Edinburgh and that of Erlangen. Your correspondent forgets to tell us that an aspirant to the M.D. Edin. has previously to get the degree of M.B. This last is awarded, after an Arts' examination much more extended than that required for the diplomas of the Colleges (as I know to my cost, on finding that my London College of Surgeons' preliminary examination only qualified in Edinburgh University for English, Latin, and arithmetic), and then four professional examinations must be passed at stated periods, during and after a curriculum extending over four entire years. I say nothing here about residence. The M.D. cannot afterwards be obtained until the M.B. has been practising his profession for at least two years, evidence of which must be produced, until he has passed further in Greek, and in logic or moral philosophy, with one extra subject selected from a list (see University Calendar), and has also produced an approved written thesis on some subject in the curriculum for the M.B. This thesis is always rejected if not up to a standard required by the Faculty. Every candidate for the M.D. Edin. must necessarily appear in person for all the examinations previous to the thesis; and the latter part of Clause xvii (7) of the regulations is obviously to accommodate those who have, after passing all the examinations above specified, settled abroad, where, if the necessary ability be possessed, they can as well write a thesis (the remaining test) as in this country. The official testimonials the medical Faculty require from them are the proper evidences that they have been in practice the necessary length of time after taking the M.B. The M.D. Erlangen of your correspondent, on the contrary, he obtained, on his own admission, as I understand him, without going to the place at all for any examination, by merely sending some professional (or official, as he styles them) testimonials, and by the exhibition of some published octavo volumes pertaining to physics or physical science. If his letter prove anything, it is an argument against the registration of foreign M.D. degrees, and shows that the Medical Council are so far acting wisely in the matter. I think we shall find that, instead of too few, we have already one registrable M.D. too many, and that of British origin, if we refer to the reports of the visitors of examinations of the General Medical Council with respect to what they term "an institution of much antiquity and interest" in the north (as quoted in the JOURNAL for June 26th, 1875, p. 851). It is the Universities—especially the teaching ones—of Great Britain that we must look to, to oppose the registration of foreign medical qualifications, such as your correspondent refers to, and others, and so to protect their own interests, and, what are of equal importance, those of their graduates. If the General Medical Council do agree to register foreign medical diplomas on any conditions, thus putting them on a par with our British ones, they will surely discontinue what will then clearly be only an useless formality—the visitation of British medical examinations.—I am, etc.,

September 6th, 1875.

M. D. EDIN.

WE are indebted to correspondents for the following periodicals, containing news reports, and other matters of medical interest:—The Bristol Daily Post; The Bristol Daily Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Glasgow Herald; The Sunderland Daily Echo; The Carnarvon and Denbigh Herald; The Manchester Guardian; The European Review; The Hackney and Kingsland Gazette; The Worcestershire Chronicle; The Birmingham Daily Post; The Brighton Daily News; The Sussex Daily News; The Glasgow Herald; The Cork Examiner; The Scotsman; The Cork Daily Herald; The Southampton Times and Hampshire Express; The Hampshire Advertiser; The Birmingham Morning News; The Chester Courant; The Metropolitan; The Live-Stock Journal; The Shield; The Grocer; The Shipping and Mercantile Gazette; The Advertiser; The Islington Gazette; etc.

ABSTRACT OF LECTURES ON SYPHILIS;

AND

ON SOME LOCAL DISEASES AFFECTING PRINCIPALLY
THE ORGANS OF GENERATION.

Delivered at the Royal College of Surgeons of England, 1875.

BY HENRY LEE, F.R.C.S.,

Professor of Surgery and Pathology to the College.

LECTURE VI.—*The Local Suppurating Venereal Sore.*

THE local suppurating venereal sore has never been known, so far as I am aware from personal observation, to infect a patient's constitution so as to produce secondary symptoms. It commences as a pustule, and runs a definite course. When artificially inoculated, the inoculated point becomes red within the first twenty-four hours. From the second to the third day it becomes slightly raised, and is surrounded by a red areola. Between the third and the fourth day, it contains a fluid more or less turbid. From the fourth to the fifth day, the pustule becomes fully formed, and from this time to the termination of the disease the secretion consists of well-formed pus. Sooner or later the cuticle covering the pustule is detached, and in some instances it may be removed, at the time of the inoculation, whether artificial or natural. This alters the appearance of the affection, but in no wise interferes with its essential characters. As soon as suppuration commences, there is a loss of substance in the part, and an ulcer forms, which has peculiar characters. When not interfered with by any accidental causes, it increases equally in every direction, so as to form a more or less perfect circle. The edges of the ulcer are cleanly cut, and present a sharp outline. The appearance presented is often that of a piece of skin having been removed by a punch. The edges of the ulcer are frequently slightly undermined and everted. The surface of the ulcer is irregular, sometimes presenting granulations, at other times presenting the appearance of having been worm-eaten. Often the bottom of the ulcer is covered by an adherent, greyish, tough matter, which probably is a part of the natural texture, which has undergone a kind of molecular necrosis, and is in process of being separated from the subjacent living parts.

Suppuration in itself does not necessarily involve a loss of substance, but these suppurating sores nevertheless often leave permanent and depressed scars. This evidence of loss of substance is probably in exact proportion to the degree in which the form of molecular necrosis before alluded to has been present in any individual case. The suppurating syphilitic sore gradually increases during a certain period, then remains stationary, and finally heals. This latter process is indicated by the base of the sore becoming clean and covered by red granulations, by the red areola which surrounded it becoming fainter, and by the edges of the wound gradually losing their prominence.

Such is a description of the typical form of chancre; but this may be modified by various accidental causes, of which the following are some of the most important.

1. If the specific pustule be destroyed by the application of caustic within the first five days of its existence, a simple ulcer alone will remain. This will then have none of the characters of the specific disease.

2. When a chancre during its progress meets with tissues of different natures, or when folds of the same texture are involved, its shape and appearance may be thereby modified.

3. Should the specific inflammation extend to the areolar tissue, a certain amount of inflammatory exudation will take place. This will produce an induration at the base of the chancre, which will sometimes very much resemble the induration which generally accompanies the infecting chancre. The induration which surrounds the suppurating form of the disease is generally characterised by gradually fading towards the circumference to the consistency of the surrounding parts. When this inflammatory exudation, however, in its progress meets with a different kind of tissue, it may terminate quite abruptly, and then it may be impossible to distinguish by the touch alone this kind of induration from that of the chancre which infects a patient's constitution. The character of the secretion of the sore, its inoculability on the same

patient, the history of the case, and the condition of the inguinal glands, must then be relied upon to distinguish the disease.

This description of the suppurating sore, derived from the experiments of Ricord and his followers, was for many years supposed to apply to syphilitic sores in general, but it does not apply to the form of disease which infects a patient's constitution. The infecting form of syphilis begins, as we have seen, in uncomplicated cases, with some adhesive form of inflammation, such as a papule, a tubercle, or an abrasion with a thickened base. This disease, characterised by the specific adhesive inflammation, cannot be reinoculated upon the patient so as to produce the same kind of action. It has a prolonged period of incubation. It cannot be destroyed by caustic, is very certainly followed by constitutional disease, and when it heals leaves no loss of substance. The suppurating sore, on the contrary, always commences with a pustule. It can always be inoculated upon the patient, so as to reproduce the same action. It may be completely destroyed by caustic so as to leave an ordinary sore only. It is not followed by any constitutional disease, and it leaves a depressed cicatrix.

In depressed states of the constitution, a local venereal sore may become extremely troublesome, assuming different forms of phagedenic, serpiginous, and other unhealthy kinds of inflammation. Such instances generally occur in patients whose systems have been undermined by intemperance or by previous syphilitic disease.

The treatment of the local venereal suppurating sore, in its uncomplicated form, is sufficiently simple. The venereal poison requires a living nidus for its development, and, even in the suppurate form of the disease, some time must elapse before its specific action is established.

If, within the first five days of the application of the poison, the part to which it has been applied be destroyed by caustic, the death of that part will determine the cessation of the morbid action. This cauterisation, to be effective, must, however, extend to all the tissues implicated. It can, therefore, only be practised with success within a very few days of the appearance of the chancre. If a longer time be allowed to elapse, the tissues will have so imbibed the poison that it will be in vain to attempt to destroy all the parts that have been affected.

Suppurating sores generally make their appearance soon after upon the application of the virus, and to these, therefore, alone the method of treatment by cauterisation is adapted. For the purpose of securing the intended result, strong caustics should be used; and, as these may sometimes extend further than is intended, it is always advisable, before applying the caustic, to have an antidote at hand, so as to limit its action when desirable. When the caustic has produced its requisite action, the antidote may be applied; this will have the effect of preventing the further extension of the caustic, and also relieve the pain to which it gives rise. Thus, if a strong acid be used, a solution of carbonate of potash or chalk will form a good antidote. If an alkaline caustic be employed, some vinegar may very conveniently be used to limit its action. When nitrate of silver is applied, the common olive-oil is the best subsequent application.

The caustics most used for the purpose of destroying the suppurating venereal sores are the mineral acids, or a combination of potash and lime. The nitrate of silver will seldom extend sufficiently deep to destroy the poison.

The strong nitric acid has often been employed, and acts extremely well, but it gives very considerable pain when applied to the surface of the body.

Another preparation, which has been much used, is a combination of sulphuric acid and powdered vegetable charcoal. When this preparation, in the form of a paste, is applied to a chancre, it dries quickly, and forms a kind of black crust, which remains adherent to the tissues, combines with them, and is not detached for several days. The wound sometimes will then be found to have lost its specific qualities, and to be in a healing condition. The application of this caustic causes very severe pain, which lasts for a considerable time. The pain, however, is said to be less than that produced by the nitric acid, but then it does not admit of being relieved in the same way by the application of an antidote.

Perhaps the most convenient form of caustic is the potassa cum calce, as prepared in the shape of little rods for the purpose. The lime combines with the moisture of the parts, and prevents this from extending itself over the neighbouring surface. The extent to which this caustic acts may, therefore, be regulated in the most accurate manner; and after it has done its duty the application of some dilute acid will relieve the pain which it has caused.

The actual cautery is a remedy which has often been successfully used for the phagedenic form of ulceration. The object with this, as with the other kinds of caustic, is to destroy the whole of the infected tissue, and completely to kill every part to which the cauterising action extends. For this purpose, the cautery should be heated to a white heat,

and allowed to remain on the diseased part sufficiently long to destroy the tissues to the requisite depth. Phagedænic sores, treated in this way, have been known subsequently to present a healthy surface, and to heal without further trouble.

Serpiginous sores are often too extensive to be conveniently treated in this way. A modification of the plan may then be adopted. The outer edge of the sore may be alone destroyed, so that the diseased part may be completely surrounded by an artificial line of demarcation. This will sometimes prevent the extension of the affection. It will often happen that the edges of serpiginous sores are undermined, and if the cautery be then applied to the edges alone of the skin, it may not reach to the circumference of the disease. It is safe, under such circumstances, to destroy the skin deeply two or three lines from its detached margin.

The ordinary suppurating venereal sore, if not in its origin destroyed by caustic, will generally run its course of five or six weeks' duration, and heal of its own accord, without leaving any injurious effects either in the lymphatic or in the patient's general system.

It may be well, however, to use various means to accelerate the healing of a suppurating sore, and such means are sometimes necessary.

So long as the sore has the specific characters of ulcerating deeply, with clearly defined vertical edges, it is well to continue the use of some mild caustic, such as a solution of nitrate of silver. When granulations spring up and the base appears healthy, it matters little what applications be used, provided the part be kept scrupulously clean.

The ulcer may assume the characters and appearances of ordinary lesions elsewhere situated; e.g., it may be indolent, irritable, or inflamed, or, by granulating too redundantly, impede the cicatrisation. Such symptoms are to be met by the same measures as would ordinarily be used.

If a chancre threaten to slough, it is best to dry the parts and apply nitric acid, afterwards using a lotion of potassio-tartrate of iron. With a solution of that salt applied to the sore, and the administration of the same drug internally, the phagedænic action will almost always alter its character.

Sometimes a large amount of inflammation, with great pain, attends the local progress of the disease. In such cases, the administration of opium is of great advantage.

EXCISION OF THE THYROID GLAND.*

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EXCISION of the thyroid gland appears to date back to the time of Albucasis. While it enjoyed a temporary reputation as an operation in the end of the last century, and in the beginning of the present, among some surgeons of repute upon the Continent, it appears to have been received with much less confidence in our own country.

In fact, on turning to one of the most recent, as it is one of the most representative, works upon modern surgery emanating from the southern metropolis, we find the learned author introducing his notice of this procedure in the following terms:—"Few surgeons believe that the entire thyroid gland has ever been successfully extirpated, although cases are so related (*sic*) by Desault, Roux, Gooch, Vogel, Theden, Hedenus, and others."

The late Mr. Liston, in his *Elements of Surgery* (page 469), speaks scarcely more encouragingly of such proceedings. "Extirpation of such growths", he says, "has been repeatedly attempted; but the patients, almost without exception, have perished from hæmorrhage under the hands of the knives. The immense supply of blood afforded to the gland in the healthy state must be kept in mind, as also the enlargement of the vessels proportioned to the increase of the part. . . . In short, the operation is attended with such risks, with so absolute a certainty almost of a fatal result, as not to be warranted under any circumstances, far less for removal of deformity only."

The late Mr. Syme, in the last edition of his *Principles of Surgery*, seems equally opposed to this operation (page 302), when he writes:—"The deep situation, muscular coverings, firm connections, and the large blood-vessels of bronchocele, forbid excision; and the attempts which have been made with this view afford a sufficient warning against their repetition by the fatal issue which has almost invariably, and often immediately, followed them."

Boyer speaks even more decidedly (vol. vii, page 82): "A last measure, an extreme one, proposed for the cure of goitre, is its extirpation. This operation, recommended by Celsus and various others since his

time, has been undertaken, and has succeeded in some very exceptional cases where the tumour has been small and confined to one part only of the thyroid gland; but where the extirpation of a voluminous goitre, including the whole gland, has been attempted, the patients have died of hæmorrhage; or, should the operator have been successful in controlling the bleeding during the operation, the patients have died within two days from the disturbance of system occasioned by a tedious and very painful operation. Thus extirpation of the thyroid gland is one of those operations forbidden by prudence, reason, and experience." But, while these views, so decidedly condemnatory of operative interference, were held, we find that, from time to time, exceptional cases occurred in which the features of the tumour or the circumstances of the case were sufficient to lead to a transgression of such prudential judgments. Mr. Liston operated in this way more than once. In his *Practical Surgery*, he figures the external appearance of a case in which he operated after preliminary strangulation of the entire deep attachments of the mass. Mr. Syme, in speaking of this operation of Mr. Liston's, says (page 303): "I once adopted this method."

In assisting others, I twice witnessed very alarming hæmorrhage where partial extirpation of the organ was adopted. In one case, where the late Mr. Syme was the operator, the case was one of hæmatocele of the thyroid, in which tapping the sac, and injecting it with iodine, had been practised previously. The sac almost immediately thereafter refilled and pulsated strongly, and, on the ensuing day, while the pressure threatened to interfere seriously with respiration, copious bleeding occurred again and again from the gaping puncture made by the trocar. In these circumstances, Mr. Syme laid open the sac, and, failing to arrest the bleeding which poured out from the edges and interior of the opened sac, he attempted to cut away as much of the tissue of the enlarged gland as he could detach from the surrounding parts. But, as this failed to afford any relief to the continued rapid loss of blood, the cavity was stuffed with sponges, and the edges of the incision stitched together to maintain them in position. These measures failed to restrain the bleeding, and the patient died in our hands. In the second case, Professor Spence successfully extirpated a tumour of the isthmus of the thyroid, but with great freedom of active hæmorrhage attending upon the division of the vascular connections of the tumour.

The hæmorrhage which attended upon these two operations was certainly such as might be regarded as quite confirmatory of the unfavourable opinions expressed in most quarters in regard to the operation of extirpation of the thyroid gland, and assuredly fitted to deter one from any attempt at its repetition.

The first case which came under my own care, in which it seemed desirable to effect extirpation of a portion of the thyroid, occurred in my practice in May 1871. The case was one of a young lady, who for many years had been affected with a tumour of the neck. It was centrally situated, prominent, of the size of a China orange, moving with the trachea corresponding to its upper part, of a solid and elastic consistence. It was very disfiguring, and steadily increasing in size, and especially so within a recent period antecedent to her coming under my care. Recognising its thyroidal nature, I advised its removal by operation. I hoped, in operating, to find it easily enucleated, as it had made its way through the interval between the sterno-hyoid and thyroid muscles, and had no lateral extension over the carotid sheaths. The early steps of the operation were easily and rapidly completed. They consisted of a linear incision in the mesial line over the centre of the tumour, which, after division of the fascia, afforded a ready access to the tumour; and, by a few touches of the knife aided by the fingers, the whole prominent part of the tumour was exposed. But no sooner were the lateral attachments of the tumour severed upon the one side, than the blood gushed in a copious stream both from beneath the sterno-thyroid muscles and also from the margin of the tumour itself. The vascular connections, which had retracted, were after some trouble secured with a ligature of silk passed beneath the central mass of the tumour, and tied so as to occasion constriction of the mass, and staunch all further flow. To escape from further trouble from bleeding before dividing the lateral attachments of the tumour upon the opposite side, I passed preliminary ligatures beneath the superior and inferior thyroid vessels, and, having tied these ligatures, I completed the operation without further loss of blood. The patient, in spite of the loss of blood, made a rapid recovery. The effects of this method of controlling the circulation in connection with the thyroid gland led to my conceiving the idea of mediate deligation of the thyroids as a preliminary step in the operation of extirpation of a bronchocele.

I had not long to wait for an opportunity of putting my plan to the test of actual practice; for, in the course of the same month (May 1871), a patient was admitted to my care in the Royal Infirmary affected with a multilocular cystic goitre. She had previously been under treatment, when a single cyst, of which the tumour then seemed

* Read before the Surgical Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

to consist, had been tapped and injected with iodine. This plan of treatment had apparently checked the progress of the disease, but again it had enlarged, and, at the time of her admission, the swelling was of the size of two fists. The patient had further become anæmic, and affected with exophthalmos to a slight degree.

In operating in this case, I followed the same method as in the first instance just narrated, so far as opening the fascia between the muscles in the middle line. But, instead of opening the fascial sheath of the tumour, I pushed the parts aside, so as to carry my forefinger and thumb over the margin of the tumour at its upper and right corner, and felt for the situation where the superior thyroid passed upon the tumour. Recognising these vascular connections, I introduced an aneurism needle beneath them. In this manner, I was able to withdraw a ligature beneath the right superior vascular connections of the goitre. The needle was similarly carried beneath the posterior surface of the right inferior corner of the gland, so as to include all the right inferior thyroidal connections, and a ligature similarly withdrawn beneath them. The same process was repeated upon the left side, a ligature being carried beneath the left superior and inferior thyroidal connections. These four ligatures included not only the arteries and their corresponding veins, but the delicate fascial sheath which surrounds them, and, passing along them, forms the fascial investment or fascial capsule of the tumour. The ligatures were then tied separately, so as to secure the vessels as far from the tumour as possible. The fascial sheath of the tumour having been now divided in the mesial line, the attachments were cut through with scissors, and the tumour turned out of its bed by stripping away the fascial capsule with the fingers. After the tumour had thus been enucleated entire, one of the ligatures partially slipped, owing to its having been unduly strained as a means of keeping the soft parts separate. A gush of blood took place into the cavity; but this was at once checked by the pressure of a sponge until another ligature was carried round the vascular connections of the tumour corresponding to the bleeding part; when this was tied, all further bleeding ceased. The wound was closed by sutures, except at the lower angle, where a large drainage tube was inserted to secure the evacuation of all blood, serum, or other discharge, during the healing of the wound. The dressings were retained in position by means of a cravat composed of a muslin handkerchief folded upon a piece of buckram, after the manner of an old-fashioned stock. The skin, which at first hung loose and flaccid, had in two days so adapted itself to the parts beneath as to show no signs of redundancy. The wound, with the exception of the point where a ligature hung out, was healed in a fortnight.

The second case, one of multiple cystic goitre, was operated on in the Chalmers' Hospital in the autumn of 1871. It presented no peculiarities in contrast with the case just narrated. In it, catgut ligatures were used instead of silk, and were cut short after the removal of the tumour was completed. Here the healing process was completed in three weeks, and the patient, who had been sent to my charge by Dr. Howden of Montrose, returned to her duties as an asylum attendant. In this case, the anæmia and exophthalmos, which were present on admission, markedly diminished after the operation.

The third case was that of an Irishwoman, also affected with multiple cystic goitre. She was admitted to Chalmers' Hospital in the early part of 1872. The operation was performed in exactly the same manner as in the last mentioned cases, and was followed by equally favourable results.

The fourth case, a patient from Leith, was admitted to the Royal Infirmary in February 1872. This was also a case of multiple cystic goitre. It had grown steadily for twenty-three years, having commenced at the period of puberty. It was of the size of a large fist; it pulsed distinctly, and was accompanied by anæmia and exophthalmos. The operation was performed on March 1st, 1872, in precisely the same manner as already detailed. An anomalous aneurismal condition presented itself after the healing process was complete, in the situation of the right superior thyroid. When first remarked, six weeks after the operation, it was about the size of a hazel-nut; but it gradually increased until it became as large as a small walnut. It then presented all the characters of an aneurism with a venous communication, manifesting the peculiar rattling thrill and the *bruit de diable*. After continuing for about three weeks, it then disappeared gradually, no treatment beyond rest in bed having been employed.

In addition to these, I have operated successfully upon two other cases, and with a fatal result in one case. In this fatal case, the tumour, of very large size, was adherent to the trachea. After the preliminary application of ligatures and the division of the vascular attachments upon the right and left sides had been effected, on turning the tumour to one side, a large vein, lying posteriorly in the groove between the trachea and the œsophagus, was unfortunately wounded.

The pressure of the sponge applied to arrest its bleeding, together with the drag upon the trachea when the tumour was turned to one side, interrupting the respiration, led me to attempt to separate the attachments of the tumour from the trachea rapidly by means of the knife in a deep wound, from which bleeding was still going on. The thin and soft posterior wall of the trachea thus turned outwards was unfortunately wounded; and, before relief could be afforded by opening the trachea and introducing a tracheotomy-tube below the level of the tumour, so much blood had been sucked into the air-passages as to determine a fatal result in the course of the evening.

So far as I am aware, this method of extirpating the bronchocele is an original one. Mediate ligation of the thyroid arteries has, I am aware, been proposed and employed by Moreau, Desault, Bruynghausen, Mayor, Walker, Coates, Earle, Green, Blizard, Cooper, Brodie, and others, as a means of curing, or at least arresting, the growth of the tumour, though its practical employment was not found to be attended by such results as to lead to general adoption; but the combination of preliminary ligation of the thyroid with extirpation of a goitre is, so far as I have been able to discover, an operation which had not been practised previously to 1871.

In operating for excision of a goitre according to this method, I should recommend attention to the following particulars.

1. The external incision should be very free, extending from the larynx to the notch of the sternum, if the tumour be large and spread widely in a lateral direction.
2. The vessels, arterial and venous, in the early steps of the operation, should be secured as they are divided, to avoid any obscuration of the parts through oozing going on.
3. The fascia should be as freely opened as the skin; and, if the tumour be a large one, more space may be gained by a transverse division of the soft parts as far as the margins of the sterno-mastoid muscles on each side.
4. The delicate investing fascial sheath of the thyroid should be left undivided until the mediate ligation of the vessels included in their fine cellular sheath has been effected. This sheathing fascia or cellular capsule of the thyroid gland is only a prolongation of the sheath of the thyroidal vessels. If the capsule be opened, then, in pushing aside the soft parts to disclose the outline of the tumour, this delicate sheath is apt to glide off the surface of the gland; and, should this occur, the gland may readily be detached from the vessels even with comparatively gentle handling, and thus copious hæmorrhage difficult of restraint may be occasioned.
5. After the mediate ligation of the thyroidal vessels in their sheathing cellular envelope, the cellular capsule of the thyroid gland should now be opened by scratching through its tissue in the middle line, and the attachments which still retain the goitre in its position carefully divided by means of blunt-pointed scissors curved on the flat. There should be no tearing away of the gland, no pushing parts aside with any roughness of manipulation.
6. Should bleeding occur from any of the vascular attachments of the tumour after its separation, it must be remembered that it must occur from within the cellular sheath of the vessels, and find its way thence into the cavity consisting of the investing fascial capsule; and, therefore, if the vessels are to be tied, they should be secured *en masse* along with their cellular sheath. Without this sheath, furthermore, these enlarged thyroidal vessels will be found so fragile as to risk being cut by the ligature, while any attempt to reach the bleeding mouths within the fascial capsule will be balked by the infiltration of this cellular envelope of the vessels by a coagulum.

In connection with this operation, it is of exceeding interest to read Mr. Allan Burns's remarks in his work upon the *Surgical Anatomy of the Head and Neck*, written in the beginning of the present century, upon the anatomy of these parts as deduced from an examination of the body of a subject who suffered from goitre (page 199-201). "It is proper to know that every tumour is originally contained in a capsule of fascia, provided the swelling arise from enlargement of any glandular organ, and also that the adhesion of the one to the other is in indolent tumours for a considerable length of time slight. . . . Indeed, the union between the capsule and the gland was so slight, that I found no difficulty whatever in insinuating my fingers between the cyst and the gland, and detaching the one from the other till I reached the thyroid artery, round which I could most easily have passed a ligature. With the gentlest effort with the finger, I separated the tumour all round, and, in succession, touched the four arteries, and brought into view the trachea and gullet. When in this way I had ascertained the practicability of extirpating this tumour, I made an incision into its substance, and found that it presented precisely the appearances belonging to a bronchocele.

"It has been proved, from the inspection of the connections of the en-

larged thyroid gland in this body, that it might with a possible advantage have been removed by operation. Although this would have been practicable in this instance, still in others the tumour may be so situated, and may have formed such adhesions, as to preclude any attempt at extirpation. The respiration and swallowing may be both much impaired, and every remedy may have been tried and failed. Under such circumstances, is it necessary to leave the patient to die a miserable and lingering death? or is there any expedient which may reasonably be employed to protract life, and to render existence more comfortable? Such an expedient is within our reach. The dissection of this case proves its practicability. There it has been mentioned that the upper thyroid artery was greatly enlarged; that it was even nearly equal in size to the carotid; and also that it lay very near to the surface. Its coverings were few and thin; the pulsations of the artery were strong and distinct. Placed as that vessel almost always is, no one would have experienced difficulty in reaching it. The pulsation itself would be a guide, which would conduct us easily and safely to the vessel. No nerve of any importance would come in the way; no muscle would require to be displaced; no depth of substance to be divided; no intricate dissection to be performed. A small incision would expose that vessel on which the tumour in great measure depended for its support. It would be easy to carry a ligature round it to intercept the flow of blood to the gland; and, till the other vessels enlarged, the tumour would have more slowly increased in size; not only so, but it will sometimes be actually reduced and life protracted. A surgeon who would decline extirpating a large bronchocele would have little dread in tying the thyroid artery. Not a thyroid artery as in health, small, indistinct in its pulsation, and requiring, consequently, a more intricate dissection to expose it, but an artery too large to be missed. I would not, however, rest the question regarding the propriety of this procedure on conjecture, nor would I appeal to the healthy or morbid connections of the vessel alone to prove that it may be safely tied, when the operation has actually been performed on the living subject, and, in so far as concerns the tumour, with a favourable result, though we must regret that the patient died. . . . The patient died; yet this does not militate against the repetition of the experiment; the same might have happened from merely opening a vein, and, in the confined air of an unhealthy hospital, has actually happened. A tumour which, before its nutrient arteries were tied, was so large that it would have been folly to have attempted its excision, may, by depriving it of the circulation along the two upper thyroid arteries, be so reduced as to allow the operation to be performed, provided its connections do not prohibit us from interfering. It is not, therefore, the immediate effect on the disease which we are to look to in tying the arteries; we are to anticipate the command which it may ultimately give us over the tumour; and consequently, when the swelling, although very large, has not formed adhesion to the large cervical vessels and nerves, we are to urge the expediency of tying its nutrient arteries as a prelude to other proceedings. We shall not, however, in bronchocele, have occasion often to extirpate the thyroid gland, neither shall we require in many cases to tie the thyroid arteries."

Again, a little further on, Mr. Allan Burns remarks: "In extirpating this gland, an incision of an elliptical shape, if the tumour be large, or if the integuments be diseased, is to be made over it with the long diameter directed from above to below. The surface of the swelling is next to be uncovered by dissecting back the integuments on both sides. The finger is to be insinuated between the skin and the muscles, pushing it upwards and backwards till it comes in contact with the thyroid artery, round which a ligature is to be passed with a blunt needle. In a similar manner, the other superior thyroid artery and the two inferior vessels are to be secured when the whole gland is to be removed. By these ligatures, we cut off the circulation into the tumour, and consequently are left at liberty to finish the operation by cutting the vessels nearer to the morbid parts than when the threads have been applied, and by dividing the sterno-hyoid and thyroid muscles above and below the tumour, which is afterwards to be detached from the trachea and gullet by cautious working with the fingers. In this way, we may remove one or both lobes of the thyroid gland; but the operation is difficult, tedious, and not without danger. . . . To those who are accustomed to do everything with the knife, the extirpation of the thyroid gland must appear a formidable operation; but, to one who knows when to use the scalpel, and when to substitute the fingers, the removal of the thyroid gland, although hazardous, does not appear impracticable. 'Wilmer (*Cases in Surgery*, page 243), in his essay on *Bronchocele*, says: 'When we reflect upon the situation of the thyroid gland, and consider its numerous arteries, which increase in diameter in proportion to the enlargement of the part, we shall not be surprised at the difficulties that must attend its extirpation in a diseased state, and the danger there ever must be of incurring a fatal hæmorrhage.' These are

the notions entertained by all who reprobate this operation; but they are founded upon a mistake in anatomy. A diseased thyroid gland really derives all its blood from four arteries; if, therefore, the surgeon push at once to these and secure them, he will, in detaching the morbid parts, have nothing further to dread from bleeding arteries. By venous hæmorrhage, he may still be incommoded; but it will easily be checked. When, however, he employs the knife and trusts to tying the arteries after he has divided them, he will unquestionably experience all the difficulty, and the patient will run all the hazard that Gooch's did. The life of the patient will be saved only by having a succession of persons to keep a constant pressure upon the bleeding vessels day and night for near a week with their fingers upon proper compresses, after the operator has been repeatedly disappointed in the use of the needle and ligature" (page 232).

THE SANITATION OF HOUSES, ESPECIALLY IN THE MATTER OF DRAINAGE.*

By W. EASSIE, C.E.

THE evils induced by improper systems of drainage, etc., will be best observed by instancing the cases of houses which have from time to time been added to, until they have passed from the chrysalis or cottage condition to that of the winged mansion. When such cases occur, it will be found that the residences will have passed through all the applied gradations of sanitary knowledge. One will be able to trace there the first rude awakening up of the inmates, when something has been found wrong with the patrimonial cesspool in the kitchen, when perhaps it has filled up, choked the tributary drains, and even raised the paving-stones out of their places. When this happened in a village or hamlet, all that the united talent of the place could apparently suggest was merely a more or less partial emptying of the offensive receptacle, and the cleaning out of the drains leading from sink and closet. And, when this had occurred several times, or when the sides caved in, and the contents of the cesspool began to interfere with the economy of the sink or the working of the closet, the fat would be issued for the excavation of a new dumb-well close by, and for the diversion of the drains to its mouth. The old cesspool was then duly covered with a stone, without being emptied. Very rarely, indeed, were these places cleaned out; the reason, doubtless, being that a disturbance of the deposits would render the absence of the family a matter of absolute necessity, owing to the overwhelming stench. Handy disinfectants for the use of soilmen were then unknown. It was, no doubt, also found cheaper to provide a paving-stone, and cover up the effete matter out of sight. And it is just the same in towns and cities. Only last week, I laid bare in the basement of a house in the West End of London three cesspools, which had been dug in most brotherly proximity, and abandoned in rotation as they filled up with ordure and filth. More than four cart-loads of night-soil were removed, and the bulk of it could not have been disturbed, I am sure, for half a century. Nor would this valuable kitchen-garden stuff, we will call it, have seen daylight now, and been carted to some spoil-bank, where will perhaps stand a future row of houses, had not the rats formed runs in the vicinity of the pits, and allowed horrible smells to invade the house by way of a long forgotten brick drain.

The reason why these ancient nuisances are found inside houses in towns and cities is not necessarily because the residences were built in rows or terraces, with but little external accommodation; for the same practice held good in country houses, where space was no object. It was rather owing to the absence of a proper flushing supply, and the improbability that the slops from the kitchen would suffice to carry away the more solid wastes outside the walls of the house. Indeed, they would be certain to be insufficient; for, at the time when these cesspools were excavated, only brick-built drains were used, generally laid with uneven bed, and through the open or perished joints of which, too, most of the fluids percolated.

The plan (Fig. 1) gives the earliest appearance of the basement of a house with which I have lately had to do, and I propose to follow its history up to the present time. At first, it must have been drained in some such manner as indicated by the dotted black lines, and I have drawn the cesspools in the kitchen, K. That cesspools are somewhere there I strongly diagnose. In a similar manner, the stables and coach-house, S, were once drained into the cesspool shown by the black spot between the stalls, because I have already discovered that one. Fortunately, the soil was of an impervious nature, or the whole basement would have been sodden throughout, and the well at W poisoned.

* Read before the Public Medicine Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875. J

Here we have a very fair representation of a house built fifty or sixty years ago; the sinks and, by-and-bye, a closet upstairs drained into the intramural cesspools. Successive ones were dug, because there was no overflow provided; nor would an overflow have been of service, since the floating matters would never have run off, but only clogged up the pipe. The stable-cesspool acted as a catch-pit for the urine, and the dung was removed to the pit beside the boundary-wall. An old-fashioned, and consequently filthy and unwholesome, privy was also in use by the family or the servants.

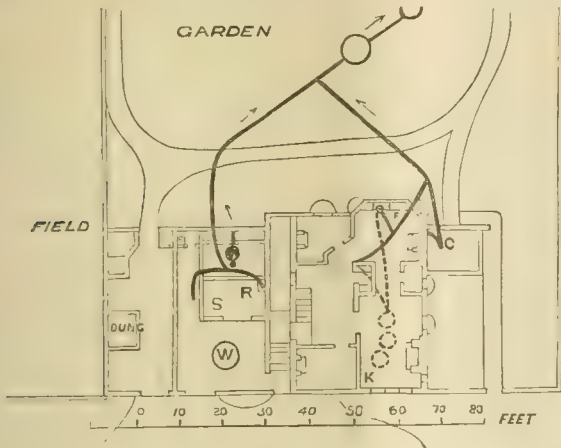


Fig. 1.

We will now pass to the second stage of progress, still regarding the same diagram, and this was reached when the water-closet was introduced, and glazed earthenware pipes. The black lines, which indicate this state of things, will show that the sink and upstairs closet drained down into the garden, picking up the conservatory floor-drain and the drain from the stables, and so on to the first cesspool. When this ran full, the overflow was into another, lower down; and both, which were built with brick, were, of course, sealed down in an air-tight fashion. There could have been no ventilation, except through the trapping-water of the syphons at the foot of the sink-waste, soil-pipe, or rain-water stack. The privy arrangement had been continued probably from a paucity of water.

And here I might interpolate a line or two, to say that it does not follow that the drainage of such a house into a cesspool is necessarily a dangerous proceeding. Provided only that the waste-pipe of the sink be made to deliver on the outside of the house over a suitable trap; provided, too, that the soil-pipe be carried up through the roof, and the highest point of the drain, near the stable at R, ventilated by a shaft up to the eaves, the residence might be deemed a safe one. It would, nevertheless, be wise to ventilate the (outdoor) cesspool by an upright pipe, or the insertion in the cover of a ventilating trap, the charcoal of which could not be saturated by rainfall. Similar or even open ventilators could even be inserted in the march of the drain, and an earth or ash-closet would improve the surroundings in the stable-yard.

The plan (Fig. 2) exhibits the same house under different auspices. The stable buildings at S have been converted into servants' offices and butler's pantry, and the loft over raised to the dignity of sleeping-rooms. A new wing has also been added at A; and, fresh land having been purchased on the stable side, new stables and coach-houses have been erected at B. The laying down of a parish sewer in the main road—the first enhancing agency in the price of land—without doubt led to these improvements; for improvements they certainly were. We will now see how matters were managed from a sanitary point of view.

First of all, then, owing to the introduction of an upstairs closet at D, it became necessary to lay the drain to that point, and also to a servants' closet which was added at E; the latter with a closet situated immediately above it in the hall. The builder began to lead a drain from the sink at F round the garden front of the house to the old privy, which he raised to the dignity of a water-closet, and then continued the drain-pipes to the front of the house, between the old and new stable on to the sewer, draining, of course, the stables in passing, and taking up also some surface-drains. All this was proper enough; but he fell into his first error when he led the surface-drain, M, downstairs, and laid pipes on to meet the sink-drain at N. No sewage from the three closets could possibly have passed the rectangular

junction at N. Nor was this his only blunder; for, thinking to exclude any sewer-gas from entering the house from the sewer, he interposed in the line of drain a common deep syphon at U.

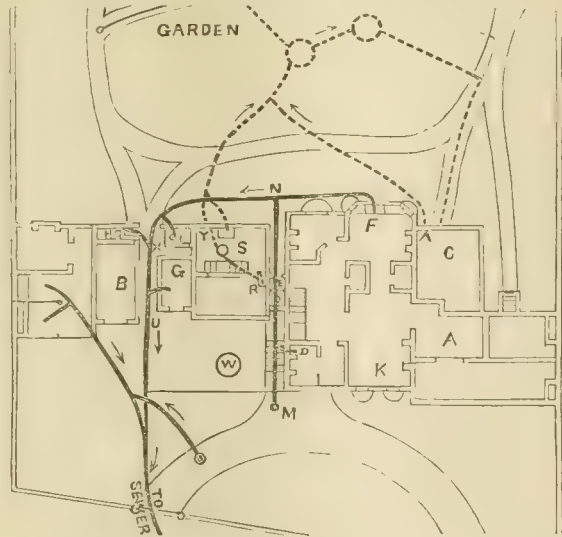


Fig. 2.

Another mistake of his was to continue the use of the garden cesspools, and the leading of the rain-water cistern overflow at R, the waste of the butler's sink at Y, and the floor-drain of the conservatory C in the old drains down to the cesspools. I have since ascertained that he did this to please his client, who objected to the deep digging between M and the sewer in the road. The consequence, however, was, that the gases forced the conservatory floor-trap, and found their way into the drawing-room, invaded the butler's sanctum by way of the sink at Y, and regularly stormed the servants' sleeping-rooms through the cistern overflow at R. He, moreover, forgot to dig up the old stable cesspool at S, and, as a consequence of this, that portion of the domicile smelt very offensively to those whose pituitary membranes were at all sensitive. The non-placement of any ventilating-pipe in the new drains was also a great oversight.

The sins of omission and commission of sanitary law came speedily upon the inmates. First of all, the syphon at U became stopped up, owing to the sluggish flow of the faecal matter from the closet at X,

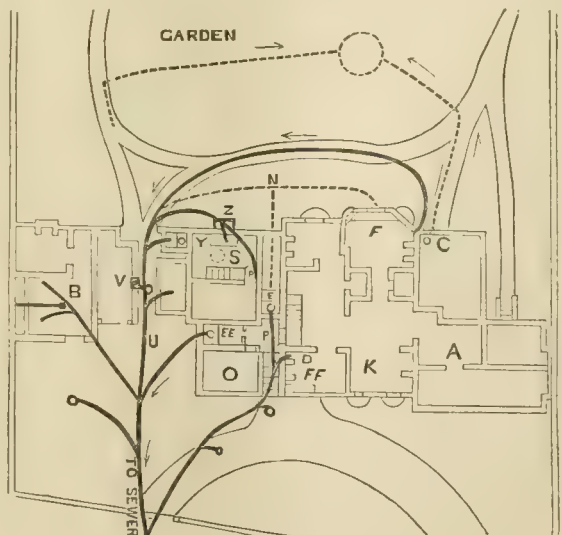


Fig. 3.

and the paltriness of the flushing water. The closets at D and E also filled up their portion of the drain. On taking up the drain below the syphon U, I found that during the whole of the time not one particle of sewage had ever reached the main sewer. Some of the drains had

also been laid in with a *backward* fall; and, in fact, it became necessary to dismiss the builder and send for the engineer.

After discovering the stoppage and its cause, and after removing some cart-loads of ordure out of the extra large-sized pipes, I began to re-arrange the whole, as shown upon plan (Fig. 3). I dug out the drain-pipes on the dotted line between the points E and N, and transferred the servants' closet from the middle of the house to E E, in the corner of a new coal-cellar, which I built at O. I also carried the drain from the foot of the upstairs water-closets, through the open area P on to the sewer in the road, and moved the scullery-sink from F to the site F F, which was more convenient to the servants. I next dug up the old stable-cesspool at S, and led the wastes of the cistern and butler's pantry to an open disconnecting chamber seen at Z, and on to the main-drain, easing the bends as I went on. I also laid in a new drain round the garden-path from the rain-water stack-pipe in the conservatory C, and so made sure of an occasional good flushing for the new drain. Ventilation for the drain I provided by erecting a shaft at V, up the high gable of the new stable building B, and upon the top of it I fixed a foul air withdrawing cowl. Very little remains to be done, except to ventilate the soil-pipes and relay the basement-floor; first searching for the cesspools, and concreting the surface over. An open area round the building would also prove a blessing.

An example of a large-sized mansion, which was partly drained into cesspools and partly otherwise, is given on the plan (Fig. 4). The

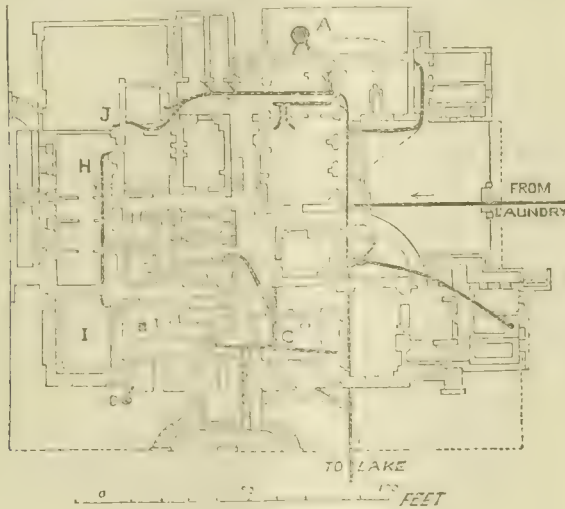


Fig. 4.

drainage was at first collected, as shown by the black lines, and ran down to a lake where the drain was trapped, the sewage falling through a valved grating into the water. The outlet being thus hydraulically sealed, and there being no ventilation in the march of the drain, the gas generated in the drains (which, by the way, were all brick-barrel ones) found its way into nearly every room of the house.

The collection from one side of the house commenced with an old rotten brick drain under the housekeeper's room at H, and the state in which it was found sufficiently accounted for certain smells prevalent thereabouts, for dampness, and for the presence of slugs. The rain-water flowing down this drain led to the beer-cellars I I, and then ran in an open channel (see faint dotted line) as far as the passage, when it entered the store-room, and here, at C, was put a catch-trap, which was relied upon to shut out the air of the drains from the house. It then ran on to the main-drain. The smells in this part of the basement were intensified, owing to the beer-droppings in the open channelling. The collection from the other side of the house led on from J through the scullery S, a separate pipe being led on from the sink. The water-closets throughout the establishment were eighteen in number, and of these ten drained direct into the drain, and so on to the lake; five into a cesspool in the quadrant-shaped yard, and only the overflow into the drain, and the other three drained into deep cesspools at A and D, excavated in the chalk. And I might here note, as a curious thing, that, upon opening a cesspool cut in the chalk, it will be found that the soil disappears there with an unaccountable rapidity. But, when once the cesspool is emptied, and the porosity of the sides interfered with, it holds water like a common brick cesspool, and becomes a receptacle where disease-germs multiply.

Whatever gas was generated in the main-drain or tributaries, or in the large cesspool in the quadrant yard, had, therefore, no escape, save into the house. The cure, therefore, lay in the abolition of this cesspool, the diversion of the drain which led into the catch-pit C outside the house altogether, the ventilating to the roof of the heretofore unventilated soil-pipes, the disconnection of the house-sinks from the drains, and the taking up of the retardative brick drains, and substitution of earthenware pipes. The large cesspool A was also filled up after having been emptied, and the closets which formerly discharged there were drained by way of the dotted line into the main sewer.

The plan (Fig. 5) illustrates the ground-floor of a large house of

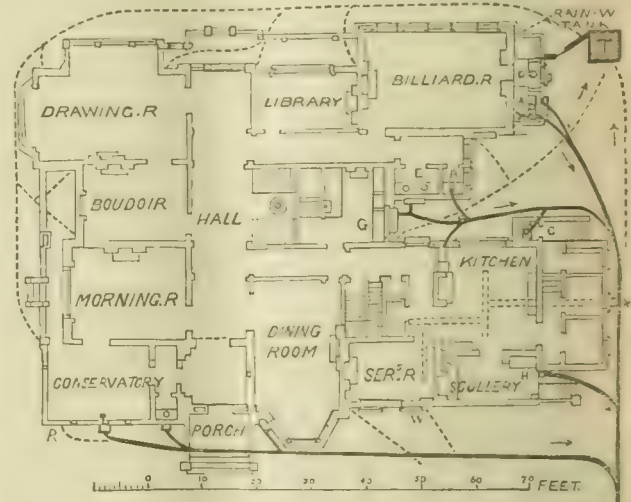


Fig. 5.

which I was both architect and engineer; and I exhibit it merely to demonstrate how easy it is to arrange so as to have the whole of the wastes delivered immediately outside the house. The water-closets A, B, and C, and others above these, the lavatories D and E, and the sinks G and H, have only the exterior wall between them and the drain. Hence none of these drains which convey the soil and other effete matters pass under the house. When it was found advisable to drain the basement—and here I found it so along the dotted double lines—I disconnected it from the main drain by interposing over the junction a ventilating shaft at X. The sinks and lavatories also deliver in the open air. To assist in flushing, some rain-water pipes, for instance, R and W, might, under certain circumstances, be led into the soil-drains. But, as a rule, it will be found wise to collect the rain-water as I did, by the dotted single line of drain-pipes to the tank T, for use in the laundry and green-houses. The main walls of the house were also built hollow, and protected from rising damp by a damp-proof course.

TWO CASES OF PUNCTURED FRACTURE OF THE FRONTAL BONE TREATED BY TREPHINING;

AND RESULTING ONE IN TOTAL THE OTHER IN PARTIAL LOSS OF VISION.

By KELBURNE KING, M.D., F.R.C.S.,
Surgeon to the General Infirmary, Hull.

THE following cases seem to me to possess sufficient interest, both in a surgical and a physiological point of view, to warrant me in bringing them before the notice of this section. Though differing greatly in the extent of injury, they have this in common: that in each the most formidable symptoms depended upon extensive fracture and displacement of the internal osseous plate of the skull, of which but little evidence was procured by means of external examination; and in both the ultimate result of the accident was loss of vision: of both eyes in the first, of one eye in the second; although in both the seat of the accident was far removed from the origin or course of the optic nerves.

CASE I.—G. A., aged 17, was kicked by a horse on the left side of

* Read before the Surgical Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

his forehead, on January 3rd, 1874. Though considerably injured—for he had two front teeth knocked out, and lost a good deal of blood from the wound—he rode a distance of two miles to the residence of Mr. Morley, of Barton, who dressed the wound, and observed that the lad was perfectly self-possessed, and showed no symptom of disturbance in the functions of the brain or the organs of sense. He was cautioned to keep quiet; but, two days after, again rode over to have the wound dressed. After this, the forehead and nose became swollen; sickness, slowness of pulse, headache, and supuration of the wound supervened. On January 12th, the sickness and headache had subsided. There was much less supuration, but rough bone was felt at the bottom of the sinus. The pulse was 44. His memory was not impaired, nor were his faculties affected; except that he was sluggish, disinclined to exertion, and uninterested in what was going on around him. I saw him on February 5th, about a month after the receipt of the accident. He was then confined to bed; had lately suffered much from sickness and headache, though these symptoms were again relieved. His pulse was 40, and full. He answered questions slowly and hesitatingly. His pupils responded to light but slowly; his vision was not affected. His mental condition was clouded; his faculties were not effaced, but they acted slowly. He had a general feeling of distress and depression, and was quite anxious to have anything done for his relief.

On examining the forehead, there was found a fistulous opening just above, and a little external to, the left supraclavicular ridge. A probe led to bare bone, and then could be passed on indefinitely. On examining with the finger, a punctured depression was felt in the bone, not larger than a split pea. Pressure in this situation caused him to wince. From these conditions, Mr. Morley and myself concluded that the injury to the internal plate of the skull was much greater than that to the external. The wound was enlarged, and a circular piece of bone removed with the trephine. On raising it up, the internal plate was found divided into three parts, and driven inwards, forming a kind of cone, the apex of which was opposite the small punctured depression of the external plate. Here the dura mater was ulcerated and sloughing.

A fortnight after, on the 19th February, Mr. Morley informed me that the lad was steadily progressing towards recovery; there was no hernia cerebri. Mr. Morley added: "The only bad symptom he has is diplopia; and he tells me that he sees double, even when I close his right eye." After this, however, protrusion took place; and an abscess formed, which burst on March 13th. On the 17th March, Mr. Morley sent me the following report. "He has not been sick for a week. Pus is still flowing, the bulging is gradually diminishing, and cicatrization advancing. Pulse 70. He does not see double with the left eye, as before; but he does with the right, the left being closed." The purulent discharge continued to the beginning of May; his general condition improved so much, that, with this exception, he might be considered as well. In the early part of May, the discharge ceased, and the wound cicatrised. He then noticed a failure of vision: first, in the left; afterwards, also in the right eye. The blindness increased; and he came under my care in the Hull Infirmary on the 26th of May. He could then distinguish light from darkness, and but little more. Both eyes were equally affected. There was a pulsating tumour, about the size of a walnut, over the seat of the operation, which could be reduced by pressure, without pain or inconvenience, but immediately returned. The pupils were dilated and sluggish, but responded distinctly to the stimulus of light. There was no paralysis, except of the optic nerve. As blindness supervened on the cessation of purulent discharge, I thought it possible that there might be deep-seated matter, and passed a fine trocar deep into the substance of the brain. No pus was discharged, and no effect was produced. He eventually left the hospital perfectly well in health, but practically quite blind. The ophthalmoscope showed white atrophy of the retina; and his condition is, I suppose, incurable.

In this case, there are two points to which I would call special attention.

Firstly, we had abscess of the left anterior lobe of the brain producing blindness of the left, then also of the right, eye. Secondly, we had the extraordinary symptoms noted by Mr. Morley, of double vision: first of the left eye, when the right was closed; then of the right eye, the left being closed.

CASE II.—The next case was that of J. F., aged 25, a sailor, who, on the 14th October, 1874, fell from the yard-arm of a ship into the empty hold—a height of upwards of thirty feet—was taken up insensible, and conveyed to the Hull Infirmary. On admission, his whole head and face were very much swollen, so that it was impossible to examine his pupils. There was a slight abrasion of the skin over the right eyebrow; and above the left supraclavicular ridge, an indentation of the bone was perceptible, sharp and deep, but not wider than a split-pea. Pressure here caused him to shrink, though he was otherwise

unconscious, incapable of being roused, all voluntary action being suspended, and only the reflex functions being carried on. In this state, he continued till the 19th—five days—when consciousness began to return, though the excretions were still passed involuntarily, and the swollen condition of the head and face prevented examination of the pupils. On the 27th, the œdema had so far subsided, that this examination could be made; when the left pupil was found to be natural, but the right was dilated and insensible to light. There was ptosis of the right eyelid; and the right eye, though capable of distinguishing light from darkness, could not discern objects with any distinctness. After this, the pulse became rapid and hard; and he suffered from severe headache, with hot skin, restlessness, and general fever. The pain was especially severe over the left supraclavicular ridge, where the depression was felt, and pressure there greatly increased the pain. It was evident that inflammatory fever was being set up as the symptoms of concussion subsided; and was probably occasioned by displacement of the inner table of the skull at this point. Accordingly, on the 4th November, the trephine was applied over the punctured bone. A portion of the outer table being thus removed, the internal was found broken up extensively, and forced inwards upon the brain. One jagged spicula, an inch and a half in length, and half an inch in breadth, was forced through the membranes right into the substance of the anterior lobe. On removing it, broken down portions of brain came away through the ulcerated aperture. At first, he seemed relieved after the operation; but, three days after, on the 7th, the part became swollen and painful; and, though pus and broken down brain-structure came away freely from the wound, he again became feverish, with great restlessness, so that he could only with difficulty be kept in bed. On the 10th, erysipelas set in in the face and scalp, affecting principally the right side; the feverish symptoms increased, and he became quite delirious. In the course of a week, the erysipelas disappeared, and the fever diminished. He became more tractable, but was very weak, and had very little muscular control. The right eye was quite blind, and the power of moving the eyeball was lost. His speech was very indistinct; the left ear was almost incapable of hearing; and the left side of the body was partially paralysed, especially the left arm. A new feature now began to present itself (November 17th). He complained of great pain in the back, legs, and feet, increased by pressure, and he dreaded even the weight of the bedclothes. In the latter part of November, and during the whole of December, his condition seemed to be desperate. There was almost complete loss of power in both legs and in the left arm, the right arm being the only limb over which he had any control. His legs were bent and drawn up, and in such a state of hyperæsthesia that the slightest touch elicited cries of pain. He was quite blind in both eyes; could hear only very loud sounds with the right ear, the left being quite deaf. His speech was not quite lost, but consisted of little more than inarticulate ejaculations. The excretions were passed involuntarily. Nevertheless, about the beginning of January, he began to improve. The œdema of the head had so far subsided that a fissured fracture—the inferior lip of which was slightly depressed—was perceived extending from the trephined part to near the left parietal protuberance. On January 13th, I made the following entry: "His general condition is much improved. Hyperæsthesia is much diminished, but still present in the legs. Muscular power is returning in the left arm, and also, though more slowly, in the legs. He has more power of moving the right eyeball, but there is still complete loss of vision in both eyes. The ophthalmoscope shows extravasation of blood in the retinae of both eyes; but, on the right side, the optic nerve is becoming cupped and atrophied." From this time, his symptoms gradually improved. On April 7th, he had quite recovered control over the sphincters. The vision of the left eye was restored, but the right was quite blind. The ophthalmoscope showed that the blood patches on both retinae were absorbed, but the atrophy of the right optic disc increased. Hearing had returned: first on the right, afterwards also on the left, side. There was occasional stammering; but the power of speech was greatly improved. The paralysis and hyperæsthesia of the limbs had disappeared. His memory, though imperfect, was daily increasing in strength. There remained some numbness of the right side of the face. When he laughed or whistled, the right side was still slightly paralysed. The movements of the right eyeball were imperfect, but he could completely close the eyelids. He had gained greatly in flesh, and his general health was good.

On the 14th of April, 1875, he left the Infirmary, cured, with the exception of complete blindness of the right eye.

The nervous symptoms in this case are difficult to explain. The optic and motor nerves of the right eyeball and portio dura suffered most, while the left auditory nerve and the left side of the body generally were more affected than the right. In a case of such severe in-

jury, it would not be right to attribute all the results to the injury caused by the splinter of bone driven through the membranes into the brain, and removed by the operation of trephining. But, in the first case related, the injury was clearly restricted to that caused by the punctured fracture; and, as it resulted in atrophy of both optic nerves, it affords proof that injury and irritation of the anterior lobe of the brain may result in loss of vision of either or both eyes.

The practical deduction is that, in cases of punctured fracture, the greatest care and caution ought to be observed; and, on the appearance of head-symptoms, the trephine ought to be applied without delay, so as to remove all offending spiculae of bone from the membranes and substance of the brain.

Percival Pott declared that "perforation is absolutely necessary in seven cases out of ten of simple undepressed fracture of the skull", a doctrine which subsequent experience has disproved; but it is not impossible that, in punctured fracture, some such proportion of cases may demand the operation; and in all such it must be of vital importance that its performance should be as early as possible, and before serious changes have been set up in the substance of the brain.

A CASE OF POISONING BY THE INHALATION OF COAL-GAS.*

By STEWART LOCKIE, M.D.,
Physician to the Cumberland Infirmary.

I FEEL justified in drawing attention to the details of the following case, as accounts of the symptoms and *post mortem* appearances in cases of poisoning by the inhalation of coal-gas are of comparative rarity; and yet it might happen to any one of us practising in towns to be summoned to a similar case.

I was called between eight and nine o'clock in the morning of 26th April to see W. J. B., aged about 18, "assistant boots" at one of the hotels in this city, who was stated to have been found in bed in an unconscious condition, and incapable of being roused. He slept in a cupboard bed in the smoking-room of the hotel. There was no fireplace in the room. He had retired to rest about half-past twelve. At twenty minutes past eight, the "boots" knocked at his door, but, receiving no reply, entered the apartment. There was a strong smell of gas in the room, so strong that the "boots" could not at first remain; the sliding gaselier was drawn down as far as possible, and one of the two jets was burning with the cock turned full. The "boots" tried to arouse him; but, failing to do so, came for me.

I arrived at 8.50 A.M. I found him lying on the right side in the semiprone position. There was a little staining of the pillow with a brownish coloured fluid near the position of the mouth. He was completely comatose, breathing irregularly, now rapidly, now more slowly, moaning much. The face was livid; the pupils were equal, neither abnormally contracted nor dilated, and sensible to light.

I had him immediately removed to a larger room, laid him on a mattress on the floor, and established a current of fresh air through the apartment. Then it was further observed that the pulse was feeble and excessively rapid (150), and that the temperature in the axilla was 102.8 deg. The eyeballs were observed to roll about in a peculiar fashion. The eyes were turned slowly to the extreme left, as if the patient were looking to his left, they then slowly returned to the median line, then back to the left, and so on. The motion was almost rhythmical, and nearly constant. It took place whether the eyelids were opened or closed. The breath smelt of coal-gas.

Dr. Maclaren was kind enough to render me his assistance and advice in the treatment of the case, as also did subsequently Dr. Coldstream and Mr. George Murphy. The subsequent notes were made by one or other of us—by whomever it was that happened to be present.

10.55 A.M. Temperature 102.2 deg. Respirations 52. Pulse 160. The conjunctivæ and corneæ were quite insensible to touch.

11.40 A.M. There was slight reflex action of the lids on touching the conjunctivæ.

It had been determined to try the effects of the administration of oxygen gas; and at 12 noon, an apparatus having been obtained, this was commenced in a modified form by setting free oxygen and conducting it by means of a tube near the mouth of the patient. This was continued with a few short intervals until 1.45 P.M., when it was discontinued. No perceptible improvement occurred during the administration.

1.45 P.M. A catheter was passed, and about a pint of clear pale

amber urine was withdrawn. A considerable portion of this had to be pressed out of the bladder with the hand, showing some degree of paralysis of the organ. Shortly afterwards, an involuntary fecal evacuation occurred. One ounce of brandy and six ounces of beef-tea were administered as an enema.

During the afternoon, our efforts were directed to obtaining a larger supply of oxygen, with a view to its administration in a pure state. An apparatus for the production of the gas was obtained, and, through the kind courtesy of Mr. Hele, a bag capable of containing twenty-six gallons with tube and mouthpiece for its administration. After considerable delay, we succeeded in obtaining the bag full of gas; and, at 6.30 P.M., commenced its administration. The whole twenty-six gallons were inhaled with two short intervals. Except that respiration was increased in frequency and the distress aggravated, no effect was observed.

By 10 P.M., we had obtained another bagful of oxygen. It was agreed to try a different method of administration, viz., to give three or four inhalations every five minutes. This was continued for an hour and a half, during which the whole twenty-six gallons were again inhaled. As before, it only seemed temporarily to increase the distressing symptoms.

At 11 P.M., the temperature had risen to 105 deg. Four ounces of urine had been withdrawn; an enema of beef-tea and gin was administered. At 11.30 P.M., the practice of cold affusion to the head was commenced. This seemed, at first, to have a good effect, the respiration becoming deeper and easier, and the temperature lower. At 12 midnight, the thermometer in the axilla registered 102.6 deg. (a fall of 2.4 deg.) Respirations 48. Pulse 150. The cold affusions were continued at short intervals until 1 A.M. (April 27th), always with apparent though temporary relief to the symptoms. After this, they were practised at longer intervals.

At 5 A.M., it was noted: "There is passive rigidity constantly present in both upper and lower limbs, and about every half minute the muscles become more rigid for a few seconds, and the patient moans. Pupils dilated, and nearly insensible to light; conjunctivæ much injected; about four ounces of urine removed. Pulse 148. Respirations 52. Temperature 103.6 deg." At 5.20 A.M., cold affusion to head; two chamber ewers full. At 5.30 A.M., temperature 102.4 deg.; pupils sensible to light; cold affusion again for eight minutes. At 5.45 A.M., temperature 102.5 deg.; no fall, but rather the reverse after this affusion. It was again practised for eight minutes. At 5.55 A.M., the temperature was 102.8 deg.

At 8.5 A.M., cold affusion was commenced again for ten minutes; before affusion, pulse 144, respirations 48, temperature 103.2 deg.; after affusion, pulse 140, respirations 48, temperature 103.4 deg. 9.5 A.M. Cold affusion had been continued, at intervals, for thirty minutes; before affusion, respirations 57, pulse 140; afterwards, respirations 42, pulse 144, temperature 103 deg.; the conjunctivæ were less injected; the pupils were sensible to light; there was spasmodic rigidity of arms now nearly constant. 10.15 A.M. Cold affusion was applied for ten minutes. The temperature had been gradually rising, and was now 104 deg. 10.45 A.M. Cold affusion was applied for fifteen minutes. Temperature 103.8 deg. Three ounces of urine were withdrawn. 11.40 A.M. Temperature 104.6 deg., pulse 140, respirations 51. 12 noon. Cold affusion was applied. The temperature afterwards was 102.8 deg. Betwixt noon and 3.40 P.M., affusion was practised four times, but it seemed to have lost the effect of reducing the temperature, and was, therefore, abandoned at this time. The nutritive enemata had been given about every four hours. During the afternoon, it was observed that the rolling of the eyeballs had ceased. 7 P.M. Pulse 160. Respirations 65. Temperature 105.4 deg. 8.45 P.M. About six ounces of urine were withdrawn. A trace of albumen was found in this specimen. At 11.30 P.M., we commenced to feed the patient by means of the stomach-pump. One of the enemata had not been retained, and we indulged the hope that, as the struggle was so protracted, if the patient were adequately supported, he might possibly rally. Upwards of a pint of a mixture of coffee and milk, with two ounces of gin, was administered. Soon afterwards, the pulse was observed rather stronger.

April 28th, 3.30 A.M. He was in profuse perspiration. Respirations 66. Pulse decidedly stronger, but 180 at least. Temperature 105.8 deg. He was again fed by the stomach-pump with a similar mixture. Six ounces of urine were withdrawn. 8 A.M. Pulse 180 at least, more feeble. Respirations 64. Temperature 105 degs. There was no spasmodic rigidity. 8.15 A.M. Upwards of a pint of a mixture of beef-tea, milk, and gin was administered. 12 noon. Pulse very feeble, could not be counted. Respirations 62. Temperature 105.5 degs. Eight ounces of urine were withdrawn. He was fed again by the means of the pump. At this point of the case, it was agreed to try

* Read at the Spring Meeting of the Border Counties Branch, held at Carlisle.

ence will dispute. What, then, are the characteristics of such a climate? Lind, an old but very good authority, thus vividly describes them: "The first proof of an unhealthy country is a sudden and great change in the air at sunset, from intolerable heat to chilling cold. This is perceived as soon as the sun is set, and for the most part is accompanied with a very heavy dew. It shows an unhealthy swampy soil, the nature of which is such, that no sooner the sunbeams are withdrawn than the vapours emitted from it render the air *raw*, *damp*, and *chilling* in the most sultry climates; so that, even under the equator, in some unhealthy places, the night air is cold to an European constitution."

Dr. Maclean will, no doubt, admit that this is an accurate description of the climate of the Gold Coast. Here, then, we have the predisposing cause of climatic fevers, viz., intense heat by day, followed by the damp chill atmosphere at night, exposure to which is generally the exciting cause of these diseases. An officer, who held a very important position in the late expedition, says: "What kills people on the Gold Coast is cold"; and adds: "We always find that some distinct act of imprudence producing chilliness has preceded fever in this country." This is not the testimony of a person whose views are biased in favour of the "chill-theory". On the contrary, this officer, who was himself attacked by fever on taking a cold bath after a walk, thinks that the nauseous penetrating smell, which proceeded from the decay of the marshy vegetation, and by which his clothes, etc., were pervaded, must have been associated with some malarial poison. So difficult is it to escape from the influence of impressions once formed.

If so-called "malarious" fevers occurred only in swamps, and only where the odour of decomposing vegetation existed, there would be good reason for connecting the foul smell with the fevers, as cause and effect. There is, however, no disputing the fact, that these diseases prevail not only where there is no smell, but also where vegetable decomposition is impossible. One condition only is always present, and that is chill!

I need scarcely point out, that no poison or other agent, which does not exist *whenever* and *wherever* these diseases prevail, can possibly be the exciting cause of "malarious" fevers; unless, indeed, the causes be many.

In my work on this subject, many instances are quoted, and I could mention many more, in which these fevers have occurred in the absence of vegetation, living or dead; where the soil is utterly sterile, and the ground undisturbed; where the drinking-water is faultless; and even on board ships far out at sea. Moreover, I have demonstrated, that the disorders referred to do not prevail in the presence of any of the conditions, hitherto supposed to produce them, unless these are associated with some influence capable of abstracting heat from the body. Still further, I have shown that the severity of these fevers is in proportion to the previous exposure to a continued high temperature; and that, owing to this, in cool climates they are mild, and in hot climates severe. I think, therefore, it cannot with justice be said that I have failed to explain the nature and origin of the fevers which prevailed in the force on the Gold Coast.

In conclusion, I fully agree with Dr. Maclean as to the very severe form which climatic fevers often assume, and as to the great mortality caused by them. The gravity of the subject, however, should serve to stimulate inquiry. How else is the truth to be established?

I fail to see that anything but advantage can ensue from the exposure of the untenable nature of a theory which utterly fails to account for the origin of these diseases; and which, by diverting attention from the real cause (as at Hong-Kong), tends to prevent the adoption of rational measures for their prevention.

ON A RARE FORM OF INFANTILE PARALYSIS (?).

By J. MEREDITH, M.D. Edin., Wellington, Somerset.

TOWARDS the end of the year 1873, when I was civil medical officer of the town and district of Pooree, Bengal, a case which I have designated as above, was brought to me at the public dispensary of the town as an out-patient. The history was briefly as follows.

A boy named Muria, aged about five years, son of a washerman residing in the town of Pooree, was stated to have been well and healthy until he was nearly four years of age. He could talk, play, sleep, use his hands, etc., like any other child of his age. At this period, he had attacks of the endemic fever of the country, enlargement of the spleen followed, then convulsions, and he was for some days unconscious; during these days, his upper extremities became paralysed, and had remained so. His lower limbs were not affected. When the fever and unconsciousness passed away, the boy was left a

mute, having lost all power of articulate speech; although able to cry and to make various noises.

The boy when brought to me appeared healthy and strong, with well formed limbs and in good condition. His head might be taken as being a little larger than usual in children of the same age belonging to his race, particularly in the transverse occipito-parietal diameter. On each temple he had a large scar where he had been cauterised, according to the native fashion, by a cow's tooth heated in the fire; these marks, however, surmounted a merry laughing face. The boy could put out his tongue straight, and without any tremor or apparent want of control. His sight and hearing were perfect, as was also the sense of touch in every part of his body. The curious thing about him was, that he could not endure the sound of coughing. Whenever any one coughed near him, he would generally fall down and become unconscious for some seconds of time; I say generally, because after undergoing an attack, he could endure the sound for a certain time without again being paralysed by it.

While I was looking at the boy, some one coughed near him, and at once he fell in a sitting posture on the floor as if shot, with his head bent forward, his eyes glazed and fixed, his mouth a little open, and saliva trickling out of it. Both arms were rigidly thrown out before him; the hands and fingers a little bent; all, however, quite rigid. There were no convulsive jerkings in any part. He was evidently completely unconscious, and remained so for some seconds; then he recovered himself, looked round at the bystanders, smiled, got up and began playing about the ward as he had done before. The boy was not, however, affected by the sound of his own cough, and he coughed strong and hard at times. Some one stated one day that other noises besides coughing would throw him into a fit, but could not say what kind of noise. To test this, I had him taken through the native bazaar where, I fancy, well nigh every variety of sound is heard. The piping shrieks of elephants, barking of dogs, beating of drums, shouts, and cries; but none of them affected the little patient further than amusing him for the time. In short, after trying him with every form of sound I could discover, I found that nothing affected him except a cough. A make-belief cough was hardly successful either, while a real catarrhal one seldom failed to paralyse him.

He came to me in the beginning of November 1873, and was given five grains of bromide of potassium thrice daily. On the 29th of the month his condition was as follows. "He cannot now be made to fall by a cough; he only stops suddenly if he be moving, and puts out his arms straight from the shoulders, the palms turned upwards. Yesterday and the day before, his friends say that he did not fall once when coughed near, either intentionally or accidentally; he only stopped with a start, and put out his arms as if to ward off danger. His face became grave and serious for a second or two; after that, all was right again."

He had never used his hands to feed himself since his illness, and various means were tried to induce him to do so, but to no purpose; he seized his food directly by his lips or teeth. He could put his hands up to his face as he rubbed his eyes when he cried, but he was incapable of deliberate co-ordinate action in this respect.

The next note taken of his case was on December 4th, when he appeared as lively and cheerful as ever. He had had no falls since last entry; was only staggered as above mentioned. While examining him on this day, the hospital assistant happened to cough just behind him. At once the little patient's attitude became fixed, his eyes assumed a glazed appearance, his face looked grave, his left arm was jerked out to full extension, with the palm turned upwards; the right flexed at the elbow with the fist resting near the axilla. He stood thus for some seconds; then recovered, looked round rather confused, not knowing whether to cry or laugh; but the latter inclination prevailed, and he was soon running about the ward in his usual manner.

December 28th. The boy on this date was said to be worse again. He had not been regular in his attendance, nor taken his medicine of late. He had had several falls, besides being staggered frequently. On December 31st, I had an opportunity of showing the case to Deputy Surgeon-General Buckle, C.B., of Calcutta, and some non-professional friends. Three attacks were induced in the usual way by coughing in his presence; and that within a very short space of time. The boy happened to sneeze at the time; and by this he was staggered, and reeled nearly to falling. I lost sight of the case early in January 1874, as he ceased to attend at the hospital.

The boy's father was a blind old man, and had a troublesome cough, due to chronic bronchitis, and as he and his boy were much together, the little one's peculiar sensitiveness was often put to sore test. Even at night during sleep he was thrown into attacks nearly as bad as when awake and running about in the daytime. His attacks during sleep were nearly always due to his poor old father's chronic cough.

During one of these, he was thrown into a tense condition of the whole body, but more especially of the upper part, and remained so about his usual length of time, then passed into his natural sleep again without once awaking.

There is but little to add by way of comment on the case. It is like nothing that I have either seen or read of before, as far as my memory serves; and I refrain from offering an opinion as to the nature and situation of the lesion causing so peculiar a disorder.*

The case seemed certainly to improve under the administration of bromide of potassium, and I had some hopes of its ultimately much improving, if not recovering, if the boy could be separated from the irritation which was so embarrassing to him, and be persuaded to persevere with his medicine.

THERAPEUTIC MEMORANDA.

TREATMENT OF WHOOPING-COUGH WITH CARBOLIC ACID VAPOUR.

IN No. 764 of the BRITISH MEDICAL JOURNAL, page 229, I find a report of a paper read by Dr. Robert J. Lee on Whooping-cough and its Treatment with Carbolic Acid Vapour. I beg you will compare this report with the enclosed paper, from which you will find that I used, in the summer of 1873, the steam of a solution of carbolic acid in water (1½ to 2 parts of acid in 100 parts of water) for inhalations three times a day, with perfect and speedy success, in the treatment of whooping-cough. The same inhalations may also be used with great advantage in other affections of the respiratory organs.

I am fully persuaded that Dr. Lee arrived at his almost identical treatment by original research, and I am glad to hear that he confirms the statements which I have made. Not so much for the purpose of claiming priority, but for the mutual confirmation of our observations, and for the sake of effecting a more general introduction of a treatment alike simple and effective, and which may save many lives, I wish that my paper may be noticed in your JOURNAL.

DR. BURCHARDT, Oberstabsarzt and Lecturer at the University of Berlin.

ESERINE DISCS IN TIC.

IN the JOURNAL of October 31st, 1874, I published some cases of tic treated by Calabar bean, and then expressed a wish that I could obtain gelatine squares containing physostigmine (or eserine). Through the kindness of Sir J. R. Cormack of Paris, I got a number of discs for trial, and have since obtained a supply from the Messrs. Squire of Oxford Street (to whom I am much indebted). Discs containing one twenty-fifth of a kilogramme (.0006 grain) do for the purpose, one half being sufficient as a rule to remove tic which has no persistent cause, in from five to fifteen minutes. The discs are made by H. Duquesnel (late Vée), 42, Faubourg St. Denis, Paris. I may mention that, since October, I have used extract of Calabar bean with advantage as a sudorific in cases of incipient bronchitis, congestion of the liver, phthisis with dry hot skin, etc., being always able to bring down the temperature two or three degrees, when sufficient doses were used; such dose being for an ordinary adult, one-fifth, or at least one-sixth of a grain, as a minimum, which can be safely repeated every four to six hours till the desired effect is produced, so long as the patient is carefully watched. I may remark that the exceedingly small doses required to act in tic of the eserine (1-3200th of a grain) are a striking fulfilment of the prophecy, so to speak, written by Sir R. Christison exactly twenty years ago (*Edinburgh Medical and Surgical Journal*, July 1855), that Calabar bean would yet be found to contain a poison more powerful than any yet known.

W. MUNRO, M.D., C.M.
Cupar-Fife.

BISMUTH AND CREASOTE IN INFANTILE VOMITING.

The present epidemic of diarrhoea has furnished us at the Birmingham Children's Hospital with a large number of cases, in which vomiting has seemed a more than usually frequent and troublesome symptom.

Purgatives or ordinary astringents being either premised or contra-indicated, a valuable remedy is known in quarter or half drop doses of dilute hydrocyanic acid, with a grain or two of soda in camphor or dill water. But in severe cases with much depression, and in many cases as an alternative treatment, bismuth and creasote together will be found

* The name by which I have described the case is open to one great objection—namely, that in paralysis there is observed wasting of the limbs, whereas there was none here.

extremely good. They may be well combined by dropping a minim of the liquid first upon a small quantity of magnesia, rubbing up with eight grains of subnitrate of bismuth, and dividing into four powders; for elder children, into two. They should be freshly prepared for use, and to infants given gently on a moistened finger-tip every three, four, or six hours. In the intervals, my cases generally get a little saccharated lime-water with milk. This plan I have proved now for several years with much success. It is not more infallible, perhaps, than others, nor will it supply for the carelessness or bad hygiene of poor mothers, but, over some approved remedies, it has this vast advantage, that it can do no harm.

EDWARD MACKAY, M.D., M.R.C.P., Birmingham.

REPORTS

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

GUY'S HOSPITAL.

PULSATING SARCOMA OF LOWER JAW TWICE UNSUCCESSFULLY REMOVED: INCISION OF BODY OF JAW: RECOVERY.

(Under the care of Mr. HOWSE.)

[Reported by Messrs. WRIGHT, PARKE, and JAYNES.]

J. P., AGED 76, a brazier and tinman, residing at Bexley, was admitted into Guy's Hospital on July 17th, 1875. He first noticed a good deal of pain on the right side of his lower jaw about nine months ago. Thinking it was toothache, he had the first bicuspid tooth on that side extracted. Speedily afterwards a small lump began to form on the inner side of the jaw, which increased in bulk until it attained the size of a walnut. He was then admitted into Lazarus Ward, under the care of Mr. Birkett. There was then a large irregular fungating mass growing from the gum, and projecting backwards into the cavity of the mouth. It extended from the canine tooth of the right side, which still remained, as far back as the point where the last molar tooth had been implanted; but all the teeth on that side, from the first bicuspid to the last molar inclusive, were wanting. It appeared to be tolerably movable with the gum upon the bone below.

On January 5th, Mr. Birkett removed the tumour (without chloroform) by snipping it through at its base with cutting forceps. A portion of the gum was then cut away with scissors. The growth was attached at one spot to the alveolar process of the maxilla, which was absorbed to a considerable extent. On section, the tumour was fairly resistant, was of a purple-reddish colour, and only exuded serum on scraping. Microscopically examined, it proved to be made up of roundish cells with clear nuclei and much vascular tissue; but no myeloid cells were detected.

Recurrence took place very quickly; and on the 14th portions of new growth along the alveolus were removed by scissors. This was repeated three times in the course of the following month, but still a piece remained. At the end of this time, the patient became very ill, suffering from diarrhoea, etc. On March 4th, he had a kind of epileptiform seizure; and on the 8th, thinking that he should be better in the country, he left of his own accord.

On April 5th, he was readmitted with a growth about three-quarters of an inch in diameter, attached to the alveolus at the same point as at first. It did not cause him any inconvenience in eating, nor was it ulcerated on the surface; but it was adherent to the cheek; and pulsation, not arrested by pressure on the facial artery, was distinctly noticed in the growth. On April 14th, chloroform was administered, and Mr. Birkett made an incision along the margin of the jaw from the anterior edge of the masseter to the symphysis. By raising the soft parts, the tumour was exposed without opening the cavity of the mouth; but the mental branch of the inferior dental nerve was exposed at its emergence from the mental foramen; and, in hooking it out of the way, some of the branches crossing the tumour were divided. The growth was then removed from the jaw with a chisel, some of the surrounding bone being also cut away. The facial artery was not interfered with during the whole operation; but, in the removal of the tumour, the cavity of mouth was laid open into the wound; it was, however, closed in the ordinary manner with sutures.

Primary union took place along the greater part of the skin-incision; and the gap in the jaw granulated, the pus mostly discharging into the mouth. There was numbness over the right side of the lower lip, owing to the division of the filaments of the mental nerve; but this

REGULATIONS TO BE OBSERVED BY CANDIDATES FOR ADMISSION INTO THE ARMY AND INDIAN MEDICAL SERVICES.

THE ARMY MEDICAL SERVICE.

THE following are the present regulations affecting candidates for commissions in the Army Medical Service. 1. Every candidate desirous of presenting himself for admission to the Army Medical Service must be not under 21 nor over 28 years of age. He must produce a certificate from the district registrar, in which the date of birth is stated; or if this cannot be obtained, an affidavit from one of the parents or other near relative who can attest the date of birth, will be accepted. He must also produce a certificate of moral character from the parochial minister, if possible. 2. The candidate must make a declaration that his parents are of unmixed European blood, and that he labours under no mental or constitutional disease, nor any imperfection or disability that can interfere with the most efficient discharge of the duties of a medical officer in any climate. His physical fitness will be determined by a board of medical officers, who are required to certify that the candidate's vision is sufficiently good to enable him to perform any surgical operation without the aid of glasses. A moderate degree of myopia would not be considered a disqualification, provided it did not necessitate the use of glasses during the performance of operations, and that no organic disease of the eyes existed. The board must also certify that he is free from organic or other disease, and from constitutional weakness or other disability likely to unfit him for military service in any climate. 3. The candidate must possess two diplomas or licenses—one to practise medicine, and the other surgery in Great Britain and Ireland, and must be registered under the Medical Act in force at the time of his appointment. 4. Certificates of registration, character, and age must accompany the declaration when filled up and returned. 5. Candidates will be examined by the Examining Board in the following compulsory subjects, and the highest number of marks attainable will be distributed as follows: *a.* Anatomy and physiology, 1,000 marks; *b.* Surgery, 1,000 marks; *c.* Medicine, including therapeutics, the diseases of women and children, 1,000 marks; *d.* Chemistry and pharmacy, and a practical knowledge of drugs, 100 marks.—N.B. The examination in medicine and surgery will be in part practical, and will include operations on the dead body, the application of surgical apparatus, and the examination of medical and surgical patients at the bedside. The eligibility of each candidate for the Army Medical Service will be determined by the result of the examinations in these subjects only. Examinations will also be held in the following voluntary subjects, for which the maximum number of marks will be: French and German (150 each), 300 marks; Natural Sciences, 300 marks. The knowledge of modern languages being considered of great importance, all intending competitors are urged to qualify in French and German. The Natural Sciences will include Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography, and Botany, with special reference to *Materia Medica*. The number of marks gained in both the voluntary subjects will be added to the total number of marks obtained by those who shall have been found qualified for admission, and whose position on the list of successful competitors will thus be improved in proportion to their knowledge of modern languages and natural sciences. 6. After passing this examination, every candidate will be required to attend one entire course of practical instruction at the Army Medical School on (1) Hygiene; (2) Clinical and Military Medicine; (3) Clinical and Military Surgery; (4) Pathology of Diseases and Injuries incident to Military Service. 7. At its conclusion, the candidate will be required to pass an examination on the subjects taught in the school. If he give satisfactory evidence of being qualified for the practical duties of an army medical officer, he will be eligible for a commission as surgeon. 8. During the period of his residence at the Army Medical School, each candidate will receive an allowance of 5s. *per diem* with quarters, or 7s. *per diem* without quarters, to cover all cost of maintenance; and he will be required to provide himself with uniform; viz., the regulation undress uniform of a surgeon, but without the sword. 9. All candidates will be required to conform to such rules of discipline as the Senate may, from time to time, enact.

INDIAN MEDICAL SERVICE.

1. All natural born subjects of Her Majesty between twenty-two and twenty-eight years of age at the date of the examination, and of sound bodily health, may be candidates. They may be married or unmarried. They must possess a Diploma in Surgery, or a license to practise it, as well as a Degree in Medicine, or a license to practise it in Great Britain or Ireland. 2. They must subscribe and send in to the Military Secre-

tary, India Office, Westminster, so as to reach that address at least a fortnight before the date fixed for the examination, a declaration according to a form. 3. This declaration must be accompanied by the following documents: *a.* Proof of age, either by extract from the register of the parish in which the candidate was born, or by his own declaration, form of which can be obtained at the India Office, such extract and declaration respectively bearing the stamps required by law; *b.* A certificate of moral character from a magistrate, or a minister of the religious denomination to which the candidate belongs, who has personally known him for at least two preceding years; *c.* A certificate of registration, in accordance with the Medical Act of 1858, of the degrees, diplomas, and licenses possessed by the candidate. 4. The physical fitness of candidates will be determined previous to examination by a Board of Medical Officers, who are required to certify that the candidate's vision is sufficiently good to enable him to perform any surgical operation without the aid of glasses. A moderate degree of myopia would not be considered a disqualification, provided it did not necessitate the use of glasses during the performance of operations, and that no organic disease of the eyes existed. Every candidate must also be free from organic diseases of other organs, and from constitutional weakness, or other disability likely to unfit him for military service in India. 5. On producing the foregoing qualifications, the candidate will be examined by the Examining Board in the following compulsory subjects, and the highest number of marks attainable will be distributed as follows: *a.* Anatomy and Physiology, 1,000; *b.* Surgery, 1,000; *c.* Medicine, including Therapeutics, the Diseases of Women and Children, 1,000; *d.* Chemistry and Pharmacy, and a practical knowledge of drugs, 100. (The examination in Medicine and Surgery will be in part practical, and will include operations on the dead body, the application of surgical apparatus, and the examination of medical and surgical patients at the bedside). 6. The eligibility of each candidate for the Indian Medical Service will be determined by the result of the examinations in these subjects only. 7. Candidates, who desire it, will be examined in French, German, and Hindustani, Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography, and Botany, with special reference to *Materia Medica*. 8. The number of marks gained in these subjects will be added to the total number of marks obtained in the obligatory part of the examination by candidates who shall have been found qualified for admission, and whose position on the list of successful competitors will thus be improved in proportion to their knowledge of modern languages and natural sciences. 9. The maximum number of marks allotted to the voluntary subjects will be as follows: French, German, and Hindustani (150 each), 450; Natural Science, 300. 10. The subjects for this part of the examination will be taken from the following books: *Animal Kingdom*, by W. S. Dallas, F.L.S.; *Outlines of the Structure and Functions of the Animal Kingdom*, by Rymer Jones, or *Cours Élémentaire d'Histoire Naturelle*, par Milne-Edwards; Lindley's *School Botany*, Lindley's *Medical and Economic Botany*, Henfrey's *Elementary Course of Botany*; *Elements of Natural Philosophy*, by Golding Bird and C. Brooke; *Physical Geography*, by Mrs. Somerville. 11. The Examiners in London will prepare a list in order of merit, with the marks affixed in the different subjects, to be transmitted to the Director-General and communicated to the Professors of the Army Medical School. If any candidate is found to be deficient in any particular subject, this shall be stated, in order that he may receive special instruction on the point at Netley. 12. After passing his preliminary examination, candidates will be required to attend one entire course of practical instruction at the Army Medical School, before being admitted to examination for a commission—(1.) Hygiene; (2.) Clinical and Military Medicine; (3.) Clinical and Military Surgery; (4.) Pathology of Diseases and Injuries incident to Military Service. These courses are to be of not less than four months duration; but candidates who have already gone through a course at Netley as candidates for the Army or Navy Medical Service may, if thought desirable, be exempted from attending the School a second time. 13. During the period of his residence at the Army Medical School, each candidate will receive an allowance of 5s. *per diem*, with quarters, or 7s. *per diem* without quarters, to cover all costs of maintenance; and he will be required to provide himself with uniform (viz., the regulation undress uniform of a Surgeon of the British Service, but without the sword). 14. All candidates will be required to conform to such rules of discipline as the Senate may, from time to time, enact. 15. At the conclusion of the course, candidates will be required to pass an examination on the subjects taught in the School. The examination will be conducted by the Professors of the School. The Director-General, or any medical officer deputed by him, may be present and take part in the examination. If the candidate give satisfactory evidence of being qualified for the practical duties of an Army Medical Officer, he will be eligible for a commission as surgeon. 16. The position of the candidates on the list of Surgeons

will be determined by the combined results of the preliminary and of the final examinations, and, so far as the requirements of the service will permit, they will have the choice of Presidency in India, according to their position in that list. *N.B.*—The examinations for admission to the Indian Medical Service will usually take place twice a year, viz., in February and in August.

MEDICAL SCHOOLS AND HOSPITALS IN IRELAND.

UNIVERSITY OF DUBLIN SCHOOL OF PHYSIC.—Regius Professor of Physic, Dr. W. Stokes, D.C.L., F.R.S.; Regius Professor of Surgery, Dr. W. Colles; University Professor of Anatomy and Surgery, Dr. B. G. M'Dowel; University Professor of Chemistry, Dr. Reynolds; University Professor of Botany, Dr. E. P. Wright; Professor of Surgery in Trinity College, Dr. E. H. Bennett; University Anatomist, Dr. T. Evelyn Little; Professor of Comparative Anatomy and Zoology, Dr. Macalister; Erasmus Smith's Professor of Natural Philosophy, Rev. John Leslie, M.A.; University Lecturer in Operative Surgery, Dr. R. G. Butcher; King's Professor of Institutes of Medicine, Dr. J. M. Purser; King's Professor of Practice of Medicine, Dr. W. Moore; King's Professor of *Materia Medica* and Pharmacy, Dr. Aquilla Smith; King's Professor of Midwifery, Dr. E. B. Sinclair; Professor of Medical Jurisprudence, Dr. R. Travers.

The Winter Session commences on the 1st October, and terminates on the 31st March. Lectures will commence on the 1st November. The Dissecting Room will be opened on the 1st October. The Winter Courses consist of fifty-six Lectures each. Attendance on at least forty-two Lectures in each Course is required. Two Medical Scholars are elected annually by the Board of Trinity College, at an Examination held at the end of June. Each Scholarship is worth £20 *per annum*, and is tenable for two years. The Professors of the School of Physic give three Exhibitions annually, amounting altogether in value to £40. No student can attend any of the Lectures delivered in the School of Physic, or Dissections, who has not complied with the provisions of the School of Physic Act as to Matriculation.

CARMICHAEL SCHOOL OF MEDICINE.—The following are the courses of lectures.—Winter Session, commencing Monday, November 1st. Surgery, Mr. Anthony H. Corley, Tu., Th., and S., 12; Practice of Medicine, Dr. Samuel Gordon and Dr. J. W. Moore, M., W., and F., 12; Anatomy, Mr. Foy, Tu., Th., and S., 1; Physiology, Dr. Reuben J. Harvey, M., W., and F., 1; Midwifery, Dr. W. B. Jennings, M., Tu., and F., 2; Chemistry, Dr. C. R. C. Tichborne, Tu., Th., and S., 2; Ophthalmic Surgery, Mr. C. E. Fitzgerald, W., 11. Summer Session, commencing Monday, April 6th, 1876.—Institute of Medicine, Dr. R. J. Harvey, Tu., W., Th., and F., 11; *Materia Medica*, Dr. Auchinleck, M., W., and F., 12; Botany, Mr. E. B. Blakeley, Tu., Th., and S., 12; Practical Chemistry, Dr. C. R. C. Tichborne, Tu., Th., and S., 1; Forensic Medicine, Dr. Woodhouse, M., W., and F., 1. The Carmichael (formerly Richmond Hospital) School of Medicine, in which all the courses of lectures required for the different Colleges are delivered, is in the immediate vicinity of the Richmond, Whitworth, and Hardwicke Hospitals, and is connected with these institutions by its teachers. Certificates of attendance on the lectures in this school are recognised by all the licensing bodies in the United Kingdom.—Class premiums, to the value of £60, on the foundation of the late Richard Carmichael, Esq.; and the Mayne Scholarship, value £15, are awarded at the termination of the session.—Fees, for each course of lectures, £3 3s.; for all the courses of lectures required in order to obtain the diploma of the Dublin College of Surgeons, £66 3s.; a discount, amounting to £9 19s. 6d., is allowed in the case of perpetual pupils. Perpetual Pupils, paying £56 3s. 6d. (either on entrance, or half at the commencement of the first, and the remainder at the commencement of the second session), can attend all Lectures necessary to obtain the license of the Dublin College of Surgeons. For all the lectures required by the Royal College of Surgeons of England, London, £51 9s.; for all the lectures required by the College of Surgeons, Edinburgh, £45 3s. The dissections are superintended by the lecturers and demonstrators who attend at the following hours, daily from 11 to 4, to assist the students in the study of Practical Anatomy. During the session, the lecturer on Surgery will give special courses of demonstrations and illustrations in Operative Surgery. Special Classes will be formed for practical instruction in Histology and Physiological Chemistry, and will be conducted by the lecturer on Physiology. The Museum of the School comprises a valuable collection of Anatomical and Pathological preparations. There is also an extensive Museum of *Materia Medica*. For further information

respecting the School, apply to Dr. Harvey, 7, Upper Merrion Street, or any of the lecturers.

DR. STEEVENS' HOSPITAL AND MEDICAL COLLEGE.—The Hospital contains 250 beds, and is provided with special wards for the treatment of fever, syphilis, and diseases of females. Visiting Physicians, Dr. W. M. Burke; Visiting Surgeons, Mr. S. G. Wilmot and Mr. C. Fleming; Physicians, Dr. H. Freke, Dr. T. W. Grimshaw; Physician-Accoucheur, Dr. J. Isdell; Surgeons, Mr. W. Colles, Dr. E. Hamilton, Dr. R. M'Donnell. The hospital is visited at 8.30 P.M.; and clinical instruction is given as follows: Mr. Wilmot (on Saturdays at 10); Dr. Freke, Monday; Mr. M'Donnell, Tuesday; Mr. Hamilton, Wednesday; Mr. Colles, Thursday; Dr. Grimshaw, Friday; Dr. Isdell, Saturday—each at 9 A.M. Operations are performed on Saturdays at 10. Pathological Demonstrations are given by the Lecturers as opportunity offers. The following lectures are given in the Medical School. Anatomy, Physiology, and Morbid Anatomy, Mr. Hamilton, daily, exc. Sat., 10; Practice of Medicine, Dr. Freke, M., W., F., 11; Surgery, Mr. Colles, Tu., Th., S., 11; Midwifery and Diseases of Women and Children, Dr. Isdell, M., W., F., 12; Chemistry, Dr. Bell, Tu., Th., S., 12; Descriptive Anatomy, Mr. Swan, daily, except Sat., 1; Dissections superintended by the Lecturers on Anatomy and the Demonstrators, 7 A.M. to 8 P.M. Practical Anatomy and Hospital Attendance commence on the first Monday in October. The Sessional Lectures commence on the first Monday in November. Lectures are also given on *Materia Medica* by Dr. Grimshaw; on Medical Jurisprudence by Dr. Tweedy; and on Botany by Mr. Warren. The Reading Room and Museum are open daily. There is also a Lending Library. Fees: Hospital Practice, 9 months, £9 9s.; 6 months, £7 7s. Practical Anatomy, £5 5s. Lectures, each course, £3 3s. Resident Dresser (6 months), Winter, £21; Summer, £15 15s. A perpetual fee of 78 guineas, which may be paid in two instalments, entitles the student to attend all the lectures and hospital practice required by the Colleges of Surgeons, Halls, and the public service.

General Examinations will be held at the close of the Session, at which Students are expected to answer, in order to entitle them to Certificates of Attendance. Students who reach a certain standard will be recommended for honours, and will receive Special Certificates. The following prizes are offered: Medical and Surgical Clinical Prizes; and Cusack Medals and Exhibitions.

Further particulars may be learned from any of the Professors; from the Resident Surgeon at the Hospital; or from Dr. E. Hamilton, 120, Stephen's Green West.

MEATH HOSPITAL AND COUNTY DUBLIN INFIRMARY.—Physicians: Dr. A. W. Foot, Dr. J. W. Moore. Surgeons: Dr. G. H. Porter, Mr. J. H. Wharton, Mr. P. C. Smyly, Mr. R. Macnamara, Mr. R. P. White, Mr. L. H. Ormsby. Four Clinical Lectures are given weekly, on alternate days. The Physicians and Surgeons visit the Hospital at 9 A.M. Fees: 9 winter months, £9 9s.; 6 winter months, £7 7s.; 3 winter months, £3 13s. 6d.; 3 summer months, £3 3s. The Hospital contains 120 beds; it has a Dispensary, Lending Library, and Physiological Laboratory attached, and is within a few minutes' walk of the University, the College of Surgeons, and the Ledwith School of Medicine. It contains a ward for Diseases of Children. Prizes are given at the end of the Winter course. The office of Resident Pupil is open to pupils as well as to apprentices. Further information may be obtained of Mr. L. H. Ormsby, 12, Lower Fitzwilliam Street.

MERCER'S HOSPITAL, DUBLIN.—Physician: Dr. Thomas P. Mason. Surgeons: Mr. Edward Ledwith, Mr. E. S. O'Grady, Dr. John Morgan, and Dr. Benjamin F. McDowell. The Hospital is visited daily at 9 A.M. There are wards for Fever and Contagious Diseases. Dressers are selected from the most attentive of the students. The Dispensary affords ample opportunities for acquiring dexterity in minor Surgery, and a practical knowledge of the Diseases of Women and Children. Systematic Clinical Lectures and catechetical instruction will be given daily. The appointment of Resident Students is open to all perpetual Pupils of the Hospital, through Competitive Examination. The Hospital is in the immediate vicinity of two of the principal Medical Schools. Fees: 6 months, £9 9s.; 3 months, £8 8s.; perpetual, £21. Further information can be obtained from any of the Physicians or Surgeons of the Hospital, or from the Registrar, Mr. James Shaw.

SIR PATRICK DUN'S HOSPITAL.—Consulting-Physician: Dr. W. Stokes, D.C.L., F.R.S. Consulting-Surgeon: Dr. R. Adams. Clinical Physicians: Dr. J. M. Purser, Dr. W. Moore, Dr. Aquilla Smith. Midwifery Physician: Dr. E. B. Sinclair. Clinical Surgeons: Dr. B.

gradually diminished. Recurrence of the growth again took place very suddenly; and on April 27th it was noted that "a small, soft, elastic swelling could be felt on the anterior part of the opening into the mouth". This rapidly increased in size, and on May 6th was found to be very distinctly pulsating. Discouraged at the want of success attending these operative proceedings, the man left the hospital on May 12th, thinking he would try to manage at home without treatment.

On July 17th, however, he was readmitted into Naaman Ward, under Mr. Howse, with a pulsating tumour in the same situation, about an inch and a half in diameter. It was adherent to the lip, was ulcerated on the surface, and—the symptom which had alarmed him principally—had bled profusely on several occasions. There was still partial anaesthesia, both inside and out, over the right half of the lower lip. A small sinus, from which a slight purulent discharge issued, still existed externally in the site of the old operation.

On July 20th, chloroform having been administered, an incision was made along the lower margin of the inferior maxilla from the angle to the symphysis, which traversed the cicatrix and the sinus remaining from the former operation. The facial artery, with one or two smaller vessels, were secured with gut ligatures. The jaw was then divided behind the position of the last molar tooth, obliquely backwards to the angle, with a finger-saw. The same process was repeated at the symphysis; but at this point it was deemed advisable to take away a second slice, as it was found, on making a section of the growth, that it had encroached very far on the bone in this direction. In this way, the whole of the symphysis was removed. The bleeding vessels having been twisted or ligatured, the edges of the skin-incision were brought together in the usual way with sutures.

No single bad symptom followed the operation. On the next day, the body temperature was normal, and the patient managed to swallow much milk through the mouth without recourse to the nasal tube. On the two following days, his temperature rose to 99.8 deg., but fell again to normal. On the 28th, two of the sutures were taken out, and on the 30th the remaining sutures were removed, complete primary union having taken place. On August 25th, he left the hospital, having then been quite well and about the ward for some time. Since that date, he has returned on two occasions to report progress, and have a large useless tooth in the upper jaw on the right side removed, as it pressed on the cicatrix and was otherwise inconvenient. A very large amount of dense gristly substance had formed in the site of the removed jaw, and he was well able to use the jaw in the mastication of soft food. There was no sign of recurrence of the disease.

On making a section of the growth, it was seen to spring deeply from the centre of the jaw itself, and to run forwards as far as the symphysis, backwards as far as the last molar tooth. Hence no operative measure short of the one adopted would have been of the slightest avail. In only one place did the tumour approach at all near the line of incision, and that was towards the lip, which was adherent to the growth, so that the dissection had to be carried out rather finely at this point. Microscopically examined, the growth was similar to that first described; viz., sarcomatous cells with much vascular tissue (aengeo-sarcoma).

The result so far must be considered very satisfactory, considering the age of the patient (76), and the very speedy recurrence of the disease after the previous operations. It should be added that the patient was a little, lithe, wiry man, who looked as if he had yet twenty years to live, if the natural period of his life were not interrupted by accidents.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

CASE OF CHOREA GRADUALLY BECOMING WORSE UNDER TREATMENT BY ARSENIC. RAPID IMPROVEMENT UNDER INFLUENCE OF CHLORAL, PORT WINE, AND IRON.

(Under the care of Dr. BRADBURY.)

M. N., AGED 15, a domestic servant, was admitted into the hospital May 25th, 1875, with well-marked symptoms of chorea. She had a similar attack two years ago, in which both sides of the body were affected. This attack lasted eight weeks, and the existing cause of it was frigid.

Her present illness began eight weeks ago, and she could assign no cause for it. Her health had been quite good for some time past. On admission, there were distressing choreic movements, the left side of the body being more affected than the right. She appeared in a very excited condition. Walking was attended with difficulty, and her articulation was interfered with, so that her sentences were interrupted. Bowels regular. Tongue clean. The catamenia had not yet appeared. At the heart's apex, a systolic *bruit* was heard. There was no history of rheumatism in the family, nor of any nervous disorder, so far as could

be ascertained. About the time when the present attack came on, she had been doing an excessive amount of work, and, from lack of sufficient time for her meals, she used "to bolt" her food. The choreic movements came on gradually, beginning in her right hand.

She was placed on full diet. Two days after her admission, she was ordered five minims of liquor arsenicalis three times a day, the dose being increased to six minims on May 31st, on the evening of which day the following note was made. "The choreic movements are considerably worse than on admission. From the time she came into the hospital to the present, she has been getting worse, and particularly so since she began to take the arsenic."

On June 1st, she was so bad that the arsenic was discontinued. Mastication was almost impossible, and for the last day or two she had had to be fed. She was ordered ten grains of bromide of potassium with tincture of henbane three times a day. On the morning of the 2nd, she was a little quieter; but in the evening she was again very wild and excited.

June 3rd. She was very bad all through the night. The wrist was red and swollen, and there was redness about the arms and shoulders, and even slight abrasions over the sacrum due to the incessant movements. Pulse 120. The temperature taken for the first time this evening was 102.4 deg. Fahr. She was quite unable to take solid food, from the difficulty of mastication and deglutition. She was very thirsty. She was ordered to be fed frequently with milk and beef-tea.

B. Chloral-hydrat. gr. xv; syrapi aurantii ℥xx; aquam ad ℥j. Misc. Fiat haustus, hæc nocte sumendus.

B. Misturæ ferri comp. ℥vj; decoct. aloes co. ℥ij. M. Fiat haustus, quater in die sumendus.

June 4th. She had a much better night, sleeping for three or four hours. Morning temperature, 100.8 deg.; evening temperature, 101.6 deg. The chloral draught was repeated.

June 5th. She seemed to have improved considerably, though she appeared much exhausted. The chloral was repeated, and two ounces of port wine ordered. In consequence of a bed-sore over the sacrum, she was placed on an air-bed. She could now eat a little bread, although the mouth and lips were very sore. Morning temperature, 100 deg.; evening temperature, 101 deg.

June 6th. She ate a little fish. Temperature diminishing.

She continued to make rapid improvement, being able to dispense with the chloral on the 9th, and on the 10th she begged for meat again. The evening temperature kept a little above the normal till the 14th, but since then there has been no elevation.

On July 8th, she appeared quite well. A systolic *bruit* still, however, remained at the heart's apex; and the catamenia had not appeared.

REMARKS.—This case is of interest in connection with the comments of Drs. Eustace Smith and John K. Spender, and of Messrs. Jones and Gaskoin, in the JOURNALS for May 1st, May 15th, and June 5th, on the treatment of chorea by arsenic in large doses. Having read the observations of these gentlemen just previously to the above case coming under his care, Dr. Bradbury resolved to give arsenic in large doses a fair trial. Finding, however, that even medium doses (five and six minims) thrice daily did harm rather than good, Dr. Bradbury did not resort to the large doses recommended by Dr. Smith, and he cannot but think that it is a mistake to treat all cases of chorea by any single remedy. Each case must be treated upon its own merits, the predisposing and exciting causes of the disease being especially inquired into; indeed, the more Dr. Bradbury saw of the practice of medicine, the more he felt the great importance of finding out the *causa et origo mali*. During the past Easter Term, when he had charge of the wards, several cases of chorea came under his care. One got well without any medicine: good food and the discipline of the hospital being all that were required. Another, with amenorrhœa, was cured with Griffith's mixture and compound decoction of aloes given in combination. A third, a woman seven months advanced in pregnancy, who had had two previous attacks of chorea, the first after acute rheumatism, was benefited by cod-liver oil and bromide of potassium; but the disease will probably not completely subside till she has been confined.* Among his out-patients, Dr. Bradbury has had great success with arsenic in chorea, and of all single remedies he considers it the most frequently successful. In the case recorded above, however, it signally failed to be of any service, and this not from any want of tolerance of the drug by the patient. The amendment following the administration of the chloral was very marked, but how much of the improvement was due to the iron it is difficult to estimate. It ought to be remarked that this case of chorea passed from an apparently non-febrile to a febrile state whilst under treatment by arsenic.

* This woman has since been delivered, and the chorea has completely left her.

REVIEWS AND NOTICES.

LUNATIC ASYLUM REPORTS, 1875.

THE annual report of the Somerset County Asylum has been just issued. The chief point of interest in it is the experience of the Superintendent, Dr. Madden-Medlicott, with regard to the influence on the admissions of the subsidy recently granted by the Exchequer of four shillings a week to the unions for each patient. Though not saying directly that the grant has been taken advantage of for the purpose of removing the imbeciles and the chronic insane to the asylum, instead of keeping them in the workhouses, still such a conclusion is to be drawn from the hints thrown out. From Dr. Medlicott's remarks on this subject, we have no hesitation in differing. He says that "the detention of this latter class (imbecile and chronic insane) in workhouses, as long as they remain cleanly, quiet, and harmless, is proper enough; and their removal to the county asylum inflicts an unjust tax on the ratepayers". But is not this rather begging the question in supposing that workhouses do afford the means for the treatment of patients in such a way that they shall remain clean and harmless? The Committee of the Somerset Asylum, indeed (p. 16), did make the attempt of utilising workhouses as lunatic asylums by transferring "forty-seven selected harmless cases"; but "of these nineteen were returned, the majority greatly deteriorated in mental, and particularly so in bodily condition." Even when more stringent regulations were enforced on the workhouse authorities as to diet and exercise, it was found that, after a period of only five months, one out of the patients had to be returned. It must be allowed that preference should always be given to the admission of acute cases, and that, *faute de mieux*, the imbecile and chronic insane had better be kept in the workhouses under some sort of supervision, than in their own homes under none; but the experience of the new metropolitan asylums, and in this we are borne out by the Lunacy Commissioners, is directly in favour of the immense benefits conferred on the chronic insane, regarding alike their bodily condition, mental quietude, and useful occupation, by removal from the workhouse to a thoroughly carried-out system of asylum treatment. It seems hardly fair to complain of want of room for these patients, since (though the report under notice does not mention it) the asylum contains private patients, paying sums varying from three to five shillings per head more than those from the county of Somerset itself. Some of these patients are chargeable (or were in October 1873) to Shoreditch, and some to Bethnal Green. It would be interesting to have a return made of the mental condition of these inmates, so that, if suitable, they might be transferred to one of the metropolitan asylums, in which vacancies exist, at a saving to the ratepayers of seven shillings per head per week. Relieved of these "boarded-out" cases for which the metropolis is both able and willing to provide, and of a certain number of "criminal lunatics", which ought to be maintained elsewhere (the wrong to other inmates of keeping "criminal lunatics" in county asylums we have often urged, and are constantly hearing complaints about), there will be room provided for the treatment of the chronic insane, for whom an asylum is as much a "hospital for the insane" as it is for acute cases.

Beyond this matter, there is nothing in the Report calling for notice except the remarks of the chaplain. This gentleman makes a refined distinction between "moral" and "physical" melancholia, expecting to meet with success in his ministrations to the former, but not to the latter. Whatever the exciting cause may be, the proximate one is always physical, and the absurdity of relaxing our efforts because melancholia depends on such a cause as hæmorrhoids, and redoubling them when it is supposed to depend upon such a transcendental hypothesis as a depressed psychic force, is manifest to all who have any real knowledge of the subject. Clergymen had better leave the vexed question of classification of disease in the insane untouched. In the table of "causes of death", we find the word "Plura", which scarcely looks like a printer's error; and in the table of "Forms of Disorder", a distinction made between "Dementia" and "Fatuity", which seems an useless refinement, if, indeed, allowable.

The Report from the Devon County Asylum, of which Dr. Symes Saunders is the Superintendent, deals with the same question as that of the Somerset Asylum, viz., the influence of the Government grant on the increase of admissions of chronic lunatics. Dr. Saunders does not like this class of patients, though he admits that they entail an additional amount of care and responsibility to the workhouse. The cases adduced as "typical" will scarcely bear criticism. One was an idiot girl, a deaf-mute, "who required no special treatment". We should

have thought that, if one case had been more fitted than another for reception into an asylum, this was the one; for, under skilled treatment, her habits might have been improved, her faculties developed, and her condition of life rendered more comfortable. The experience and attention required to effect these ends could not be had in a workhouse; and it is simply outrageous to expect a special staff to be kept in a workhouse to deal with cases for which the asylum was purposely built. Another case, "M. A. P.", was violent when in the workhouse, and "her superfluous energy found vent by striking those who annoyed her; though in the asylum she is docile, harmless, well conducted, and employs herself in domestic work". A curious instance, this, to give of the absurdity of removing a person, deaf-mute, from the workhouse to an asylum! It is doubtless more interesting for a superintendent to have a number of acute cases under his hands, since his proportion of cures will be greater, and his death-rate less, than if the chronic insane, many of them, perhaps, in the last stages of dementia, are brought in; but it has been proved, over and over again, that the insane are not, and cannot be, properly treated in workhouses, and it is only a retrograde philanthropy that proposes to keep them there. The law on the subject is so simple and clear, that no apprehensions need be felt as to the improper incarceration of persons in consequence of the Government grant. If a person become insane, the proper place for him, whether his insanity be acute or chronic, is the asylum; and the fact of the ratepayers being relieved to the extent of four shillings per head per week, can make no difference as to the propriety or not of sending him to a place where he can be placed under the best possible conditions for his comfort and recovery (and the experience of Leavesden and Caterham has shown amply that "chronic" lunatics may recover). If, on the other hand, persons who are simply troublesome in the workhouse, but not insane, are sent to the asylum, the remedy is easy—viz., discharge them, and, if necessary, prosecute those who tried to incarcerate them improperly. The general management of the asylum appears to be satisfactory; but we notice that the death in one instance was "impaction of food in the larynx", and that no inquest was held. Without doubt, the circumstance was reported to the coroner at the time; but it would have been more satisfactory if an inquest had been held, as there is nothing so salutary as a temporary check in public institutions for making the subordinate officers more careful. Dr. Saunders concludes by suggesting that the Government grant should be applied for the building and repairs of asylums, and for salaries and superannuations. If we mistake not, the same proposal was made in a letter to the *Times* by Dr. Robertson when the grant was first made.

The want of appreciation of the Government grant which we have shown to exist in the Reports of the Somerset and Devon Asylums is confirmed by what the Committee of the Chester County Asylum and Dr. Davidson have to say. These hope that, in consequence of it, "patients will be brought sooner for asylum treatment, and thus afford a more favourable prospect of recovery"; and "though the effect will probably be an increase in the number of admissions, the increase will not be permanent." Such enlightened views deserve imitation. It is mere prejudice on the part of superintendents to object to chronic cases; for it is now an absolute fact that many so-called "chronic" cases recover under good auspices; or, if they do not recover, they are, by removal from the workhouse to the asylum, placed under the advantageous conditions to which, both by law and by common consent, they are entitled. A remark recently made by a commissioner in one of his visits to one of the metropolitan asylums, is worth quoting. It was to this effect: "Well, if occasionally improper cases are sent down, these asylums have clearly demonstrated that chronic insanity is not always an incurable disease, and have formed a new era which no superintendent should forget." After all, what is "chronic disease"? It cannot be measured by time. There is no definition in the whole bounds of medicine more difficult; and, in the present state of uncertainty, it is best to give all the benefit of the doubt.

ANNUAL REPORT OF THE FEVER HOSPITAL AND HOUSE OF RECOVERY, CORK STREET, DUBLIN, for the Year ending March 31st, 1875.

This report consists chiefly of a series of tables showing the number of admissions of the principal diseases and their mortality during the year, and comparing them with those admitted during the same periods of previous years. Other tables give an analysis of the ages of the patients; while the remainder of the report is devoted to a short account of the localities whence the patients came, and some observations on the connection between a large number of cases of pneumonia and the meteorological conditions at the time. In Dr. Grimshaw's table, there does not appear to be any relation between the rainfall and the number of admissions of pneumonia cases. In August,

when the rainfall was most heavy, but four cases were admitted; in another month, when the rainfall was nearly as heavy, the cases were numerous. The same observation may be made with regard to the temperature. It is interesting, however, to learn that Dr. Grimshaw concludes that he has distinctly traced the cause of the pneumonia to a miasmatic source.

SELECTIONS FROM JOURNALS.

MEDICINE.

GIOVANNI ON CONTRACTED PUPIL IN HEART-DISEASE.—Professor Giovanni (*Annali Universali di Medicina*) has studied with care three cases of advanced organic heart-disease accompanied with bilateral myosis, from which he draws some interesting conclusions. All three were accompanied by severe dyspnoea, continuous or recurrent. One was a case of mitral narrowing and insufficiency; the second, a case of aortic narrowing, with valvular insufficiency; the third, aortic narrowing, with mitral insufficiency. In all three, there was constant bilateral myosis; in two, this symptom was more marked when the dyspnoea was more urgent. Since Pourfour, Du Petit, Bernard, and Biffi demonstrated the influence of the sympathetic on the pupil, the action of aortic aneurisms and of other tumours on the pupil has been studied. Eulenberg, Gultmann, and others, have shown that all affections which produce compression of the sympathetic in the neck are followed by pupillary stenosis. The author has not found this symptom mentioned in isolated cardiac affections. In order to determine the clinical value of myosis of cardiac origin, its origin and mechanism must be studied. It is a paralytic myosis. It may arise from three sorts of lesion: 1, lesions of the cervical cord; 2, lesions of the superior cervical ganglia; 3, of the terminal filaments of the sympathetic which go to the radial fibres of the iris. We must here dwell on the lesion of the superior cervical ganglion. The author has examined with the microscope the sympathetic and many sections of the cervical spinal cord of the patients in question. He has found great hyperæmia of the ganglia of the sympathetic, with more or less intense infiltration of the lymphoid elements. At the same time, the tissue of the ganglia was softer and more infiltrated with fluid than in the normal state. The upper part of the cord presented no similar condition; nor was there any reason to admit an isolated lesion of the terminal sympathetic nerves of the iris. These different lesions are the consequence of the stasis of the blood produced by the state of the heart. They exist, probably, in all patients of this class, but are not always manifest. The disorders which have their source in the sympathetic are comparable to those which proceed from the encephalon or from the spinal marrow. In certain patients with cardiac disease, cerebral excitement is found; in others, somnolence. Myosis has a very distinct significance; it does not only indicate stasis of the blood, but a profound lesion of the ganglionic cells, thenceforth paralysed. The ganglionic lesion affects equally the heart and the lung, to the innervation of which the ganglionic cells contribute. The cardiac activity and pulmonary circulation are therefore more seriously affected than in other cases, when myosis exists. The author draws from these facts the following conclusion from the point of view of prognosis. Myosis in affections of the heart is a symptom of very grave prognostic value. It announces the presence of a lesion of the ganglia of the sympathetic, which tells upon the heart itself and the lungs.

MILK-DIET.—Milk-diet, as a means of treatment in dropsical disease, is specially advocated by Dr. Serre d'Alais (*Journal de Connaissances Médicales*). He associates it with a diet of onions, raw or cooked. He prescribes three *soupes au lait* every day, onions, and a dry diet. He lays down, as his method of treatment, first to relieve the urinary gland by abstinence from drinks generally; to excite it gently with onion; to nourish the body with milk, its primitive nutriment, without irritating it. M. Serre terminates by saying that, if this régime be not successful, the régime is bad. M. Desnos, at the Pitié, employs milk a good deal when it is desirable to provoke diuresis, and that in very different cases. But he is not a partisan of the exclusively milk diet, which is often not well tolerated, and is not sufficiently nourishing. The patient eats meat, drinks wine, but adds to his diet two pints of milk every day. The milk is drunk cold, and salted with two *grammes* of kitchen-salt to the pint. M. Desnos recommends milk especially in acute catarrhal nephritis. In chronic nephritis, it is only palliative. In dropsies complicating the diseases of the heart, M. Desnos employs also milk, which provokes abundant diuresis, and unloads the vascular system; but if, after two or three days, diuresis be

not established, he stops the milk-treatment, for then the circulatory system would become loaded rather than relieved. Milk is advantageous also in simple pleurisy; but there must be an absence of fever, and the milk must only be employed when we wish to avoid puncture. It is especially employed when the effusion has resisted blistering and natural diuretics. It has also succeeded sometimes in chronic pleurisy.

MIDWIFERY AND DISEASES OF WOMEN.

OBSTRUCTIVE DYSMENORRŒA.—Dr. Thomas Addis Emmet, in the *New York Medical Journal*, August, 1875, divides cases of obstructive dysmenorrhœa into two classes: 1. Obstruction at or below the vaginal junction; 2. Obstruction in the body of the uterus. The first class he considers congenital, and due to the more rapid growth of the cervix, causing it to turn against the posterior vaginal wall, and producing a flexure at the junction of the body and neck. Predisposing causes: laxity of uterine tissues and elongation of cervix. In this class, the pain passes off as the flow becomes established; congestion causing thickening and shortening, with consequent straightening of the cervix. For these cases, he advocates dividing the cervix posteriorly. This cuts the circular fibres; and the longitudinal ones gradually contract and retract, and the canals become straight. The advantages of posterior division are, less risk of hæmorrhage, and the prevention of gaping by the lateral pressure of the vaginal walls. The operation should be performed by slitting the cervix back to the vaginal fold with scissors. If this be made the guide, there is no danger of wounding the circular artery. A tampon should be applied, in case bleeding comes on after the operation; and the wound kept open by drawing a sound through its angle, with daily dressings. The patient must be kept in bed till the parts have healed. The second class are due to flexions in the body of the uterus from chronic metritis or fibroid tumour. In these, increase of congestion increases the flexure. When of old standing, the fibres at the point of flexure degenerate fatty, and are absorbed; hence the deformity becomes permanent. In these cases, the pain is worse as the flow goes on. The cure is very tedious. No operative measures should be undertaken until all tenderness at and around the uterus has been removed by appropriate treatment. Hot-water vaginal injections; iodine or the impure carbolic acid to the interior of the uterus. When all disease is remedied, divide the cervix posteriorly, as in the other cases; and then carry up an uterotome, and incise the uterus at the point of stricture, so as to leave a permanent channel.

COMPLICATED OVARIOTOMY.—A case of ovariectomy complicated with pregnancy and Cæsarean operation is recorded by Mr. Thomas Hillas, M.R.C.S. Eng., in the *Australian Medical Journal*, February, 1875. M. McC., aged 24, single, was admitted into the Ballarat District Hospital on June 4th, 1872, having previously been in another hospital for supposed pregnancy, and been discharged after a seven months' residence as suffering from ovarian tumour. After admission at the Ballarat District Hospital, she was examined by the staff, and a consultation held, when ovariectomy was decided on. On June 13th, Mr. Hillas commenced the operation, and, in entering the peritoneal cavity, cut into a gravid uterus. The abdominal incision being enlarged, an ovarian tumour was removed, and the clamp applied to the pedicle; the uterus all this time lying on the thighs, with a wound probably into the placenta. The general advice was to sew up the wound in the uterus, and let nature take its course; but Mr. Hillas, thinking labour must soon come on, and fearing rupture of the uterus at the wounded point, decided to perform Cæsarean section. The uterus was incised to five inches; and the placenta, with a living and well developed fœtus at about the eighth month, extracted. Nine or ten silver sutures were then put into the uterus, the cut ends being carefully tucked down into the incision. The uterus immediately firmly contracted. The abdominal wound was then closed with deep and superficial stitches, the clamp at the lower angle of the wound having a good deal of drag on it. The patient vomited for forty-eight hours after the operation. In four days, all unfavourable symptoms ceased, and she was discharged cured at the end of six weeks. On July 3rd, a month after the operation, she menstruated moderately for four days; and again on August 28th. She has since been seen several times in good health. [The success attending ovariectomy during pregnancy, without interfering with the uterus, is well established by many successful cases. The above case seems to show that we need not be in despair if such a very unfortunate accident as wound of the uterus occur. It would be very interesting to have the farther history of the silver sutures, especially should the woman again become pregnant.]

Brit. Med. Journal

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st, Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, SEPTEMBER 25TH, 1875.

PSYCHOLOGY AND THE NERVOUS SYSTEM.

I.

SOME of those who are sceptical as to there being representation of movements in the cerebral hemispheres seem to us altogether overlook several kinds of evidence in favour of it. This evidence has recently been presented in a pamphlet, of which this article is in great part a summary. The lower nervous centres represent movements; and thus it would be a marvellous breach of the principle of continuity, of which so much use is made, if the highest nervous centres—the cerebral hemispheres—did not. So long as thirty-five years ago, Laycock was led to the conclusion that the cerebral hemispheres are functionally like the lower nervous centres, except for differences of degree and complication. The following is a remarkable statement, considering that it was made so long ago.

“Four years have elapsed since I published my opinion, supported by such arguments as I could then state, that the brain, although the organ of consciousness, is *subject to the laws of reflex action; and that, in this respect, it does not differ from the other ganglia of the nervous system.* I was led to this conclusion by the general principle that the ganglia within the cranium, being a continuation of the spinal cord, *must necessarily be regulated, as to their reaction on external agencies, by laws identical with those governing the spinal ganglia, and their analogues in the lower animals.*” (Laycock, *British and Foreign Medical Review*, vol. xix, January 1845, p. 298.)

If the lower centres represent impressions and movements, why should not the highest nervous centres represent them? The reader must bear in mind that this question was asked before the recent brilliant experiments of Hitzig and Ferrier were made. As we wish to show that there is, independently of these experiments, strong although indirect evidence of another kind that the cerebral hemispheres do represent movements, we are anxious that the following arguments should not be considered as mere after-thoughts. Five years ago it was asked, “*Of what ‘substance’ can the organ of mind be composed, unless of processes representing movements and impressions; and how can the convolutions differ from the inferior centres, except as parts representing more intricate co-ordinations of impressions and movements in time and space than they do? Are we to believe that the hemisphere is built on a plan fundamentally different from that of the motor tract?*”

To questions like these, one reply often is, that the highest nervous centres, being the organ of Mind, have a different “function” from that of lower centres. The implication of this objection evidently is that, in asking such questions, we confound Mental states with Physiological states. The objection cannot be sustained; in fact, the assertion is an irrelevant one. That the highest centres are concerned in mental operations, no educated person denies now-a-days; but, in regarding the function of the highest nerve-centres as being the co-ordination of impressions and movements, we do not ignore that other so-called function, Mind. Our supposed objector speaks of Mind being a “function” of brain; he speaks, indeed, quite easily, as if there were no sort of difficulty as to the nature of the connection betwixt mind and brain. It is very easy to say the highest nervous centres are for mental operations; the lower for physical functions. We wish to urge, however, that nothing whatever is known as to the nature of

the connection betwixt nervous states and mental states. We can only assume a parallelism. The word “function” should be limited to physical operations. Consciousness is, at any rate, not a function of brain in the same sense that secretion of bile is a function of the liver. We repeat our belief that the function of the brain with which we as medical men are directly concerned is the co-ordination of impressions and movements. There is no *more* difficulty as to the connection between physical states and mental states, if the physical states be, as we affirm, nervous arrangements for the co-ordination of movements and impressions; because the problem is an insoluble one, whatever the physical states may be. Indeed, so far are we from confounding mental states with physical states, that we make the widest possible, because an absolute, distinction betwixt the two. We are not trying to explain mental states in physiological terms. For example, in showing that the anatomical substratum of a visual idea is a nervous arrangement representing certain retinal impressions and particular ocular movements, we do not pretend to have done anything whatever towards solving the problem as to the nature of the connection betwixt any mental state and any nervous state. Before we can give reasons for the belief that the unit of composition of the organ of mind is, like that of the lower centres, a *sensori-motor* process, we must speak more explicitly on the differences betwixt psychology and the physiology of the nervous system, or, as we think it should be put, betwixt psychology on the one hand and the anatomy and physiology of the nervous system on the other. The best reasons for the belief that the convolutions represent movements are the facts of the experiments of disease—for example, partial convulsive seizures from disease in the cerebrum—and more especially the experiments, properly so called, of Hitzig and Ferrier. Whatever interpretation may be put on the experiments of these distinguished physicians, it cannot be denied that the facts they have established are of inestimable value. It is not, then, because we underrate them, that we bring forward other evidence. The argument in the following is, we think, entirely in harmony with the conclusion Hitzig and Ferrier draw from their experiments, that convolutions are centres for movements. But, as their facts are not considered by very many to be conclusive, we shall advance a different kind of evidence.

What we wish to insist on is that, whilst assuming a parallelism betwixt mental states and nervous action, we have nothing to do with the *nature* of the connection betwixt the two; that is, of course, in our character of anatomists and physiologists. The term psychology is often used as if it were applicable to what we may call the finest part of the anatomy and physiology of the nervous system. A common popular doctrine is this. Up to the corpus striatum, we have to do with anatomy and physiology; we have to do with the co-ordination of impressions and movements. When we come to the convolutions, we have to do with psychology. We believe this, which seems so clear, is only the clearness of shallowness. Such schemes lead to confusion. Psychology, dealing with mental states, is one thing. The anatomy and physiology of the nervous system are quite other things; they have to do with certain complex questions in *physics*—that is, with nervous statics and dynamics. The nature of the connection betwixt physical and mental states is not a problem either in psychology or in anatomy and physiology; it is a metaphysical problem. In saying, then, that the constitution of the cerebral hemisphere is fundamentally like that of the lower nervous centres, we are not to be understood as even remotely and indirectly comparing mental states and physical states of the nervous system. We beg the reader to bear in mind that the comparison is betwixt the *physical* functions of the cerebral hemisphere *which in some instances may be associated with mental states*, and the physical functions of lower centres which (that is, as is commonly supposed) have no mental states in association with them. We say as commonly supposed; for Lewes believes that there is attending active states of even the lowest nervous centres a “sensibility” homologous with that sensibility which we call consciousness attending active states of the highest nervous centres. Then, whilst we believe that the

highest centres are, like the lower, made up of nervous arrangements for the co-ordination of impressions and movements, we of course believe that they are unlike them, in that the co-ordinations they effect differ greatly in degree of complexity. These differences of degree of complexity on the physical side would, we suppose, according to Lewes, have on the psychical side corresponding differences in degrees of Sensibility, from consciousness ordinarily so called attending active states of the very highest centres, to the under-consciousness or Sensibility attending active states of the lowest: a ganglion of the sympathetic, for example.

The absolute distinction we have made betwixt mental states and physical states is the one made by Sir William Hamilton, Mill, Spencer, Huxley, Tyndall, Clifford, etc. We do not mean that the view as to the particular constitution we attribute to the physical states—that they represent impressions and movements—is the one accepted. Clifford puts the distinction very well. "It is not a right thing to say, for example, that the mind is a force, because, if the mind were a force, we should be able to perceive it.....But I may very well say that among the physical facts which go along at the same time with mental facts, there are forces at work. That is perfectly true; but the two things are on two utterly different platforms: the physical facts go along by themselves, and the mental facts go along by themselves. There is a parallelism between them, but there is no interference of one with the other." (*Fortnightly Review*, December 1874.) G. H. Lewes, however, differs; and his opinion on such a matter deserves the most respectful consideration. Lewes thinks (*Problems of Life and Mind*, vol. ii, p. 459) that "the neural process and the feeling are one and the same process viewed under different aspects. Viewed from the physical or objective side, it is a neural process; viewed from the psychological or subjective side, it is a sentient process." This is not, as Lewes states, the opinion usually accepted. He quotes the well known remarks by Tyndall, part of which is, "the passage from the physics of the brain to the corresponding facts of consciousness is unthinkable". Lewes adds: "To the same effect, Mill, *Logic*, ii, 436; Du Bois Reymond, *über die Grenzen des Naturerkennens*, 1872, p. 17; Griesinger, *Maladies Mentales*, 1865, p. 7; Donders, in the *Archiv. für Anat. u. Physiol.*, 1868, p. 658; Lotze, *Mikrokosmos*, 1861, i, 161. We reproduce these references, in order to show that there is a powerful array of authorities in favour of the absolute distinction between mental states and physical states, in spite of their assumed parallelism.

Whether this distinction be accepted or not does not make very much difference for our further exposition. We had, however, to defend ourselves against the inference sure to be drawn by a certain section, that, because we attempt an explanation of the physical *substrata* of mind, we are trying to explain mind in terms of matter. What we wish to insist on most is, that to give a materialistic explanation of mind—even assuming that a materialistic explanation can be given—is not to give an anatomical and physiological one. Suppose mind is a force, as some say, we should still have to seek lines on which it manifests its effects in particular mental operations. But the strange thing is, that some of those who take materialistic views practically ignore anatomy and physiology. Let us clear the ground before we consider this statement. To hold any one of the following views as to the relation betwixt states of the nervous system and states of mind does not warrant us in ignoring the anatomy and physiology of the nervous system. We may believe (1) that nervous states are parallel with mental states, the nature of the connection being unknown; (2) that mental states and certain nervous states are one and the same thing under two names; (3) that there is a soul acting through a mere mechanism.

Taking, then, for consideration the material basis, we have, whichever of the above views we hold, to give an account of its anatomy and physiology. We can now draw attention to the error of some of those who consider their method to be physiological. It is, that they give a merely morphological account of the material basis, in place of giving an anatomical account. This is a common error. In this way work is

really done on the old method by so-called materialists and by some of those who consider they are doing physiological work. We assert that to speak of centres for "volition", for "ideation", for "memory of words", without regard to the anatomy and physiology of these centres, is to work essentially on the old method. The difference is, that the mind is supposed to be a solid one, made up of nerve-cells and fibres. Instead of having "ideas", "emotions", etc., unassociated with physical substrata, we have "ideational cells", etc. Let us quote authority on this matter.

Mr. G. H. Lewes, in his *Problems of Life and Mind*, vol. i, p. 126, remarks on the "disposition to translate psychological observations into physiological language, and to accept this as biological illumination; which not unjustifiably provokes the scorn of the pure psychologist. One example of this may be given here. Some anatomists having conceived the infelicitous idea of distinguishing nerve-cells into sensory, motor, and sympathetic, this nomenclature, so misleading even where it is not profoundly unphysiological, is adopted by several writers, who first establish the illusory distinctions of sensational cells, ideational cells, and emotional cells, and then proceed to explain the mental mechanism by these imaginary cells."

Let us take a particular class of ideas. We choose visual ideas. These are the most important of all ideas; in them most of our mental operations are carried on; they form the most developed part of perceptive mind (Spencer). Moreover, we can, by aid of certain experiments of disease, trace their relations to tactual ideas.

A visual idea has a material basis; this basis is morphologically made up of nerve-cells and fibres. These are truisms needing no comment. The questions we try to answer are: 1. What is the anatomical constitution of this substratum of cells and fibres? and 2. What is its physiology? We must define these two words. Anatomy of the nervous system, or nervous statics, is not to be confounded with morphology. Anatomy is concerned with showing what peripheral parts of the body particular nervous centres represent. The reader must not lose sight of this definition. Thus we shall try to show that the anatomical substratum of a visual idea represents or re-represents a retinal impression and an ocular movement. More generally, the anatomical unit of composition of the nervous system is not a cell and fibre; that is the morphological unit. The anatomical unit is a sensori-motor process. We may thus illustrate. A grouping of cells and fibres no more forms the unit of the nervous system than a grouping of words forms the unit of speech. The unit of composition of the nervous system is of cells and fibres arranged so as to form a sensori-motor process; the unit of composition of speech is of words arranged so as to form a proposition. Next we give our definition of physiology. Physiology of the nervous system, or nervous dynamics, is concerned with varying conditions of the anatomical substrata; with nerve-currents and nervous discharges. The variation is great. Thus most of our ideas are latent. This is a psychological expression; the corresponding physiological expression is, that their anatomical substrata are unexcited, or not strongly excited. And of ideas actual there are two degrees. Thus we see an object before us; at that time, the substratum is excited or discharged strongly and widely. After actually seeing that object, we can see it ideally; then the same substratum is excited or discharged slightly and to a limited extent.

THE late Mr. Richard Winter Mount, of Wingham House, Wingham, and who for many years was a solicitor in extensive practice at Canterbury, has left a legacy of £10,000 to the Kent County Ophthalmic Hospital, at Maidstone. After making other minor bequests, he leaves the residue of his property to the Royal South London Ophthalmic Hospital.

IN addition to the large bequest to ophthalmic hospitals by Mr. Mount, other important benefactions are announced this week; prominent among them is the bequest of a reversion of £10,000 stock to the Medical Benevolent College at Epsom for the creation of pen-

sioners to receive annuities without residence. This generous benefaction is the act of Mr. T. B. Pugh, and we hail it with great gratification. Mr. Pugh leaves also, to the Royal Sea-Bathing Infirmary, Margate, £3,000; to the Hastings and St. Leonard's Home for Invalid Gentlewomen, the London Fever Hospital, and the Samaritan Society of St. Thomas's Hospital, £300 each.

THE Rev. Henry Morgan of Oakfield, Berks, has bequeathed to the Royal Berkshire Hospital, the North London Consumption Hospital, the North London (University College) Hospital, the Middlesex Hospital, the London Hospital (Whitechapel), St. Mary's Hospital (Paddington), St. George's Hospital, Queen Charlotte's Lying-in Hospital, the Lock Hospital, Westminster Hospital, King's College Hospital, the Royal London Ophthalmic Hospital, the Asylum for Idiots (Earlswood), the Hereford Infirmary, the Society for the Relief of Widows and Orphans of Medical Men, and the Ross Dispensary, £1,000 each.

WE are pleased to have to announce that Sir W. Jenner has forwarded to Dr. Joseph Rogers a cheque for £5 5s, in aid of the fund he is raising for the benefit of the widow and children of the late Dr. Maunsell of Dublin, who have, by his premature death, been left in straitened circumstances.

THE amount of property left by Sir C. Locock has been sworn under £100,000. The most noticeable provisions of his will are, that his remains should be buried in Kensal Green in an unostentatious manner, and that, in the event of his death occurring from any obscure or doubtful disease, his remains should be subjected to *post mortem* examination.

A NEW Hospital for Women has been established at 45, Castle Gate, Nottingham, and Dr. B. R. Morris appointed physician, and Mr. George Elder surgeon, to the institution.

DR. J. B. BRADBURY of Downing College, Cambridge, Linacre Lecturer of Physic at St. John's College, has been appointed Medical Lecturer at Gonville and Caius College, in the place of Dr. Drosier, resigned.

AN "Association of Medical Officers of Health for Yorkshire" has been formed, and the following officers appointed, viz., *President*: Samuel William North, M.R.C.S.Eng. *Secretary and Treasurer*: John Sebastian Wesley, M.B.Lond. *Committeemen*: William Swift Wade, L.R.C.P.Edin.; Geo. Goldie, L.R.C.P.Edin.; Titus Deville, M.D.; T. Britton, M.D.St.And.; E. Buller Hicks, L.R.C.P.Lond.; and Henry Franklin Parsons, M.D.Lond. The next meeting is to be held at Wakefield on October 27th.

WE publish in another column a letter from Dr. James Macaulay, the editor of the *Leisure Hour*, on the alleged evils of the over education of girls. We are rather inclined to the precisely opposite view of Dr. Wilks and others, that the health of girls suffers chiefly from idleness and insufficient education; but the subject is one which only large experience can finally decide, and on which we should be glad to encourage the freest discussion on the basis of observed fact.

MR. HENLEY has been addressing his constituents. Mr. Henley is a good representative of old-fashioned good sense mixed with current prejudices. He is apt at manufacturing catch-words; among other things, he is reported to have said: "Then the whole sanitary law was consolidated, which was no trifling work. He thought that would stop many evils that were around them, if only the law was administered with moderation and discretion. This country had up to the present refused to be priest-ridden, and he did not believe they would consent to be doctor-ridden." The consolidation of the sanitary law is no doubt useful, but mainly so as a stepping-stone to its amendment; and of this it is difficult to be hopeful, when the prominent men of the party in power adopt as their watch-word simply obstructive fallacies.

OUR readers will be gratified to learn that the health of Mr. George Southam, the respected late President of Council of the Association, is somewhat improved; but they will regret to learn that he still remains weak, and is unable to do any work.

THE decoration of the Legion of Honour has been conferred upon Dr. Bormemaison, Physician-in-Chief of the Hôtel-Dieu of Toulouse; Helson Batur, Surgeon-in-Chief of the hospitals of Toulouse; and Dr. Th. Desclaux, the Mayor of Tonniens, for their actions during the recent inundation.

STATE MEDICINE EXAMINATIONS.

THE Senatus of the University of Cambridge have fixed the date of their first examination in State Medicine for October 5th.

MORTUARIES FOR THE METROPOLIS.

AT a meeting of the Strand Board of Works on Wednesday, September 22nd, the following notice of motion by Dr. Joseph Rogers was carried unanimously.

"That, with a view to the more effectually and economically securing the establishment of mortuaries in the metropolis, this Board do memorialise the Metropolitan Board of Works to apply, in the next session of Parliament, for powers authorising that body to undertake their erection in such parts of the metropolis as may be considered necessary."

It was also resolved that a copy of the resolutions should be forwarded to the several Boards of Works in the metropolis, and that they should be requested to co-operate with the Strand Board in pressing the question on the attention of the Metropolitan Board. Dr. Joseph Rogers, Mr. Betts, Mr. Phillips (the representative of the Board on the Metropolitan Board), and Mr. Jenkins (the clerk), were appointed to draw up the form of memorial to be forwarded to the Metropolitan Board.

A MEDICAL STRIKE.

AT a recent meeting of the Caermarthenshire Board of Guardians, a round robin was sent in by the six medical officers of the union asking for an increase in the amount of their salaries, and intimating at the same time their intention to resign unless the request was complied with. The board adjourned the matter for further consideration.

MEDICAL CONGRESS AT BRUSSELS.

THE International Congress at Brussels was opened by the King of the Belgians, with great ceremony, on September 18th. His Majesty was warmly cheered by the assembly. Dr. Vleminckx was elected President and Dr. Warlemont Secretary-General, both being Belgians. Out of compliment, however, to the different foreign medical celebrities present, several honorary Presidents were also elected—viz., Drs. Boulland, Jaccoud, Larrey, and Verneuil (France); Mr. Bowman (England), Drs. Semmola and Palasciano (Italy), Drs. Langenbeck and Graefe (Germany), and Drs. Signmund and Hebra (Austria). We shall publish an abstract of the most interesting portions of the proceedings. The attendance is stated to be under three hundred, mainly Belgian physicians; but the programme promises an interesting meeting. The subjects to be discussed are important and well digested.

THE HUNTERIAN SOCIETY.

THE Honorary Secretary of this excellent and old-established Society writes to us, at the desire of the Council, to ask us to bring under the notice of the local profession some facts connected with this Society showing its advantages and uses. They are briefly as follows.

"1. The London Institution, Finsbury Circus, in which its meetings are held, now forms the central point on which no less than nine suburban railways converge, at only three minutes' walking distance from each. 2. It possesses the most complete accommodation for small as well as very large meetings. 3. Its permanent medical library consists of nearly four thousand volumes; and it has established a circulating one by subscription to Lewis's, by which each member can

obtain all the latest works by application to the librarian between the hours of 10 A.M. and 4 P.M. 4. It is a Society originally established (fifty-seven years ago) for the purpose of encouraging kindly feeling, friendly discussion, and integrity of purpose, amongst its members. These objects it has steadily fulfilled during its course, and has always maintained a sound financial position. One reason for its being less known than other medical societies is a rule, made *in limine*, that publication should be avoided, lest it should restrict freedom of discussion; another, the migration to the West of the men who were, at the period of its formation, the leading members of the profession; and the third, the difficulty of access to its former place of meeting. This is now changed, and the Council desire to bring the fact as prominently forward as they legitimately can before the profession."

It is probably the limitation of publicity mentioned which has injured the growth of the Society. The theory of publicity restricting freedom of discussion is calculated to provoke a smile, and its nominal operation has no doubt stunted the growth of the Society. Practically, the authors of good papers read before this Society have generally taken care to secure publicity for them; and they would have acted unwisely, and in a manner contrary to the interests of science and of the Society, if they had not done so. The Society, indeed, mainly owes such prosperity as it enjoys to the infraction of the rule which it puts forward.

ROYAL COLLEGE OF SURGEONS.

NOTICE has been given that the Council of the College will, at a special meeting, to be held on the 13th proximo, proceed to the election of three Fellows of the College as members of the Court of Examiners. With the exception of Mr. Hancock, we believe that the retiring members will offer themselves for re-election. Fellows desirous of being considered candidates for the office are invited to send in their names on or before October 12th.

THE LATE WILLIAM CLIFT.

MANY years ago, in fact, soon after the death of Clift, an accomplished member of the College, Dr. Hugh Diamond of Twickenham, quietly and unostentatiously walked into the hall of that institution and deposited on one of the then vacant pedestals, an excellent and life-like bust of Mr. Clift, by the late Mr. Archer, saying to an old official he happened to encounter, "There, I have done what I consider a duty, to preserve the memory of that dear good and faithful servant of the College and of the profession, and hope your great guns will have it executed in marble". There it remained until, at the last meeting of the trustees of the Hunterian collection, Sir James Paget, Bart., suggested its removal to the museum, where over the principal entrance it is to be placed, on a bracket, with the simple inscription, "William Clift, F.R.S., the first Conservator of this Museum". It is to be hoped that the wish of Dr. Diamond may yet be carried out, especially as an eminent sculptor, Mr. Henry Weekes, R.A., many of whose works adorn the College, happily survives, who, from his long and intimate acquaintance with Mr. Clift, would no doubt do full justice to the subject.

POISONING OF FIFTY-EIGHT BOYS BY THE ROOTS OF LABURNUM.

ON the morning of the 3rd of August, between 6 and 7 A.M., before breakfast, 58 boys in the Forest Gate Industrial School chewed varying quantities of the roots of an old laburnum tree, which had been cut across the preceding afternoon, they either mistaking it for, or thinking it very much like, stick liquorice, which it certainly resembles in smell; in a very short time, these boys were affected with symptoms of narcotic poisoning, varying in severity from simple sleepiness to complete stupor; none of them complained of any pain, or burning of mouth, throat, or stomach, nor was there any sickness until emetics were given. They were taken into the Infirmary, looking pale and cold, and staggering about; their pupils were somewhat dilated. Dr. Vallance of Stratford, the medical officer of the school, states that the boys were treated immediately by emetic doses of mustard and water; and, in the worst cases, by sulphate of zinc and ipecacuan. It was remarkable to see the boys, whilst in the act of

vomiting, going to sleep, some with the basins in their hands, others standing at the sink. Two boys were much worse than the rest; they, after freely vomiting, were insensible, and showed very strange waving motions of the arms to and fro, whilst now and then their legs, first one and then the other, were convulsively drawn up; there was also in one of the two slight frothing of the mouth, and the pupils of each were *unequally dilated*. This latter symptom was noticed several times. These two boys were strong and robust, and thirteen years old. Ten hours after taking the poison, they went to sleep, whilst being walked about the yard, after having had cold douches, strong coffee, etc. Upon careful inquiry, it was found that these boys could not have chewed more than half an ounce of the laburnum root. All the cases speedily recovered, and, on the next day, showed hardly any traces of injury. Dr. Vallance thinks there are indications of great therapeutical value in the laburnum root, although he has failed to find any description of its effects in the books he has consulted. The seeds are summarily put down as narcotic acrid poisons, and they may be so; but certainly, in these fifty-eight cases, the root, whilst showing plenty of narcotic effects, exhibited none that could be called acrid.

SCARLET-FEVER AT FELSTEAD SCHOOL.

MOST people have read the excellent letter in which Mr. Hardcastle describes the result of Mr. Grignon's protest against the opening of the drains at Felstead Grammar School, and the subsequent "isolation" of the boys sick with scarlet-fever in the wardrobe room. Seeing that clothing will retain the seeds of scarlet-fever, and subsequently disseminate them, unless disinfected, during a long series of years, we can but hope that every article of this school-wardrobe either has been, or will be, disinfected by dry-heat or destroyed. It is needless to say that Mr. Grignon seems to us to have done his duty in the matter manfully, and that his censure and removal for such causes is scarcely credible. Mr. Hardcastle's narrative can scarcely fail to arouse the utmost possible indignation, and we trust that full reparation will be made.

MEDICAL EDUCATION OF WOMEN.

OUR Birmingham correspondent writes, under date September 20th:—About two years ago, application was made to the authorities of Queen's College, Birmingham, to admit several lady medical students. After much consideration, this was declined, though not unanimously. The liberal tendency of public opinion in the town was, however, strongly in favour of providing a medical education for women, and an Association was formed to promote that object. Last week, the Mayor (Mr. Chamberlain), accompanied by an influential deputation which included many well-known professional men and merchants, attended a meeting of the College Council, in order to urge the desirability of their providing the necessary facilities. In the course of his speech, Mr. Chamberlain said that they felt justified in appealing again on this subject by the fact that it had assumed a different aspect since the reply to the Government of the highest medical authority in London—the General Medical Council—in favour of the medical education of women. The deputation were agreed that it was an unfair and improper thing, when there were competent women who desired to enter the medical profession, that they should be refused the opportunity of gaining a satisfactory education. They believed such a thing was unjust in itself, and constituted a grievance which was certainly discreditable to all concerned as long as it remained, and should as soon as possible be removed. They had not attended to argue the matter, but to confer, and to ask the Council, in the interests of the College, to take such steps as would secure the medical education of women in connection with it; and they were prepared to seek with the Council, if they granted the principle, a means of remedying any pecuniary or other difficulties which might arise. Dr. Heslop observed that many members of the Medical Council were of opinion that the profession was not a fit one for women; but still, as a number had chosen it, and shown themselves capable of passing examinations, it appeared needful to take steps to give them an education and place them on the

Register. The obtaining of an education, especially at Zurich, had been easy; but this did not always end in obtaining a degree, and it was very desirable they should not be exposed to the embarrassments of foreign residence. The public and the women being now agreed upon this matter, it came to this: Should the College undertake the work, or should some other institution be founded for it? No doubt there was a difficulty as to hospital practice; but that could be surmounted. The Queen's Hospital was bound by its charter to accept such students as the College admitted; and, if female students were received there, they would probably be so also at the General Hospital—at first, doubtless, in separate classes. But, if the existing hospitals opposed great difficulties, he believed that the materials for a new clinical hospital existed in Birmingham. The general tone of the conversation which followed was evidently favourable to the cause in question. The Warden mentioned an important point when he said the College finances might be affected by the objection of parents to sending their sons to the same classes as ladies; for this, and objection upon the part of the students themselves, were threatened when the subject was mooted last time. It was agreed, however, that these and other difficulties were not insuperable; and the Mayor, in thanking the Council, summed up by saying that he understood *they made no objection on the score of principle*, and would, therefore, concur with the deputation, conditionally upon the assent of the hospital authorities, and conditionally also upon their being prepared to guarantee to them a sufficient amount to cover the fees in those cases in which the professors declined to lecture to double classes.

THE DIGESTIVE PRINCIPLES OF PLANTS.

DR. CHANCE, Sydenham Hill, writes to us: "Immediately I heard of Mr. Darwin's experiments with insectivorous plants, it occurred to me that the principle or principles, in virtue of which these plants dissolve albuminous substances, might possibly be found useful, as pepsine is, in assisting the digestive powers of the human stomach. This idea must have occurred to many others as well as to myself; but have any steps yet been taken with the view of ascertaining whether it can be turned to any practical account?"

EARLY MENTION OF JABORANDI.

In the works of the Hon. Robert Boyle, London, 1772, vol. iii, p. 155, Dr. Piso's *Travels in South America* are quoted from. The latter says: "I saw divers, as it were in an instant redeemed from death, who had been poisoned by the eating of venomous mushrooms and other unwholesome things, only by drinking a recent infusion of the root of *jaborandi*, whilst myself and others of Galen's disciples blushed to see the ineffectual endeavours of all our alexipharmacy, treacles, and other antidotes; so that I afterwards suffered myself to be joined in consultation with these barbarous colleagues, not so much to be arbiters of the condition of our men by their pulse, as to gain their assistance and counsel in the above-mentioned way, viz., the prescribing of proper medicines."

A NOVEL BUT EFFICACIOUS SCREEN.

RECENTLY, one of the most eminent naval surgeons was stationed off the West Coast of Africa. At the station, the chief surgeon on shore, who had a very large practice amongst all classes of the community, native and English, was sorely harassed by the large number of deaths which occurred in a short time amongst his patients. At his wits' end to obviate the discredit which he feared might ensue to himself should he not be able to stop, or at any rate to remove from his own shoulders the responsibility of these numerous fatal cases, he hit upon the expedient, when he found his patient to be *in extremis*, of sending to the naval surgeon to meet him in consultation. This he did in six consecutive cases, with the result that some twenty-four hours after the consultation, the patient died. When he sent the seventh time to the naval surgeon, the latter politely declined the consultation, on the ground that, unless his medical colleague on shore could arrange to

meet him before things became desperate, he felt that even a large fee must not tempt him to laboriously earn the reputation of his visits, being the invariable harbinger of death. Surely many physicians might complain with equal cause, that their aid is too often sought by their medical brethren when their experience and skill can be of no possible avail. We commend this incident to the thoughtful consideration of general practitioners throughout the United Kingdom.

THE CENTRAL LONDON EAR AND THROAT HOSPITAL.

LAST week, Madame Adelina Patti (Marquise de Caux) laid the foundation stone of the new building, which the Committee of this hospital are about to erect in the Gray's Inn Road. It is worthy of record, as showing the dearth of news which the daily newspapers experience at this season of the year, that the *Times* devoted a whole column to a description of the ceremony and to an account of the objects and progress of this new and insignificant charity; and that all the other morning and evening papers, without exception, pursued a similar course. Whatever may be said against special hospitals, and we have often in these columns shown that the necessity for them as distinct institutions does not now exist, owing to the excellent special departments which are attached to the principal London hospitals, it cannot be denied that the specialists show much commendable energy and ability in promoting the success of their institutions. Many of our larger hospitals might well take a hint from the specialists in this respect, and we feel sure, that if half the energy they display in promoting the success of their cause were manifested by the managers of not a few of the less wealthy general hospitals in London, they would soon cease to complain of the lack of support they receive from the general public.

SCOTLAND.

THE annual meeting of the members of the Scottish Midland and Western Medical Association will be held on Thursday, the 30th inst., at the Imperial Hotel, George Street, Glasgow. The chair will be taken at 2 o'clock by Dr. Moffatt of Falkirk, Senior Vice-President of the Association. Dr. Wm. Dean Fairlies of Kirklands, Bothwell, is the General Secretary of this Branch.

IRELAND.

At the Queen's University in Ireland the following examiners have been appointed: Benjamin M'Dowel, M.D., Examiner in Medicine; Anthony H. Corley, M.D., Examiner in Surgery; William Roe, M.D., Examiner in Midwifery; Charles F. Moore, M.D., Examiner in Materia Medica; Matthias O'Keefe, M.A., M.D., Examiner in Medical Jurisprudence.

LIMERICK LUNATIC ASYLUM.

A MEETING of the Board of Governors of this institution was held last week, when it was stated that a tender for the execution of the enlargement of the Asylum at a cost of £11,800 had been accepted. It is expected that the work will be completed in about eighteen months. Increased room is much required, a considerable amount of overcrowding having taken place for a long time. Dr. Courtenay, the resident medical superintendent, at the same meeting, drew attention to the fact that, under a recent Act of Parliament, the Governors were empowered to sue relatives in the same way as Poor-law Guardians did, and compel them when able to contribute to the support of their friends. A list of the parties liable has been drawn up, and the necessary steps taken relative to the matter.

MR. H. A. CÆSAR, Public Vaccinator, Western District of Mile End, has received a grant of £36:19 from the Local Government Board for efficient Vaccination.

R. C. Thomas, equal; W. J. W. Proffitt, Edward Fardon, Thomas Crook, and James. *Fornice Medicine*—T. F. Pearce, W. J. W. Proffitt, and A. R. Davis. *Materia Medica*—A. J. Newman, H. B. Mason, and A. S. M'Cauleland. *Botany*—C. G. Beuts, A. S. M'Cauleland, and Thomas Jackson. *Comparative Anatomy*—F. Bellaby and S. F. Pearce, equal. *Physiological Medicine*—A. K. Davis.

ST. THOMAS'S HOSPITAL.—*Summer Session, 1874.—Second Year's Student, J. F. Nicholson, College Prize, £15, and Certificate. First Year's Students* (College Prizes and Certificates)—G. B. Longstaff, £15; C. E. Sheppard, £10. F. H. Weekes, £5. *Winter Session, 1874-75.—Third Year's Student, J. F. Nicholson, College Prize, £20, and Certificate. Second Year's Students, College Prizes and Certificates*—C. E. Sheppard, £20; F. H. Weekes, £15; W. H. Battle, £10. *First Year's Students, College Prizes and Certificates*—J. Shaw, £20; H. Castle, £15. *Physical Society's Prizes*—G. F. Poynder, Third Year's Prize and Certificate; T. J. Sharkey, Second Year's Prize and Certificate; G. B. Longstaff, First Year's Prize and Certificate. *Prosectors*—F. R. Barker and C. K. Morris, Prizes and Certificates. *Resident Accoucheurs*—H. S. Bennet and C. M. Taylor, Certificates. *Gravener Testimonial Prize*—H. P. Potter, £20, and Certificate. *Surgery and Surgical Anatomy*—J. F. Nicholson, Cheselden Medal; T. Fisher, Prize and Certificate. *Practical Medicine*—J. F. Nicholson, Mead Medal. *House-Physicians*—A. S. L. Newington, J. W. Clarkson, W. S. Mavor, and A. Lingard, Certificates. *House-Surgeons*—J. Crossman, C. M. Taylor, G. F. Rossiter, and J. W. Clarkson, Certificates. *General Proficiency and Good Conduct*—Treasurer's Gold Medal and Certificate, J. F. Nicholson.

UNIVERSITY COLLEGE.—*Winter Session, 1874-75: Atkinson Morley Surgical Scholarship, E. Markham Skerritt. Filittier Exhibition in Pathological Anatomy, A. J. Pepper. Liston Gold Medal for Clinical Surgery, C. J. Manning. Bruce Medal for Proficiency in Surgery and Pathology, A. J. Pepper. Cliff Memorial Prize for Proficiency in Anatomy, Physiology, and Chemistry, G. C. Henderson. Surgery*—Gold Medal, A. J. Pepper; 1st Silver, J. Arthur Kempe; 2nd Silver, L. S. Jameson; Certificates—4. Alfred Applin; 5. John Gardiner; 6. R. W. Greenish; 7. G. H. B. Fisk; 8. J. Sydney Pearce; 9. H. Lawrence Crocker; 10. G. S. Bayly; 11. Henry R. Dale. *Physiology*—Gold Medal, F. Lucas Benham; Silver, J. Stanley N. Boyd; Certificates—3. James Hudson; 4. James W. Bond; 5. D. J. Williams; 6. R. S. Miller. *Anatomy (Senior Class)*—Gold Medal, Howard Cane; 2nd Silver, Judson S. Bury; 2nd silver, Richard S. Miller; Certificates—4. Edwin Hughes; 5. F. Lucas Benham; 6. George C. Henderson; 7. Alfred James; 8. David Jones; 9. Chas. E. Beevor; 10. Boyd B. Joll; 11. J. W. Bond; 12. E. J. Thompson; 13. A. E. Broster; 14. James Hudson; 15. W. M. Hope; 16. Frank S. Goulder. *(Junior Class)*—Silver Medal, William Banks; Certificates—2. Bilton Pollard; 3. W. S. Tuke; 4. N. S. Whitney; 5. W. H. Copley; 6. Kenneth R. Smith; 7. Chas. M. Maxwell; 8. C. B. Hill; 9. Jas. O'Connor; 10. H. Ewbank; 11. D. F. Dymott; 12. W. W. Colborne; 13. W. E. Goed; 14. S. E. Duncan; 15. Michael Oppenheim; 16. Christopher Briggs. *Chemistry*—Gold Medal, W. R. Parker; 1st Silver, Ernest Westlake; 2nd Silver, I. C. Poo-ford; Certificates—4. Francis M. Webb; 5. W. G. Chuckerbutty; 6. equal, F. L. Teed, R. S. Miller; 7. R. H. Wright; 8. H. A. H. Fenton; 9. equal, J. H. Oldroyd, J. R. Satter; 10. equal, H. P. Miller, J. A. Voelcker, J. W. Evans; 11. equal, John Marshall, L. C. Parkes; 12. equal, Bilton Pollard, W. C. Adams, F. S. Arnold, V. A. H. Horsley; 13. equal, K. Jameson, C. G. Stein, T. Buxton, A. J. Harries; 14. equal, J. E. Squire, A. M. Palmer, N. Jean-Louis, S. H. Henty; 15. equal, J. E. Hine, D. E. Anderson; 16. equal, J. S. Tew, Mark F. Sayer; 17. equal, Angel Money, David Gamble, C. E. Cassall, Y. J. Cruz; 18. equal, O. F. Combe, J. A. Broun, A. H. Cooke, F. W. Motz, Julian Stephens, W. Francis. *Medicine*—Gold Medal, George H. Voelcker; 1st Silver, A. J. Pepp r; 2nd Silver, L. S. Jameson; Certificate—4. James Ryley. *Practical Physiology*—1st Silver Medal, D. J. Williams; 2nd Silver, W. Gristock; Certificates—3. Alfred James; 4. Boyd B. Joll; 5. J. W. Bond. *Clinical Medicine: Fellowes Medals*—Gold, T. K. Rogers; Silver, equal, A. J. Pepper, G. H. Voelcker; Certificates—4. J. F. Trafford; 5. L. J. Hobson; 6. P. M. Chapman; 7. J. Moore. *Junior Class: Fellowes Medals*—1st Silver, J. G. Langley; 2nd Silver, J. Todd; Certificates—3. P. Ballard; 4. equal, S. H. Burton, A. W. Kempe; 6. J. Ryley; 7. equal, L. M. Buckell, W. James Pickup; 9. J. S. Pearce; 10. H. L. Crocker; 11. F. F. Perry; 12. W. M. Lory. *Dental Surgery*—Silver Medal, E. J. M. Phillips. *Summer Session: Pathological Anatomy: Filittier Exhibition of £30*—F. J. Davies; Silver Medal, James Ryley; 3rd Certificate, S. H. Burton. *Practical Chemistry (Senior Class)*—Gold Medal, K. R. Smith; 1st Silver Medal, D. J. Williams; 2nd Silver Medal, Herbert Robson. Certificates—4. H. R. H. Bigg; 5. equal, J. Stanley N. Boyd, R. S. Miller; 6. equal, Boyd B. Joll, J. S. Bury, J. R. Salter, W. R. Nicholson; 7. equal, W. Gristock, F. L. Benham; 8. equal, F. S. Culhane, S. P. Phillips, Harry Duncan, Bilton Pollard; 9. David Lloyd. *Junior Class*—Gold Medal, Wm. Banks; 1st Silver Medal, L. L. de Montille; 2nd Silver Medal, S. R. Corder; Certificates—4. equal, A. A. Lendon, Y. Ito, A. M. Palmer, W. S. Tuke; 5. equal, W. R. Parker, T. Buxton; 6. equal, F. W. Mott, A. Hemsted; 7. equal, W. Pasteur, H. P. Miller, A. J. Harries, M. Oppenheim, P. S. Kendall; 8. equal, P. N. Bose, W. C. Adams; 9. equal, D. Duncan, Theophilus Hoskin, J. I. Paddle, H. E. Spencer, H. F. Stokes, J. A. Broun; 10. equal, J. E. Hine, G. N. Stathers, E. H. Fenwick; 11. equal, Archibald Blair, V. A. Horsley, J. E. Squire, P. E. Shearman, A. E. Wigg; 12. equal, S. E. Duncan, D. T. Ho-kyn, Nemours Jean-Louis, C. M. Maxwell; 13. equal, Reuter Roth, C. J. Watkins, D. E. Anderson, E. J. Brook Smith, J. S. Buck, E. Eardley-Wilmot; 14. H. Astley Phillips; 15. David Gamble. *Materia Medica and Therapeutics*—Gold Medal, W. Banks; 1st Silver Medal, N. S. Whitney; 2nd Silver Medal, H. E. Spencer; Certificates—4. R. S. Miller, A. Hemsted; 6. L. E. Williams; 7. Boyd B. Joll; 8. equal, Arch bald Blair, J. R. Salter, W. S. Tuke. *Midwifery (Senior Class)*—Gold Medal, H. F. Bailey; Silver Medal, A. Hullard; Certificates—3. equal, Ernest G. Francis, Howard Cane; 5. J. F. Trafford; 6. T. E. Foster MacGeagh; 7. S. H. Burton; 8. A. W. Galloway. *Junior Class*—Silver Medal, D. J. Williams; Certificates—2. J. Stanley N. Boyd; 3. H. F. Hann; 4. J. E. Bullock; 5. H. R. Dale; 6. Brian Rigden. *Medical Jurisprudence*—Gold Medal, A. Hullard; Silver Medal, Arthur Whitelegge; Certificates—3. D. R. Jones; 4. equal, H. R. Dale, J. E. Bullock; 6. A. J. Smith; 7. A. W. Kempe; 8. Brian Rigden. *Botany*—1st Silver Medal, W. Rushton Parker; 2nd Silver Medal, W. Carey Trafford; Certificate—3. Walter Pearce. *Hygiene and Public Health*—Silver Medal and 1st Prize, Alfred Applin; 2nd Prize, K. R. Kirukur; Certificates—3. A. Hemsted; 4. R. B. Wilkins. *Mental Diseases*—Prize and Silver Medal, K. R. Kirukur. *Ophthalmic Medicine and Surgery*—Silver Medal, A. Hullard. *Zoology*—Silver Medal, Angel Money; Certificate—2. J. Stanley N. Boyd. *Comparative Anatomy and Zoology*—Gold Medal, H. R. Heather Bigg; Silver Medal, V. A. Horsley; Certificates—3. J. E. Hine; 4. E. H. Fenwick. *Clinical Medicine*—1st Prize, equal, J. S. Pearce, B. M. S. Roth; 3rd Prize, J. A. Kempe.

WESTMINSTER HOSPITAL.—*Entrance Scholarships*—1. George Shaw; 2. T. H. May. *Mr. Davy's Prize for Practical Anatomy*—T. H. May and T. G. Munyard, equal. *Exhibition in Anatomy and Physiology*—Thomas G. Munyard. *Dr. Ailchin's Prize for Practical Histology*—George Eliot. *Scholarship in Anatomy and Physiology*—George S. Robertson. *Chadwick Prize*—No award. *Class Certificates: Junior Physiology*—Horace Elliott and Thomas G. Munyard, equal. *Junior Physiology*—1. George Shaw; 2. Thomas G. Munyard. *Chemistry*—1. Thos. G. Munyard; 2. George Shaw. *Senior Anatomy*—1. George S. Robertson; 2. Geo. Eliot. *Senior Physiology*—1. George S. Robertson; 2. George Eliot. *Histology*—1. Geo. S. Robertson; 2. George Eliot. *Junior Medicine*—2. Thomas Gaddes. *Junior Surgery*—2. Wm J. Foster. *Senior Medicine*—1. Wm. J. Quicke. *Senior Surgery*—2. Richard Clarke.

BRISTOL MEDICAL SCHOOL.—*First Year's Prize, not awarded; Second Year's Prize, Mr. F. Taylor; Third Year's Prize, Mr. J. R. Guy; Prize for Practical Anatomy, Mr. C. C. Cripps. ROYAL INFIRMARY.—Supple Medical Prize and Gold Medal, Mr. C. Newman; Suple Surgical Prize and Gold Medal, Mr. F. C. Palmer; Clark Prize, Mr. J. R. Guy. GENERAL HOSPITAL.—Guthrie Scholarship, Mr. C. Jones; Clarke Scholarship, Mr. T. C. Norton; Sanders Scholarship, Mr. J. Taylor.*

LEEDS SCHOOL OF MEDICINE.—*Hardwick Prize (Clinical Medicine), value £10, J. B. Hellier. The Surgeons' Prize (Clinical Surgery), 1, value £10, Cautley Dawson; 2nd, value £5, E. B. Holwell. Medicine*—Medal, Cautley Dawson. *Surgery*—Medal, Cautley Dawson; Certificate, G. H. Higgins. *Anatomy (Senior)*—Medal, J. H. Thorp; Certificate, R. N. Hartley. *Anatomy (Junior)*—Medal, R. B. Morley; Certificate, F. W. Storry. *Anatomy (Lecturers' Book Prizes)*—Senior, W. S. Porter; Junior, F. W. Storry. *Physiology*—Medal, J. H. Thorp; Certificate, C. L. Pape. *Chemistry*—Medal, R. Hagyard; Certificate, F. Robinson. *Thorp Scholarship (Forensic Medicine), value £10, A. K. Scattergood. Forensic Medicine*—Medal, A. K. Scattergood. *Midwifery*—Certificate, G. F. Bates. *Materia Medica*—Medal, J. D. F. Reckitt; Certificate, R. Hagyard. *Botany*—Medal, R. B. Morley; Certificates, J. W. Oglesby and R. Hagyard. *Practical Chemistry*—Medal, R. Hagyard; Certificates, R. B. Morley and E. P. Pickersgill.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.—*Winter Session.—Exhibitioners: Mr. H. Gorst, Mr. S. F. Bigger, Mr. G. H. Jackson, and Mr. W. G. Miskelly. Third Year Subjects (Medicine, Surgery, and Pathology): Mr. John Twincem, Silver Medal; Mr. W. H. Wright, Bronze Medal. Second Year Subjects (Advanced Anatomy and Physiology): Mr. J. Wigglesworth, Torr Gold Medal; Mr. W. Gillibrand, Bronze Medal; Mr. R. H. Jones, 1st Honorary Certificate; Mr. D. Harrison, 2nd Honorary Certificate. First Year Subjects (Elementary Anatomy and Physiology and Chemistry): Mr. T. W. O. Pughe, Bligh Gold Medal; Mr. T. M. Porter, Bronze Medal; Mr. C. E. Steele, 1st Honorary Certificate; Mr. W. O. Beckitt, 2nd Honorary Certificate. Summer Session: Second Year Subjects (Obstetric Medicine, Medical Jurisprudence, and Toxicology): Mr. W. B. Hadden, Honorary Certificate. First Year Subjects (Botany, Materia Medica, and Practical Chemistry): Mr. R. Bredin, Silver Medal; Mr. Charles E. Steele, Bronze Medal. Comparative Anatomy and Zoology: Mr. R. Bredin, Prize; Mr. T. W. O. Pughe, Mr. A. Meeson, and Mr. A. C. Rich, Honorary Certificates. Students' Debating Society's Prize: Mr. W. B. Hadden.*

OWENS COLLEGE (MANCHESTER ROYAL) SCHOOL OF MEDICINE.—*Third year: Turner Scholarship, £20, H. Tomkins; first prize, £5 ss., Stanford Harris, John Chadwick; 2nd prize, £3 ss., not awarded; third prize, £2 ss., Arthur Richardson. Second Year: Scholarship, £15, Charles Frederick Dingle; first prize, £5 ss., Arthur Thomas Wilkinson; second prize, £4 ss., not awarded; third prize, £3 ss., not awarded. First year: Scholarship, £10, not awarded; first prize, £5 ss., Walter Muir; second prize, £4 ss., John Hodgson; third prize, £3 ss., Hector Leak.—Platt Physiological Scholarship, £50 per annum, tenable for two years, John Priestley. Dumville Surgical Prize, £20, Arthur Richardson.*

SHEFFIELD MEDICAL SCHOOL.—*First Year's Prize*—1. Mr. Beard; 2. Mr. Collier. *Second Year's Prize*—Not awarded.

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, NEWCASTLE-ON-TYNE.—*Winter Session, 1874-75.—Physiology: Medal and First Certificate, Mark Malvin; Second Certificate, Marshall Taylor; Third Certificate, Charles James Sutherland. Chemistry: Medal and First Certificate, Charles James Sutherland; Second Certificate, Charles M'Ivor Goyder; Third Certificate, Septimus Lowes. Anatomy: Medal and First Certificate, Thomas G. Ainsley; Second Certificate, James B. Noble; Third Certificate, Charles Green. Medicine: Medal and First Certificate, George Newton; Second Certificate, G. O. M'Kane. Dickinson Memorial Scholarship, George Newton. Summer Session, 1875.—Practical Physiology: Medal and First Certificate, William J. Sweet; Second Certificate, James B. Noble. Practical Chemistry: Medal and First Certificate, Charles M'Ivor Goyder; Second Certificate, William J. Sweet. Botany: Medal and First Certificate, William J. Smith; Second Certificate, James T. T. Reed. Medical Jurisprudence: Medal and First Certificate, Mark Malvin. Midwifery: Medal and First Certificate, Mark Malvin. Materia Medica: Medal and First Certificate, A. Snowdon.*

NEW REMEDIES IN 1875.

MR. GROVES, the President of the Pharmaceutical Conference recently held at Bristol, discusses this subject at some length, and with good judgment. We make the following extracts from it, passing over the notice of jaborandi, of which the literature has been fully given in these pages:—

The Brazilian drugs recently presented to the Pharmaceutical Society by Messrs. Cyriax and Farries, and reported on by Mr. Holmes, contain among them several that seem to call for further inquiry and examination on the part of pharmacists. It seems, indeed, that South America, to which we are indebted for some of the most destructive diseases, is endeavouring to balance the account by providing the means of effecting their cure.

The statement respecting butea, "that it contains a basic substance which, combined with sulphuric acid, is white almost like that of cinchona, and is exported to Europe in great quantities to adulterate quinine", deserves to be taken note of, though one part of it seems highly improbable.

Erva de Rato, a cinchonaceous plant used in Brazil for killing rats and mice, exerts, it is said, on the heart an action similar to that of digitalis. This statement certainly deserves careful examination; should the action not be identical, probably it is only similar, it might furnish another means of alleviating a class of disease of a peculiarly painful and hitherto intractable character.

To Dr. Fayrer of Calcutta is mainly due the introduction to European medical practice of Goa powder, called also Bahia powder, and Araroba powder, a potent remedy in certain skin-diseases—herpes circinatus, chloasma, etc. This, too, has a Brazilian origin, and seems to have been an article of export from Bahia to Goa, when both were Portuguese colonies. Its origin long remained a profound secret, and its employment was confined to those irregular practitioners of medicine whose untrammelled intellects have so often opened a path for the more staid and methodical practitioners of the schools. Dr. J. F. da Silva Lima has traced the substance from its place of production to its place of sale, and made evident the fact that the Goa, Bahia, and Araroba powders are one and the same, and the produce of a leguminous plant growing in Bahia, where several species of it are to be found, all, with characteristic Brazilian indifference, called by the same name "araroba", or tawny-coloured. Some plants of araroba are now, thanks to Dr. da Silva Lima, growing in the Royal Botanical Gardens of Edinburgh, so that it will not be long before botanists will be able probably to give a complete account of the true source of this interesting remedy. Professor Atfield, in a paper read before a meeting of the North British Branch of the Pharmaceutical Society of Great Britain, described fully the chemical characters of the pure powder sent to him by Mr. David Kemp of Bombay, by whom it had been christened, with the view to doing away with troublesome synonyms, chrysarobin. The one remarkable fact connected with a most patient and able analysis is this, that chrysarobin contains from 80 to 84 per cent. of pure chrysophanic acid. This acid, long known as a constituent of rhubarb roots, *Parmelia parietina*, and perhaps also senna leaves, had never been suspected of possessing powers such as now it must be credited with. Should the price of chrysarobin ever become disproportionately high, it will always be possible to revert to its active principle derived from well known and native sources, but that contingency seems remote, as, according to Dr. da Silva Lima, it is obtainable in Brazil in any reasonable quantity. Possibly its wonderful properties as a dyeing material may eventually be made use of. It is a singular fact, referred to by Mr. Holmes in his paper on the identity of Goa and Araroba powders, that dock-root, a well known but poor source of chrysophanic acid, was used in the time of Gerrard for the treatment of certain skin-diseases, and Professor Bentley affirms that it is still used in Sweden for scurvy, and in many cutaneous disorders.

Gurgun balsam, a fluid of oleoresin, attained by incisions of the bark of *Dipterocarpus laxis*, has, until recently, been regarded solely as an object of suspicion and a possible adulterant of copaiba. It now is in a fair way of being recognised as a most valuable agent in the treatment of skin-diseases, and especially of that most horrible one, leprosy. Dr. Dougall, a medical officer of the Indian Government, first conceived the idea of so employing it, and, having observed decided mitigation of the worst symptoms of the cases first experimented upon, carried out on an extensive scale a series of trials of the remedy at the Haddo Leprous Hospital, Andaman Islands. In his report to Government, he gives details of the remarkable results of the treatment, leaving no doubt that the doctor has hit upon a most valuable agent which renders tractable a most loathsome disease, that hitherto has defied human efforts at removal, and it may almost be said of alleviation. The balsam emulsed with lime-water is given to the extent of twelve drachms daily, and at the same time the whole body is anointed with a similar emulsion night and morning. The Indian Government attaches so much importance to the discovery, that it has instructed the keeper of medical stores at Calcutta to collect a large supply of the balsam, for distribution wherever competent persons can be found to administer and report upon it. The issue of these reports will be awaited with interest, more especially since the balsam has been found by so trustworthy an observer as Erasmus Wilson to exercise a beneficial influence in the treatment of a disease of equally painful character affecting Her Majesty's European subjects, viz., cancer.

More than fifteen years ago, Kolbe and Lautermann demonstrated the possibility of preparing from carbolic acid the then little esteemed salicylic acid. The process adopted was one suggested by Wanklyn, who in the same year discovered that when carbolic acid was passed

into sodic alcohol, propionate of soda was formed, and similarly when methylic alcohol was used instead of ethylic, acetic acid was the result. More recently the reaction has been carefully studied by Kolbe with the view of procuring the acid at a cheap rate for the economical uses which Professor Kolbe was the first to recognise in it. He imagined that, seeing their easy convertibility, the two acids carbolic and salicylic might probably be endowed with similar physiological properties, and that idea he has since fully demonstrated the truth of by experiment. As an antiseptic, salicylic acid is a formidable rival to carbolic acid, preventing and destroying with equal certainty the action of both organised and inorganised ferments. Thus, it destroys the activity of the alcoholic ferment in saccharine fluids, and the ammoniacal ferment in solutions of urea, whilst it equally prevents the decomposing action of emulsion on amygdalin, and of synaptase on myronic acid. Its power as an antiseptic, when used in the treatment of the dressing of wounds, is considered by Mr. Lister to be scarcely equal to that of the latter substance. This inferiority possibly depends on its less volatility, which, whilst offering the advantage of absence of disagreeable smell, entails the disadvantage of limiting seriously its action on the atmosphere surrounding the diseased surface. On this account, we may expect that, as a general disinfectant, carbolic acid will continue to hold its ground, and that notwithstanding its extremely poisonous character, a fact of which we are now and then reminded painfully by the occurrence of loss of life through its accidental administration.

Salicylic acid, on the contrary, is comparatively innocuous, and being a solid does not invite the attention of drinkers and others too apt to conclude that a carefully hidden bottle must conceal something nice. The antiseptic action of salicylic acid is not shared with its salts, so that when the saturation of the acid accidentally occurs through the evolution of ammonia generated by putrefaction, its utility ceases, or at least is suspended until the addition of an acid sets it free again. Nothing could more forcibly illustrate the non-poisonous nature of salicylic acid, than the fact that it has been recommended to be added in minute quantities to the water in which leeches are preserved. It is said that their mortality is in that way very much lessened. The future of salicylic acid seems to point rather in the direction of internal than external applications. It has been suggested as likely to be a potent remedy in diseases of a zymotic character; perhaps its exhibition in conjunction with sulphurous acid would be more beneficial than when given alone, as the sulphurous acid would not only directly assist it, but by preventing its neutralisation, conduce to the permanence of its action. Mr. John Williams, at a recent meeting of the Pharmaceutical Society, exhibited oil of wintergreen (salicylate of methyl) prepared from the artificial acid, and possessing perfectly the taste and odour of the oil yielded by the plant on distillation. The methylic element was probably obtained in the usual way from wood spirit, but it would not have been difficult to prepare this from purely vegetable sources, as pointed out by Mr. Williams.

Salicylic acid is now quoted in the price lists at 8s. per oz. for the natural product; 2s. per oz. for the artificial.

In October 1871, Dr. Broughton of Outacumund, presented to the museum of the Pharmaceutical Society, a very pure and interesting specimen of carbolic acid derived indirectly from the essential oil of wintergreen, which he had obtained from the plant growing on the Neigherrie Hills. This oil is nearly identical with that of wintergreen, and consists almost wholly of salicylate of methyl. The production of carbolic acid is effected by first saponifying the oil with potash, then adding a mineral acid which precipitates the salicylic acid in a state of purity, and finally distilling the dry acid with lime and sand. The result is pure carbolic acid, which crystallises at once on reaching the receiver. Dr. Broughton calculates that by pursuing this method, pure carbolic acid could be produced at from five to seven shillings per pound. It is obvious that, by dispensing with the last operation, and stopping at salicylic acid, that acid could be rendered at a price considerably less than the figures I have quoted—possibly at four shillings per pound. Here, then, is a hopeful source of a cheap and pure supply of this valuable drug. I have written to Dr. Broughton with reference to it, and hope to have in time for this Conference a note from him respecting it. Dr. de Vrij has also pointed out a new source of carbolic acid, and has shown that it can be prepared at a cost of about 1.15 per cent. of crude oil. This might possibly be similarly utilised.

M. Nativelle, who also writes in the *Ann. Chim. Pharm.* on procuring from the leaves of *Digitalis purpurea* a substance possessing the physiological properties of the plant, and which he named digitalin, has also a full notice of it in the *Revue de Pharm.* In the April number of the *J. de Ph. et de Ch.*, he repels the attack of M. Kosmann, who had reasserted his belief that the true active principle of foxglove is an amorphous body, and affirmed that M. Nativelle's

digitalin was a product of change, such as might take place, such is the instability of the true digitalin, either inside or outside the plant. To attempt to give an outline, even of the results described by Nativelle, Kossmann, Homolle, Walz, and Schmiedeberg, would occupy much longer time than I could devote to this subject. Probably, not less than a dozen definite principles, if one could believe their discoverers, would have to be examined. Certain it is, one could not find *digits* enough to count them upon; and, moreover, the greater number of them seem possessed of toxic properties. Schmiedeberg's last announcement, digitoxin, is so poisonous that he doubts whether it is fit for medicinal use. It moreover is completely insoluble in water, in that respect agreeing with the digitalin of Nativelle, which Schmiedeberg declares to be a mixture of digitoxin and paridigitogenin. Anyhow, Nativelle was the first to produce and exhibit a crystalline principle derived from foxglove, and representing with tolerable exactness its physiological action, and while such can be obtained of constant composition and definite form, that assuredly is the article that ought to be employed, and not an amorphous substance possessing no definite characters by which it might be recognised. Doubtless the more complex of the vegetable alkaloids are extremely prone to alteration, and until we know more of the true constitution of that class of bodies, it will be useless to attempt to decide as to which is the mother substance of such series as are met with in foxglove, aconite, cinchona. This Conference has already made a money vote towards the elucidation of the aconite mystery, and will probably be asked for a second grant; but it would, in my humble opinion, be more usefully devoted to the determination of the exact chemical position occupied by one or two of the more stable alkaloids. It doubtless is very interesting to ring the changes upon such a substance as morphia, but this might go on for ever, and I have failed to perceive that up to this time any consensus of opinion has been arrived at, on what may be termed the previous question—What is an alkaloid?

MEDICAL ADVERTISING.

THE following resolution was last week proposed by Dr. PARSONS, seconded by Dr. BOWLES, and carried unanimously, at a full meeting of the East Kent District Branch of the British Medical Association.

"That, in the opinion of this meeting, the practice of advertising medical books in the public papers is derogatory to the interest and dignity of the profession, and likely to occasion social inconvenience and annoyance, and should therefore be abandoned."

REPORTS OF SOCIETIES.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, JULY 21ST, 1875.

G. W. BALFOUR, M.D., Vice-President, in the Chair.

Exhibition of Patients, Pathological Specimens, etc.—Dr. LITTLEJOHN showed (1) a skull-cap and membranes, including an osseous mass as large as an almond in the falx. The deceased, who was a notorious drunkard, and had suffered several times from delirium tremens, died very suddenly in the hands of the police. The diseased condition of the heart, liver, and kidneys, satisfactorily accounted for his death. (2) A part of the small intestine of a boy, who had died without medical attendance after urgent vomiting. The portion had passed through an opening in the mesentery, and had thus become occluded.—Dr. G. W. BALFOUR showed (1) Rosenthal's apparatus for washing out the stomach in cases of dilatation, which he had used with great advantage in various cases, especially in one in which the dilatation was due to pyloric constriction. For the principle of the method, the profession is indebted to Kussmaul. (2) A patient who, three months ago, had exhibited all the symptoms of locomotor ataxy. He then could not walk, nor stand with his eyes shut. Now, in all points, he was much improved. The treatment which had been successful in his case, as well as in many others in Dr. Balfour's hands, was that proposed by Wunderlich, *i.e.*, the use of half-grain doses of nitrate of silver night and morning, for six weeks continuously. It should then be broken off for a fortnight or three weeks, and resumed, if necessary. (3) He gave an account of three cases, all of which had been benefited by the use of large quantities of raw onions as a diuretic. All had been previously dropsical, and had been tapped, other diuretics having failed. Under the use of the onions, the urine steadily increased in quantity, and the dropsy disappeared.—Dr. P. H. WATSON showed (1) an oxalate of

lime calculus removed by the lateral operation; (2) a small one taken out of the eye of Clover's washing catheter; (3) and the detritus of another removed after five crushings; (4) a sarcomatous tumour of the lower third of the femur, for which he had amputated the thigh; (5) a cast of a deformed limb, on which he had lately operated. It was a fracture of the fibula, with rotation of the astragalus and ankylosis of the ankle-joint, which had been treated by an irregular practitioner. Dr. Watson cut out the astragalus after division of the fibula, with the best possible result. (6) The contents of an aneurismal sac, for which he had lately performed the old operation. It was in the axilla, and the result of a severe injury to the shoulder-joint, which the patient seemed to have at first made light of. Pulsation and *bruit* were absent, till the introduction of a trocar to assist diagnosis at once rendered the nature of the swelling evident, and, by the relief of tension, allowed the pulsation and *bruit* to be felt. Aided by Dr. John Duncan, who compressed the subclavian artery above the clavicle, Dr. Watson introduced his finger by a limited incision into the tumour; felt whence the warm gush of blood came from as pressure was relaxed; compressed the spot; then divided the pectoralis minor, extended the incision, and secured the divided ends of the ruptured artery. Very little blood was lost; but, unfortunately, gangrene of the arm showed itself next day, and the arm had to be amputated at the shoulder.—Dr. BATTY TUKE showed the right corpus striatum of a patient who had been the subject of constitutional syphilis, and, for three years, of chronic mania. He had suddenly become unconscious and paralysed, and died on the eighth day after the seizure.

Accidental Poisoning.—Dr. CUTHBERT read a case of accidental poisoning of a child two years and three months old, by two drachms of Bow's liniment. It was interesting, not only from the very large quantity of opium and ammonia in so young a child (it being estimated that fifteen grains of opium must have been swallowed), but from the fact that, owing to Dr. Cuthbert's prolonged and careful use of a galvanic battery during many hours, the child, though several times its case appeared absolutely hopeless, at length recovered completely.—Dr. ANGUS MACDONALD complimented Dr. Cuthbert on the successful termination of this most remarkable case. He could hardly have believed it possible for the child to survive, even with the very prompt and energetic means used. In his opinion, however, the danger of small doses of opium in childhood had been exaggerated, at least after they were two or three years old. He mentioned two cases; in one, a boy, aged 2 years, swallowed a grain of opium, and recovered, though he became deeply comatose; in the other, of a similar age, a teaspoonful of laudanum was given by mistake for a teaspoonful of syrup of senna. He recovered after about fourteen hours, though there had been time for the full absorption of the poison.

Malignant Pustule.—Mr. JOSEPH BELL read notes of a case of malignant pustule. A fine healthy ploughman had helped to skin and dress the carcass of an ox that had died of spleen-disease. On the next day, he felt itching and pain in the wrist. On the third and fourth days, he was ill, shivering and feverish; the mark on the wrist had proved to be a black pustule with a hard yellowish-red circumference. On the fifth day, he was comatose, with all the symptoms of extreme blood-poisoning; and, when he was seen by Mr. Bell in consultation, the limb was cold, dead to the elbow, and yellowish and putrescent to the shoulder. Free incision did not even draw blood; he was comatose and pulseless, and he died in three hours. Mr. Bell gave a detailed account of the latest views of the pathology, causation, and treatment of this malady, and described the microscopic appearances of the blood, which became thickly loaded with bacteria of various shapes.—The PRESIDENT alluded to the interest and rarity of the case. This disease, in its essential pathology, was closely allied to the plague; it was not, therefore, a mere local affection, but a continued fever of a malignant type; and death was due, not to the carbuncle, but to the resultant blood-poisoning.—Dr. WATSON had only seen one case, in the person of a cow-keeper, who had a pustule on one finger, and, notwithstanding free incisions, died of it. He referred to the work of M. Bourgeois on the subject. Fortunately for the public, this disease did not seem to be easily or frequently communicated by eating the flesh of animals which died of it.

Excision of the Knee.—Mr. CHIENE read a note on the after-treatment of excision of the knee-joint, in which he advocated the use of the weight and pulley as a means of keeping up extension. The case which served as a text was in a young child. The chief reason for approving of it seemed to be the comparative facility by which, in this method of dressing, the antiseptic precautions could be carried out.—Dr. WATSON had never tried the method spoken of by Mr. Chiene; but, after a lengthened trial, he had no reason to wish to change the method he himself had introduced and continued to use. By it, if necessary, he could still keep up the strictest antiseptic dressings; still

he must not be supposed to think that antiseptic dressings had any miraculous results in such cases, as he had quite as good, and certainly much more speedy, cures before employing antiseptics than since. He was glad to hear that, even in the practice of a staunch supporter of antiseptics, suppuration did occasionally occur. A few days of serous discharge used to be all that was admitted as possible under antiseptic surgery. Time seemed to be modifying the views held by its supporters.—Mr. BELL wished to give his support to Dr. Watson's splint. Before this mode of dressing was introduced, the results of knee-excision in the Edinburgh Infirmary, so far as he had watched them, were not good; after it came into use, they were good. This method allowed the patient to move, while it kept his limb at perfect rest. In his own practice, he had never lost a case of excision of knee; and, in his last case, the result was almost immediate union without using antiseptics at all. He doubted if Mr. Chiene's plan would be possible in a patient over 20 years of age.—Mr. CHIENE briefly replied, saying that he was glad to elicit an expression of opinion. In his own case, he thought the weight steadied the limb, and even yet, if the weight were removed, the extensors contracted, and the patient's face assumed an anxious expression.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Office of the Association, 36, Great Queen Street, London, on Tuesday, the 12th day of October next, at Three o'clock in the afternoon.

FRANCIS FOWKE,
General Secretary.

36, Great Queen Street, London, W.C., September 23rd, 1875.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE autumnal meeting of this Branch will be held at Tenby, on Thursday, September 30th.

Nomination-papers must be sent to one of the undersigned by the 9th instant.

ANDREW DAVIES, Swansea. } *Hon. Secs.*
ALFRED SHEEN, M.D., Cardiff. }

September 2nd, 1875.

YORKSHIRE, AND EAST YORK AND NORTH LINCOLN BRANCHES.

IT having been decided by the respective Councils of the above Branches that the autumnal meeting shall be held conjointly at the York Museum on October 13th, 1875, members of these Branches intending to read papers or cases are requested to forward the title to either of the Secretaries on or before the 27th instant, so that a notice thereof may be included in the circular convening the meeting.

Dinner at the Station Hotel at 5 o'clock. Tickets (exclusive of wine) 7s. 6d. each.

W. PROCTER, M.D., York, } *Hon.*
R. H. NICHOLSON, Hull, } *Secs.*

York, September 18th, 1875.

SOUTHERN BRANCH: SOUTH-EAST HANTS DISTRICT.

THE next ordinary meeting of the above Branch will be held at the India Arms Hotel, Gosport, on Wednesday, October 13th, at 4.30 P.M.

Notice has been received of the following communications:—

1. Dr. W. Hoare: Venesection.
2. Surgeon-General J. Mouat, V.C., C.B.: Pyæmia.
3. Dr. Ward Cousins: Case of large Cystic Tumour of Lower Jaw.

Dinner will be provided at 6.15 P.M.; charge 6s., exclusive of wine. Members intending to be present are requested to communicate with Dr. Kealy, Gosport, on or before October 10th.

J. WARD COUSINS, *Honorary Secretary.*

Southsea, September 23rd, 1875.

BATH AND BRISTOL BRANCH.

THE first ordinary meeting of the Session will be held at the York House, Bath, on Thursday, October 28th, at 7.15 P.M.: W. M. CLARKE, Esq., President.

R. S. FOWLER, Bath. } *Honorary Secretaries.*
E. C. BOARD, Clifton. }

Bath, September 24th, 1875.

WEST SOMERSET BRANCH.

THE autumnal meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, October 14th, at 5 o'clock.

The following question has been settled by the Council as the one on which members should be invited to express their opinion at the said meeting after dinner:—"Is the disuse of Bloodletting in the Treatment of Disease in accordance with the principles of Pathology?"

Dr. Cordwint proposes to read a paper "On Tissue-Change in Fevers".

Dinner (on the table at 5 o'clock), 4s. a head, exclusive of wine.

W. M. KELLY, M.D., *Honorary Secretary.*

Taunton, September 16th, 1875.

READING BRANCH: ANNUAL MEETING.

THE annual meeting of the above Branch was held at the Athenæum, on Wednesday, September 16th. There were fifteen members present.

Mr. Maurice, having resigned the chair in favour of Mr. May, President for the year 1875-76, the usual officers were elected.

Subsequently, the President delivered a very able address, for which he received the thanks of the meeting.

The members afterwards adjourned to the Queen's Hotel, where they dined and spent an agreeable evening.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

THE MORTALITY-TABLES OF THE CITY OF GLASGOW FOR THE QUARTER ENDING MARCH 31ST, 1875.—Dr. Russell, the Medical Officer of Health for Glasgow, commences the explanatory statement or report accompanying his tables, with a comparison of the meteorological phenomena of the first quarter of 1875 with those of the corresponding quarters in the ten preceding years. It appears that the temperature last January was lower, and the rainfall larger, than the average; the temperature and rainfall in February were both lower than the average; whilst in March the atmospheric conditions were normal in character. We do not perceive, however, that the death-rate was much influenced by the meteorological states. During the first quarter of 1875, the death-rate was $35\frac{1}{2}$ per 1,000 living; the birth-rate, 39 per 1,000. The death-rate was obviously very unfavourable, and trenched close upon the birth-rate, which was itself high. The death-rate per 1,000 living under one year was 195; and from one and under five years, 80; from five years and upwards, 24. As compared with standard death-rates at the same ages, these ratios indicate a very high mortality. The total death-rate under five years was 108, which was more than 50 per cent. in excess of the mean rate at that period of life. The deaths under five years amounted to 42 per cent. of the total deaths, and the deaths under one year were 17 per cent. of the total births. Of the births, 8 per cent. were illegitimate, which is a very high number. We observe from these tables that there is a great defect in the registration system in Scotland; for Dr. Russell informs us that, "of the deaths under one year, in only 65 per cent. was the cause of death certified; of the deaths at one and under five years, in 78 per cent.; of the deaths above five years, in $88\frac{1}{2}$ per cent." Thirty-five children out of every hundred who died under one year in Glasgow in the first quarter of the year were buried, therefore, without any certain knowledge being obtained by the authorities of the cause of death. Associating this fact with the large number of illegitimate births, we draw the conclusion that it is high time for the sanitary authorities of Glasgow to look into this matter and improve the registration. It is not necessary to impute crime anywhere. The mere facts, as they are stated, point to a laxity which gives facilities to crime; and these facilities, in a well-regulated community, should be diminished. In an admirable tabular statement drawn up by Dr. Russell, we find these figures: Of 786 legitimate children dying under one year, 539 were certified, or about 68 per cent.; whilst of 112 illegitimate children dying under one year, only 47 were certified, or about 42 per cent. There are thus about 50 per cent. more deaths of infants certified among the legitimate than among the illegitimate. Among the classified causes of disease, there was a large proportion from phthisis and acute diseases of the lungs, as might be expected from the season, viz., 1,981; from scarlet fever, measles, whooping-cough, croup, and diphtheria, 667; from nervous diseases of children, atrophy and

debility of children, 535; from fevers, 74; diarrhoeal diseases, 57; from small-pox, 1. The total deaths were 4,756, and out of this number so many as 1,441 were uncertified. Dr. Russell gives two tables to show the proportion contributed by each class of disease to the total deaths in the earlier and adult periods of life, and he also tabulates the death-rate in the several subdivisions of the city. Kelvinhaugh and Sandyford show the lowest, 17½; whilst Bridgegate and Wynds show 65; High Street and Closes (East), 58; High Street and Closes (West), 56; Gorbals, 50½; St. Andrew's Square, 49½; Cowcaddens, 49. The group in which the latter subdivisions are included contains 83,174 persons, and the density is 369 to the acre. "They are the worst districts in Glasgow," as Dr. Russell says, "both morally and physically." So we should judge from the terrible mortality. The operations of the Improvement Trust are carried on in this quarter, and the density is already diminished 14 per cent. There is plenty of room for bold work here. Such reports as this by Dr. Russell must do great good by demonstrating in an unmistakable manner the more crying evils, and by pointing out to the authorities the course of action to be taken for their removal. There can be no doubt that the authorities of Glasgow have already done much good service in behalf of their poorer fellow-citizens.

MILITARY AND NAVAL MEDICAL SERVICES.

DEPUTY SURGEON-GENERAL A. CROCKER is appointed to the Staff at Cork as Principal Medical Officer, on return from China, *vice* Deputy Surgeon-General M. W. Murphy, retired.

THE INDIAN MEDICAL DEPARTMENT.

THE *Pioneer Mail* of the 18th ultimo contains an article on a proposed reorganisation of the Indian Medical Department, in which article changes in the constitution of that body, of a somewhat fundamental and comprehensive character, are advocated. Our contemporary believes that the present plan of attaching an European medical officer to each native regiment is "not only injurious to the interests of the taxpayers, but intellectually injurious to the medical officers themselves".

Well-educated native practitioners, whose services would cost less than a fourth of the expenditure at present incurred, and who are "more conversant with the gastronomic indulgences of their brethren than any European can be", are now obtainable without stint of numbers, and might, with advantage, be placed in charge of native regiments. The European officers thus relieved would, it is alleged, be more profitably and congenially employed in the sanitary supervision of areas of two or three districts to be allotted to each, in immediate subordination to the sanitary commissioner of the province. Finally, dispensaries should be established in "tehsels", or sub-districts, under native doctors, who would be responsible for the proper performance of their duties to the European medical officers of district areas. In this way, our contemporary thinks, medical and sanitary relief would really be brought into contact with the masses of the people, at a total extra cost not exceeding "double the yearly revenue of a first-class London hospital"; moreover, the country would have, what is now so much needed, an organised and intelligent staff, capable of dealing promptly with the varied contingencies of epidemic outbreaks as they arise, and of deducing from them on the spot information which may lead to a solution of the mystery which envelopes the causes of cholera, Burdwan fever, leprosy, and the other diseases to which the vast population of our Eastern Empire is so peculiarly and fatally liable. As so many of our readers are more or less directly interested in Indian medical affairs, we have thought it as well to reproduce, for what they are worth, the salient points of the scheme proposed by the *Pioneer*, which paper, we believe we are correct in saying, is about the most influential and best informed organ of the Indian press.

CORRESPONDENCE.

THE FLEXIBLE CLINICAL STETHOSCOPE.

SIR,—This instrument, of which you gave a notice on September 4th, was in daily use in the Royal Infirmary of Glasgow eighteen years ago, and how long before that time I cannot say. It was made, I believe, by Mr. Hilliard of Glasgow for Dr. Tannahill, physician to the infirmary. The advertised advantages of the said form of stethoscope were long ago well appreciated, and are not by any means new.

Yours faithfully,

JOHN BRUNTON, M.D.

21, Euston Road, September 1875.

DEGREE OF M.D. IN THE UNIVERSITY OF EDINBURGH.

SIR,—Dr. William Hitchman of Liverpool, in his letter inserted in the number of the *BRITISH MEDICAL JOURNAL* for September 4th, in referring to the degree of M.D. of the University of Edinburgh, has not given the full particulars of that degree. I now supply the deficiency by sending a copy of the regulation concerning it.

"The degree of Doctor of Medicine may be conferred on any candidate who has obtained the degree of Bachelor of Medicine in the University of Edinburgh, and is of the age of twenty-four years, and has produced a certificate of having been engaged, subsequently to his having received the degree of Bachelor of Medicine, for at least two years in attendance on an hospital, or in the military or naval medical services, or in medical and surgical practice, provided always that the degree of Doctor of Medicine shall not be conferred on any person, unless he be a graduate of arts in one of the Universities of England, Scotland, or Ireland, or of such other Universities as are above specified, or unless he shall, before or at the time of his obtaining the degree of Bachelor of Medicine, or thereafter, have passed a satisfactory examination in Greek, and in Logic or Moral Philosophy, and in one at least of the following subjects—namely, French, German, Higher Mathematics, and Natural Philosophy; and provided also that the candidate for the degree of Doctor of Medicine shall submit to the Medical Faculty a Thesis, certified by him to have been composed by himself, and which shall be approved by the Faculty, on any branch of knowledge comprised in the professional examinations for the degree of Bachelor of Medicine, which he may have made a subject of study after having received that degree. The candidate must lodge his thesis with the Dean on or before 30th April of the year in which he proposes to graduate. No thesis will be approved by the Medical Faculty which does not contain either the results of original observations in practical Medicine, Surgery, Midwifery, or some of the sciences embraced in the curriculum for the Bachelor's degree; or else a full digest and critical exposition of the opinions and researches of others on the subject selected by the candidate, accompanied by precise references to the publications quoted, so that due verification may be facilitated.

"Candidates, settled for a period of years in foreign parts, who have complied with all the above regulations for the degree of M.D., but who cannot appear personally to receive the degree, may, on satisfying the Senatus to that effect, by production of sufficient official testimonials, have the degree conferred on them in absence."

I am, sir, your obedient servant,

J. W. BALFOUR, M.D., F.R.S., Dean of the Medical Faculty.
Edinburgh, September 16th, 1875.

UNIVERSITY LOCAL EXAMINATIONS.

SIR,—I am surprised that no voice has been heard from anyone in the medical profession in regard to the University examinations as applied to girls. My attention has been specially directed to the matter by being asked to advise whether two young ladies, aged 14 and 13, ought to go in for the "Cambridge Locals". The book was put into my hands containing the examination papers for last year and the programme of studies for next year. Of this book, I need not occupy space by giving any detailed account, but only say that I do not believe one of our school inspectors could stand examination without a good deal of preparation, and I know I would require some months' "coaching" to make a creditable appearance. In quality, some things are objectionable; but I confine myself to quantity in the subjects prescribed. So large an amount of brain-work and straining of the memory and other faculties at this particular time of female life, when the nervous power is more needed for physical development, must be injurious. No girl can enter for the junior examination who is over 15. I have known cases of brain fever and of permanently injured health from excessive study for prizes and other competitions at this age in ordinary schools. The University examinations are giving new impetus and development to this system of "forcing" all over the country.

I say nothing at present of the examinations as applied to boys' schools. Mr. Fawcett, M.P., in a recent speech, met supposed objections, and said that, for one boy whose health was injured by excessive study, nine were injured by insufficient mental work. I will not dispute this, especially as the tendency is now rather towards "muscular training" in excess. But, in regard to girls at the same age, I would reverse Mr. Fawcett's proportion, and say that nine out of ten are likely to be injured by excessive study.

When in America some years ago, I found that this subject of mental "forcing", by competition both in the public schools and in private seminaries, was occupying much attention. Dr. Storer of Boston and other eminent medical men strongly opposed the system, and they

attributed to it, more than to climate, the nervous and unhealthy temperament of many of the educated women in the New England States, especially in large cities and towns, where the competition is greatest.

When the great Napoleon asked Madame de Staël what she thought was most needed for the welfare of France, the answer was, "Good mothers". The answer was excellent, if it included both moral and physical points of goodness, and is applicable to England as well as to France. But mere intellectual forcing, if pushed to excess, will be at the cost both of moral and physical good training. We used to laugh at the "accomplishments" which were taught in boarding-schools for girls; but they had this advantage: that they occupied pleasantly some of the time which is now all required for unnatural training of the mind and the memory.

It is very well for professional inspectors and college Fellows to prepare these schemes of study; but medical men are in a position to regulate their application in particular cases with a view to social benefit and public health. Let any father examine these books, and, if he would not allow his own daughters to be overworked, he may give the same advice to his friends and neighbours.

Let me not be misunderstood. The University local examinations are doing good service in diffusing sound principles of education and in directing the courses of study in schools. It is only one abuse of the system to which I am calling attention. Professor Maurice, some years ago, gave warning as to the evil results of overstudy and over-competition among boys. I am sure the warning is now doubly needed with regard to girls.

I am, etc.,
JAMES MACAULAY, M.D., Editor of the *Leisure Hour*.

PLASTIC OPERATIONS.

SIR,—I observe the description of "a new method of performing plastic operations" by Dr. Wolfe (Glasgow) in the last number of your JOURNAL (September 18th, 1875), which, allow me to say, is a misnomer, inasmuch as the method which he has described is not new; and, in making the following remarks, I, for one, protest against the lofty stand which, in that article, he has assumed towards the profession. Anyone would think, in reading the communication referred to, that no progress had been made in plastic surgery for three hundred years previous to the advent of Dr. Wolfe.

But to the subject in hand. If I read Dr. Wolfe's article aright, he claims originality of thought on two points. First, the complete dissection of the flap of skin from the arm; and, second, the confining of it to the dermis and epidermis without the adherence of cellular tissue. With regard to the latter point, Mr. Lister, in describing skin-grafting on Reverdin's principle in the *Lancet* of May 1875, says:—"The skin of the inner side of the upper arm having been lightly washed with one to twenty of watery solution of carbolic acid, to purify its surface, a thin layer of the integument is shaved off with a very sharp knife, so as to take barely more than the epidermis, scarcely drawing blood or causing pain." Regarding the first condition, viz., complete severance of the flap and its insertion into the gap in the surface prepared for it, I have more than once seen it successfully performed, and that long before Dr. Wolfe appears to have practised it. Where, then, is the originality of this "new method of performing plastic operations"? the article describing which has been got up with such hot haste, that the author fails to give the date of the operation, and the wood-cut illustration of same was made only eight days afterwards.

Dr. Wolfe's communication is, therefore, worthless, as no one can say in eight days whether the flap will not by the lapse of time shrink to a nodule or even die. A month at least should have been allowed to elapse before the case was published, and then the profession would have some assurance that one of the elements of failure in such operations, namely, shrinkage of the flap (which this new method is intended to obviate) has not occurred in the very case which has been brought forward as proof.

One or two cautions, and I have done. I would recommend Dr. Wolfe to put a date to any new operation which he may lay before the profession in future, in order that, when years afterwards the history of his achievements is written, all priority of claim by others may be easily set aside. Again, for his own reputation during his lifetime, he might well be a little less hasty before communicating to the profession the results of his experiments. I am, sir, yours truly,
FIDES.

STAFF-SURGEON ARCHIBALD LESLIE ARCHER, M.D., has been appointed Visiting Surgeon at Plymouth, Devonport, Dartmouth, Ivy Bridge, and Plympton, under the Contagious Diseases Acts of 1866-69, *vice* Dr. Patrick Digan, deceased. The appointment to date from August 10th, 1875.

MEDICAL NEWS.

MEDICAL VACANCIES.

- THE following vacancies are announced:—**
- BATTLE UNION**—Medical Officer for the Ashburnham District. Salary, £25 per annum.
- BODMIN UNION**—Medical Officer for the Sixth District. Salary, £200 per annum.
- BRIDGNORTH INFIRMARY and DISPENSARY**—House-Surgeon. Salary, £120 per annum, increases to £150 a year, if it reaches £150, with coals, gas, and furnished apartments. Applications on or before the 25th instant.
- BRISTOL GENERAL HOSPITAL**—House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications on or before the 25th instant.
- BRISTOL HOSPITAL FOR SICK CHILDREN**—House-Surgeon. Salary, £100 per annum, with furnished rooms, coal, gas, and attendance. Applications on or before October 7th.
- CAISTON UNION**—Medical Officer and Public Vaccinator for the Tealby District. Salary, £30 per annum, and fees. Applications on or before Oct. 1st.
- CHESTER GENERAL INFIRMARY**—Visiting Surgeon. Salary to commence at £80 per annum, with board, lodging, and washing. Applications on or before the 27th instant.
- COLCHESTER UNION**—Medical Officer for the Second District. Salary, £75 per annum.
- DONCASTER INFIRMARY**—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be made on or before October 18th.
- ESSEX and COLCHESTER HOSPITAL**—House-Surgeon and Apothecary. Salary, £80 per annum, with board and lodging. Applications on or before October 7th.
- HASLINGDEN UNION**—Medical Officer for the Accrington District. Salary, £90 per annum.
- HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST**—Resident Clinical Assistant. Applications to be made on or before October 18th.
- INVERNESS DISTRICT ASYLUM**—Assistant Medical Officer. Salary, £70 per annum, with bed, board, and washing. Applications on or before the 11th prox.
- LIVERPOOL DISPENSARIES**—Assistant Resident House-Surgeon. Salary, £108 per annum, with furnished apartments, coals, gas, and attendance. Application on or before the 25th instant.
- LONDON HOSPITAL**—Assistant Obstetric Physician. Applications on or before the 27th instant.
- NORTH WALES COUNTIES LUNATIC ASYLUM, Denbigh**—Assistant Medical Officer. Salary, £100 per annum, with board, lodging, and washing. A knowledge of Welsh indispensable. Applications to be made on or before October 15th.
- NORWICH DISPENSARY**—Salary, £120 per annum, with unfurnished residence and apartments.
- ONGAR UNION**—Medical Officer for the First District. Salary, £105 per ann.
- OWENS COLEGE MEDICAL SCHOOL**—Sub-Curator of the Anatomical Museum. Applications on or before the 27th instant.
- PAISLEY INFIRMARY**—House-Surgeon. Salary, £80 per annum, with board. Applications on or before October 1st.
- PEMBROKE UNION**—Medical Officer for the First District.
- ROYAL HANTS COUNTY HOSPITAL**—House-Surgeon and Secretary. Salary, £100 per annum, with board and lodging. Applications on or before the 29th instant.
- ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road**—House-Physician. Applications to be made on or before October 2nd.
- ST. MARY'S HOSPITAL and DISPENSARY FOR WOMEN and CHILDREN, Manchester**—Medical Officer. Salary, £200 per annum, with board and residence. Applications on or before October 1st.
- STROUD GENERAL HOSPITAL**—House-Surgeon.
- WESTMINSTER HOSPITAL**—Physician and Assistant-Physician. Applications on or before the 28th instant.
- WEST NORFOLK and LYNN HOSPITAL**—House-Surgeon and Secretary. Salary, £100 per annum, with board, lodging, and washing. Applications on or before October 2nd.
- WEST SUSSEX, EAST HANTS, and CHICHESTER GENERAL INFIRMARY and DISPENSARY**—House-Surgeon. Salary, £80 per annum, and £20 per annum as Secretary, with board, lodging, and washing. Applications to be made on or before October 27th.—Assistant House-Surgeon to dispense. Salary, £20 per annum, with board, lodging, and washing. Applications to be made immediately.
- WORKSOP DISPENSARY**—Resident Surgeon. Salary, £100 per annum, with furnished apartments, coals, gas, and attendance. Applications on or before the 30th instant.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTHS.

- BARRIE**—On September 15th, at Elmhank, Dumfries, the wife of Andrew D. Barrie, M.P., C.M., of a son.
- NOAD**—On the 16th instant, at East Cowes Villa, Lower Norwood, the wife of H. Carden Noad, L.R.C.P. Lond., M.R.C.S. Eng., of a son.

MARRIAGES.

- BLYTHMAN**—Ellis—On September 20th, at Thrusmore, by the Rev. Arthur Blythman, brother of the bridegroom, assisted by the Rev. J. B. Ellis, brother of the bride, Clement S. Blythman, M.B., C.S., of Swinton, to Annie, only daughter of J. D. Ellis, Esq., of Thrusmore Hall, Yorkshire. No cards.
- McDOWALL**—Carlyle—On the 21st instant, at the Parish Church, Ryton, by the Rev. T. Finch, B.A., De. T. W. McDowall, Northumberland County Asylum, Merrieth, to Annie, eldest daughter of H. C. Carey, Esq., Lismore, Denmark. No cards.
- MACLAREN**—CAMPBELL—On the 15th instant, at St. Paul's Church, Carlisle, by the Rev. F. Richardson, Roderick MacLaren, M.D., to Isabella Emma, youngest daughter of the late Rev. Duncan Campbell, North Knapdale.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 6 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

TUESDAYGuy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY, St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.

THURSDAY ...St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.

FRIDAY.....Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.

SATURDAY ...St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with Duplicate Copies.

AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

CAPSICUM IN DELIRIUM È POT.

SIR,—In reference to the remarks of Mr. L'Heureux Blenkarne in the JOURNAL of May 8th, I beg to state that I have been in the habit of using capsicum in delirium tremens, with the best results. Many years ago, this treatment was recommended by Dr. Lyons of Dublin, who found it very beneficial; and, as I said before, I have frequently had recourse to it myself with success, after morphia, spirits of chloroform, chloral-hydrate, hyoscyamus, and digitalis, had failed to induce sleep. Dr. Lyons generally prescribed the powdered capsicum in twenty-five grain doses, made into a bolus with a little honey. This dose, though excessively pungent to the palate, as may be imagined, was always taken readily, and without any unpleasant after-effects. So convinced am I of the usefulness of this mode of treatment, that I now usually adopt it in the first instance, in preference to any other. Capsicum, like most plants of the order Solanaceæ, appears to act as a direct sedative when taken in large doses.—I am etc., OTHO GALGEY.

St. Vincent, West Indies, August 1875.

SIR,—I am sorry that, through ill-health and other private affairs, I have not been able to answer a query in one of your JOURNALS; I think a fortnight ago. It was about the dose of tinct. capsici in cases of "potomania", on which subject I have written several letters to *Land and Water*, under the head of "Tippling in Private Life". In one of these, I advocated the use of capsicum, as suggested in your columns in 1871 by Dr. Ringer. I gave a patient of mine in Boulogne the following prescription.

R. Tinct. capsici Siss. tr. aurant. Sij. syr ejusdem Svi. aquam ad 5vj. M. Fiat mist. A tablespoonful three or four times a day, as required.

I afterwards increased the dose of tinct. capsici to nearly double the strength of the original dose before my patient left for London, an altered man in every way; who, as I said in my letter to *Land and Water* of January 20th (same was copied into the columns of the BRITISH MEDICAL JOURNAL), "took to his bottle"—the capsicum one—whenever he felt inclined to indulge in the other sort of "nicture", and was quite well when last I heard of him.—I am, sir, yours faithfully, SIDNEY CHATER.

16, Rue des Vieillards, Boulogne-sur-Mer, September 15th, 1875.

G. H. D. inquires whether a gentleman, having served three years to a medical man previous to the passing of the Act enforcing the preliminary examination, would be exempt from passing the preliminary on producing certificate of same.

*. * No; certainly not.

"YE VAMPYRES."

SIR,—A "victim" wishes to warn medical gentlemen to be extremely cautious before they trust their hardly earned money in the hands of assurance or other companies, which require medical gentlemen to invest certain sums in order to obtain certain salaried appointments to the said companies. He can assure them that their investments sometimes end in more than disappointment. Trusting this will act as a warning to many, I am, sir,

A HATER OF ALL "VAMPYRES".

MR. A. BENDER (Dalston).—We do not recommend medical men. Mr. Bender had better consult any respectable practitioner in his neighbourhood, and avoid advertising quacks.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

MAUNSELL MEMORIAL FUND.

The following subscriptions have been received.

	£	s.	d.
Sir Wm. Jenner, Bart., per Dr. Rogers	5 5 0
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Subscriptions will be received at the office of this JOURNAL, or by Dr. Joseph Rogers, Dean Street, Soho, London.

It is the intention of the Council of the English Poor-law Medical Officers' Association to have a special meeting in London, in order to promote the Memorial Fund.

THE USES OF TEREBENE.

SIR,—I observe that two of your correspondents have drawn attention to the use of terebene as a deodorant in cancer and other cases. It may not, perhaps, be out of place for me, as having been the first to introduce this body into medical use, to supplement the evidence given by Drs. Wilson and Paine in its favour by a few facts which may be of some interest in connection with the subject. Although, as Dr. Paine points out, terebene does not mix readily with water, it is easily miscible with olive oil, with which it may be diluted to any extent, the combination thus produced forming a very convenient way of applying it for external purposes. For internal use it may be given in gum emulsion, to which a few drops of acetic acid may be added.

Your correspondents have drawn attention to the value of terebene for deodorising or disinfecting purposes, and any one who is interested in these applications of it can readily satisfy himself that their recommendation of it is well founded: my object in this communication is, however, to invite attention to its use for internal purposes, and especially as a substitute for salicylic acid. The number of the JOURNAL in which the letters of Drs. Wilson and Paine occur, contains a very full summary of the experiments of Wunderlich, Wagner, and others, on the therapeutic applications of salicylic acid, and it is curious how equally most of their statements would apply to terebene. Thus Wagner speaks of the effect of the former body in promoting the healing of atonic ulcers and wounds; terebene has been found to produce the same effect. He also praises the acid as a mouth-wash and gargle in offensive mouth-affections; a drop or two of terebene in a few ounces of water makes one of the most effective mouth-washes which can be desired. The effects of the two, when given internally, are apparently identical. Terebene, when given in doses of 5-10 minims, arrests more or less completely the putrefaction of the contents of the intestinal canal, the fæces becoming almost entirely odourless. Its power in this direction is especially marked, in offensive diarrhoea of some forms of peritonitis. In addition, it exercises somewhat of an astringent influence on the alimentary canal, which is in harmony with Dr. Paine's evidence as to its styptic powers. When given by the mouth, it passes off partly by the bowel, in an unchanged form; partly in an oxydised form, and with a characteristic odour, in the urine; and partly also, I think, by the pulmonary membrane—at least it seems slightly to promote bronchial secretion.

The above facts indicate that terebene, like salicylic acid, is especially applicable in cases of excessive intestinal secretion, accompanied with a tendency to rapid and offensive decomposition, such as that of dysentery and enteric fever, which the antiseptic properties of both of these bodies seem well adapted to check; though it is noteworthy that terebene, like salicylic acid, does not interfere with the fermentative process of digestion, which proceeds unchecked during its use.

I have not yet had an opportunity of getting terebene tried in diphtheria, but I feel satisfied that, from its analogies in other respects, it would be found to be equally effective with salicylic acid.

I may add, that I shall be happy to send a small sample of terebene to any of your readers who may wish to examine it.—I am, faithfully yours, Gloucester, September 1875. FRANCIS T. BOND, M.D.

DR. JOHN TATHAM.—Yes, report for 1874 received.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

THE TREATMENT OF CHLOROFORM POISONING.

SIR,—I should content myself with thanking Dr. Skinner in a private letter for his suggestions in reference to my case of chloroform poisoning, were it not that, in addition to criticising my treatment, he makes certain statements which seem to me both dangerous and erroneous; and I am therefore compelled to make some remarks, "in the hope", to quote his own words, "that humanity may profit by them."

His opinion that my patient was in an epileptic fit, and would have come to himself if left alone, is correct, but not, I think, correct. When attention was called to the lad's condition, the operation was nearly completed, the administration of chloroform was stopped; and, from the fact that the teeth were closed (not clenched), it is evident that the lad was not completely under the influence of the drug. The frothy mucus at the angles of the mouth was due to the temporary suspension of the act of swallowing. There was no convulsive action, and nothing whatever to justify the name of fit; indeed, he had struggled perhaps less than is common during the early stages of the administration, when the convulsive movements of a patient would often seem to partake somewhat of the nature of an epileptic attack.

Dr. Skinner says, in speaking of the treatment adopted, viz., that of inversion, that he should have preferred the horizontal position; but it is really not a question of objection or preference. As a matter of fact, no one would prefer to be hung up like a sheep by the heels; and both surgeon and patient would be sure to condemn such an obviously inconvenient method, unless it were superior to, in being safer than, any other plan. This is the very point to be determined, the point which both could and should be finally settled by experiments upon animals. All that we are able to say at present is that recoveries have taken place under the plan of inversion after a longer period of suspended animation than have taken place under any other method. Mr. Whitehead informs me that, since publishing the details of my case, he has had a very similar experience—circulation and respiration both abruptly closing in a patient whilst recovering from chloroform, the plan of Silvester adopted without success, but respiration almost immediately following inversion of the patient, though in his case artificial respiration was not continued when the patient was turned upside down.

But it is to another point in Dr. Skinner's letter that I especially wish to draw attention. He states that, inasmuch as the lad was not completely under the influence of chloroform, therefore there was no danger. "In chloroform-poisoning, as a rule," he remarks, "whenever there is muscular contraction or rigidity, I should consider my patient's life safe." Now, I fear if this statement were generally accepted, it would lead to the loss of lives in disabusing our minds of the presence of danger when anaesthesia is incomplete. The details of fatal cases, on the contrary, prove, beyond all doubt, that danger and death attend each and every step of the process. There is, so to speak, no point on the line where a return ticket is always procurable. I find, for example, that, in the years 1871, 1872, 1873, and the first half of 1874, about forty-five deaths from chloroform reported in the BRITISH MEDICAL JOURNAL; and of these, twenty died when insensibility was incomplete, several of them whilst in the act of struggling. Some died after vomiting, others in making efforts to vomit. Many died before the operation was begun; some few when it was over, and after animation had been partially restored. Some died gradually; in others, death was instantaneous. Let us not, then, dwell in a fool's paradise of safety in thinking our patient safe because he is kicking; but let us be prepared to encounter danger, and resort to treatment at any stage of the administration of chloroform; and surely it is not expecting too much to look for some authoritative decision upon the exact treatment which should be adopted when alarming symptoms appear.—I am, etc.,

Manchester, September 7th, 1875. S. MESSENGER BRADLEY.

DR. CROFT.—The midwives' chair is in common use at Cairo, and is carried from house to house when wanted, and is probably similar to the stools mentioned in Exodus, chap. i, v. 16. "And he said when ye do the office of a midwife to the Hebrew women, and see them upon the stools, if it be a son then ye shall kill him, but if it be a daughter then she shall live." A similar stool is used at the present time by the Germans, and by them is called the Geburtsstuhl.

THE KING'S EMBLEM.

In his *History of Advertising*, Mr. Sampson publishes the following announcement from the *Public Intelligencer* of May 1854: "Whitehall—His Sacred Majesty having declared it to be his royal will and purpose to continue the healing of his people for the evil during the month of May, and then to give over till Michaelmas next, I am commanded to give notice thereof, that the people may not come up to town in the interim and lose their labour." How passing strange that a people who had tried, condemned, and executed one king like any common man, should have put faith in such an announcement as the above.

DERMATOLOGIST.—A second edition of Professor Wilson's descriptive catalogue of the dermatological specimens contained in the museum of the College of Surgeons has just been published.

VERY AMAZING.

Two physicians in Quincy, Illinois, have been sued by a patient on whom they operated for hernia. The declaration states that the defendants conducted themselves in an ignorant manner, by unnecessarily, wantonly, improperly, and unskillfully performing a surgical operation on the body of the plaintiff, by cutting through the flesh of said plaintiff into the cavity and through the left lower region of the abdomen; and in an unskillful manner the defendants took and removed from the cavity of the abdomen of plaintiff twenty-five feet of bowels, by reason of which ignorance his recovery is greatly impeded. *Med. and Surg. Rep.*

SIR,—The letter signed William Hitchman, M.D., in your issue of September 4th, is in my opinion likely to mislead. The statute he refers to with regard to M.D. Edin. only relates to the simple ceremony of conferring the degree; and at Edinburgh, at any rate, no one is admitted to M.D. until two years after obtaining M.B.; and to obtain M.B. one year at the very least must be passed at the Edinburgh University.—I am, etc.,

Skipton, September 9th, 1875.

E. WEST SYMES, M.D. EDIN.

AN OLD MEMBER.—It was abolished a few years ago; prior to which the Presidents of the Colleges of Physicians and Surgeons of London received respectively, as members of the Vaccine Board, the annual honorarium of one hundred guineas.

A MEMBER will be pleased to receive, through the medium of the JOURNAL, any suggestions for the cure of an inveterate habit of biting finger-nails.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than Thursday, twelve o'clock.

DR. CHEYNE.

Sir, In connection with the printer's error in your issue of day reading "Dr. Cheyne, I venture to send you the following with passage of time between him and Dr. Winter, in the hope that it may serve as a diversion from the uncharitable nature of the process." At the time that Dr. Cheyne and Dr. Winter were the two principal physicians at Bath, they adopted very opposite modes of practice; but the former gave more credence to his prescription of milk-diet by making it the principal article of his own sustenance. On this occasion, Winter wrote him the following stanzas:

"Tell me from whom, fat-headed Scot,
Thou didst thy system learn:
From Hippocrates thou hast it not,
Nor Celsus, nor Pitcairn.
Suppose we own that milk is good,
And say the same of grass—
The one for babes and calves is food,
The other for an ass.
Doctor, one new prescription try
(A friend's advice forgive),
Eat grass, reduce thyself, and die,
Thy patients then may live."

Dr. Cheyne's answer:

"My system, Doctor, 's all my own,
No teacher I pretend;
My blunders hurt myself alone,
But yours—your dearest friend
Were you to blink and straw confined,
Thrice happy might you be;
Perhaps you might regain your mind,
And from your wit get free
I can't your kind prescription try,
But heartily forgive:
'Tis natural you should bid me die
That you yourself may live."

I have taken this from an old volume, published more than fifty years ago, and it may be authentic.—I am, your truly,
A. D. KEITH.
Craigweil, Ayrshire, Sept. 18th, 1875.

We are indebted to correspondents for the following periodicals, containing news reports, and other matters of medical interest:—The Bristol Daily Post; The Evening News; The Sheffield Post; The Metropolitan; The Blyth Weekly News; The Edinburgh Daily Review; The Glasgow Herald; The Western Daily Press; The Merthyr Telegraph; The Leighton Buzzard Observer; The Bristol Daily Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Sunderland Daily Echo; The Co-operative and Financial Review; The South Wales Daily News; The Macclesfield Courier; The Melbourne Argus; &c.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. H. Lee, London; Mr. W. Fairlie Clarke, London; Dr. A. Drummond, Birmingham; Dr. Payne, London; Dr. Kelburne King, Hull; Dr. Burchard, Berlin; Dr. J. Crichton Browne, Wakefield; Mr. O. C. Oliver, Cardiff; Dr. J. B. Bradbury, Cambridge; Mr. W. Cadge, Norwich; Dr. George Oliver, Harrogate; Mr. John Moir, Bristol; Dr. J. Meredith, Wellington; Dr. Chance, Sydenham; Dr. Bruce Goff, Bothwell; Dr. F. T. Bond, Gloucester; Dr. H. W. Hardwick, Sheffield; Mr. Joseph Bell, Edinburgh; Dr. Ferguson, Bolton; Dr. J. McKendrick, Edinburgh; Mr. George Hastings, London; Mr. E. Eastes, London; Messrs. Bernhardop, London; Dr. John Haddon, Manchester; The Registrar-General of Ireland; Mr. Samuel Bamford, Brighton; The Secretary of Apothecaries' Hall, London; Dr. J. H. Dalfour, Edinburgh; Dr. Richard C. Shettle, Reading; The Registrar-General of England; Dr. J. Hughlings Jackson, London; Mr. George May, Reading; Dr. Althaus, London; Mr. T. M. Stone, London; Dr. T. W. Grimshaw, Dublin; Dr. James Macaulay, Lancaster; Mr. Charles A. M'Nunn, Wolverhampton; Dr. G. E. Shuttleworth, Lancaster; Mr. F. Gordon Brown, London; Dr. James Hardie, Manchester; Dr. Oscar T. Woods, Killarney; Dr. W. Wade, Birmingham; Dr. Batty Tuke, Edinburgh; Dr. P. Heron Watson, Edinburgh; Dr. T. Claye Shaw, Leavenston; Dr. Stewart Lockie, Carlisle; Mr. H. C. Burdett, Greenwich; Mr. H. A. Caesar, London; Mr. George Rendle, Forest Hill; Mr. J. C. Roope, London; Dr. W. Druce, Oxford; The Secretaries of the Bath and Bristol Branch, Mr. T. Clarke, Doncaster; Mr. George Elger, Nottingham; Dr. J. Ward Cousins, Southsea; Mr. Arthur Gangee, Manchester; Dr. Sney Ringer, London; Mr. H. G. Howe, London; Dr. A. B. Steele, Liverpool; Dr. T. J. Vallance, Stratford; Dr. Matthew Miller, Glasgow; Mr. Robert Smith, Winchester; Our Dublin Correspondent; Mr. Wm. Tallack, London; The Dean of Charing Cross Hospital; Mr. W. H. Michael, London; Dr. John Branton, London; Professor Simpson, Glasgow; Dr. W. T. Gairdner, Glasgow; Dr. C. E. Underhill, Tipton Green; Mr. Wm. Hinds, Birmingham; Dr. C. E. Taylor, Nottingham; &c.

BOOKS, ETC., RECEIVED.

Cyclopedia of the Practice of Medicine. By Dr. H. von Ziemssen. Vol. 8. London: Sampson Low and Co. 1875.
Transactions of the College of Physicians of Philadelphia. Third Series. Volume 1. Philadelphia: 1875.

REMARKS

ON

THE TREATMENT OF ACUTE RHEUMATISM BY
TINCTURE OF THE PERCHLORIDE
OF IRON.*By J. RUSSELL REYNOLDS, M.D., F.R.S.,
Professor of Medicine in University College, London.

In the year 1869, at the meeting of this Association in Leeds, I had the honour to read a paper upon the Treatment of Acute Rheumatism by the Tincture of the Perchloride of Iron. The facts which I then recorded were such as to induce me to continue the mode of treatment which I then described, and I wish now to lay before you some further results of that mode of dealing with the disease in question.

You will allow me to remind you that the possibility of relieving acute rheumatism by the tincture of perchloride of iron was suggested to my mind by observing the rapid arrest of certain other "spreading" inflammations—such as erysipelas, diphtheroid and hepatic sore-throats—by the administration of this drug; and that I stated at the time, and wish now to repeat the statement, that, in my judgment, the cases that I could then bring before you, and those which I can now submit to your consideration, are not sufficiently numerous to establish a therapeutic position; but that they are, so far as I can see, sufficiently significant to warrant a further trial of a mode of treatment which is certainly better than that which Warren said was all that he knew of that was good for rheumatism, viz., six weeks.

In the front of this paper I wish to state, that very many cases that have been under my care, both in hospital and in private practice, but of which I have no sufficient notes, have left upon my mind the strong conviction that those which I am able to bring before you under-rate rather than overrate the value of the mode of treatment that I have suggested. This I am convinced is the case especially with regard to the time of the relief afforded to spontaneous pain.

The treatment has been generally the administration of the tincture of perchloride of iron, in doses varying from 15 minims to a drachm every four hours, with or without 20 to 30 minims of glycerine and spirits of chloroform. No patient has complained of any discomfort of any kind, which could be referred to the medicine.

The facts which I have to submit to you have been gathered by my very able clinical assistant in University College Hospital, Mr. Voelcker, from the case-books of Sir William Jenner, Dr. Wilson Fox, and myself. The cases are sixty-five in number, all treated by iron, and the general results are as follows. Hyperpyrexia occurred in 3 cases; was fatal in 2, relieved in 1 on the seventeenth day. A normal temperature was observed throughout in 2 cases; 1 presenting friction sound and systolic apex murmur, probably old. No heart-affection was observed in 27 of 52 cases. The joint-affection was severe in 18, of medium intensity in 16, and but slight in 5. The severity of the disease, as judged of by the temperature before the commencement of the iron treatment, may be represented thus, generally, that in 37 of 52 cases it was at or above 102 degs. Fahr.

Analysing these cases more minutely, I find the following results.

1. With regard to the date on which the temperature became normal after the commencement of treatment, that in 20 of 57 cases the normal condition was reached on or before the fifth day; in 26, *i. e.*, in 45 per cent., before the end of the first week; in 15, between the fifth and tenth day, *i. e.*, in 35 cases, or 61 per cent. before the tenth day; in 15, between the tenth and twentieth days, *i. e.*, in 50 cases of 57, before the end of the third week. The most important point to notice here is, that in 36 per cent. the temperature was normal on or before the fifth day after the commencement of iron treatment.

2. The date of the disappearance of all pain may be shown thus: in 2 cases on the second day, in 3 on the third, in 6 on the fourth, and in 4 on the fifth, that is to say that in 15 of 57 cases (22 per cent.) all pain had gone by the fifth day; in 14 other cases, the pain had ceased after the sixth and before the tenth day. This gives 29 of 57 cases, more than 50 per cent., free from pain on or before the tenth day. And further, 22 cases found relief between the tenth and twentieth days; *i. e.*, 51 of 57 cases were relieved of all pain within twenty days. Here, again, the principal point of interest is the earliness of the date upon which pain disappeared in a considerable number of cases.

3. The relation between the severity of the disease, as judged of by temperature elevation, and its duration after the iron was administered, may be thus exhibited in 52 cases. Under 101 degs. Fahr. of 15 cases, the temperature became normal in 7 during the first week, in 5 during the second week; at 102 degs., and between 101 and 102 degs. of 19 cases, the temperature became normal in 11 during the first week, in 2 during the second week, and in 9 during the third and fourth weeks. In 14 cases when the temperature was 103 degs. at the commencement of treatment, 4 convalesced in the first week, 4 in the second, 5 in the third, and 1 in the fourth. Of 4 cases in which the temperature was 104 degs. when the iron was first given, 2 presented a normal heat in the second week, and 2 others in the third.

The result of this examination may be most correctly exhibited by dividing the cases into two groups, those in the first having a temperature ranging from 99 to 101 degs., those in the second group varying from above 101 to 104 degs. Of the first group, 15 in number, 46 per cent. convalesced during the first week; of the second group, 37 in number, 40 per cent. attained a normal temperature within the same period. It is obvious from these facts, that the duration of fever after the administration of iron was not determined, and but only slightly affected (6 per cent.) by the degree of fever which had been previously attained. In other words, it was in severe as well as in moderate and mild cases, that the beneficial effects of treatment might be observed.

4. The degree to which the condition of the heart affected the duration of fever in cases of acute rheumatism, may be shown in 52 cases; thus, in 21 cases the heart was healthy throughout, and of these, 10 convalesced within five days, and 6 between the fifth and tenth days; whereas, of 31 cases with endocarditis, pericarditis, or the two combined, but 9 reached a normal temperature on or before the fifth day, and 6 between the fifth and tenth days. Further, of those 21 cases in which the heart was healthy, five only presented an abnormal temperature beyond the second week; while of those 31 in whom heart-disease existed, 16 remained feverish beyond that period. Representing these facts by calculations per cent., they stand thus; that when there was no cardiac affection the temperature was normal before the tenth day in 76 per cent., and when there was heart-disease only 22 per cent. convalesced during that period. It may be interesting further to know, that of these 52 cases, 16 presented endocarditis alone, 7 pericarditis alone, and 8 endopericarditis.

From this it is obvious, that the presence of cardiac affection protracted the duration of the fever, and, *pro tanto*, diminished the beneficial action of the drug.

5. The influence of the severity of the joint-affection upon the duration of the abnormal temperature may be exhibited in 39 cases. In 18 the severity was great, in 16 medium, and in 5 inconsiderable. Of the 18 severe cases the temperature became normal within the fifth day in 4, between the fifth and tenth days in 5, between the tenth and fifteenth in 4, and between the fifteenth and twentieth in another 4; and, in one case, it was not reduced to 98.4 until the thirtieth day. In 21 cases of medium or slight severity, the temperature was normal in 7 before the fifth day, in 8 between the fifth and tenth days, in 3 between the tenth and nineteenth days; in 2 medium cases it remained elevated until the twentieth day; and, in one mild case, the fever continued until the thirtieth day.

Representing these facts by percentage, they show that in severe cases the temperature became normal before the tenth day in 50 per cent.; and that it was normal in moderate and slight cases in 71 per cent. by the same date. Or, separating those of medium severity from those of but slight joint affection, we find the temperature normal before the tenth day in extreme cases in 50 per cent., in moderate cases in 68 per cent., in mild cases in 80 per cent. Remembering that, as a rule, endo- and pericarditis are more frequently found in cases of severe than of but slight joint affection, the facts that I have stated cannot, I think, be referred to the mere chapter of accidents. I do not remember to have seen under other modes of treatment one half of the cases of severe acute rheumatism, presenting a normal temperature within fifteen days from the commencement of treatment.

6. The length of the persistence of pyrexia after the commencement of treatment by iron in relation to the day from the attack at which such treatment was begun, is somewhat curious. No case was treated before the third day of the attack; and of those which were treated within the first week, 23 in number, 10 presented a normal temperature before the seventh day, 8 before the end of the second week, 1 in the third week, and 4 in the fourth. Of those, 15 whose treatment did not commence until the second week from the date of attack, 5 presented a normal temperature within seven days, whereas abnormal heat remained in 8 until eight and twelve days from the administration of the iron. It is interesting to note that in two cases, each of whom had suffered for

* Read in the Medical Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

longer than three weeks before the medicine was given, this temperature became normal in one on the second day, and in another on the third. Of 45 individuals, including extreme cases, the mean duration of fever after giving iron was eleven days; and this was so in each of two groups, one of 25 in whom the treatment was commenced before the seventh day, and in the other, of 20 cases who had undergone no treatment until after that date. The point of importance lies in the fact that although, when treated within the first week, 43 per cent. presented a normal temperature within seven days; and that when the treatment was not commenced until the second week, 33 per cent. lost their fever during the same period, it is not warrantable to conclude that the date at which the case was taken into hand alone determined the duration of the malady, for in two cases which had resisted other treatment for a period of three weeks, relief followed the administration of iron, and the temperature became normal within three days.

7. The relation between the number of attacks which the patients have suffered, and the duration of abnormal temperature may be thus shown in 55 cases: 20 were in their first attack, and, of these, 13 lost all fever within the first week; 9 within the first five days; 19 were in their second attack, and of these 7 were of normal heat within six days; 6 were in their third attack, and of these 3 presented a normal temperature within five days. Or, putting it another way, of those who were in their first attack, 44 per cent. were convalescent within the first week, while of those who suffered in their second, third, or fourth attack, 42 per cent. recovered within the same period.

It is obvious from these facts that so far as iron treatment is concerned, it is a matter of indifference whether the patient be suffering in a first, second, or third attack.

In several cases I have observed a remarkable diminution in the frequency of the pulse at and after the time at which the temperature has become normal; thus it has been as low as 40, 30, and even 28, but regular in rhythm and force, and the patients have made no complaint of pain or faintness.

I have purposely stated the facts already in my possession, in a bald manner, and have avoided all theory with regard to the treating, that at some future meeting of this Association I may be able so to increase their number as to be able positively to answer the question as to the utility of treating acute rheumatism in the manner I have described.

SACCULATION OF, AND STONE IN, THE BLADDER.*

BY W. CADGE, F.R.C.S.,

Surgeon to the Norfolk and Norwich Hospital.

I DESIRE in this communication, as briefly as I can, to direct the attention of the meeting to the combination—I may say the unhappy combination—of stone in and sacculation of the bladder, chiefly with reference to operations for the removal of the stone, and especially to the risks of lithotripsy in such cases. I do not allude to ordinary cases of encysted stone—cases which may occur in the young as well as in the aged—in which probably there is a single cyst, which may, and very likely have, been caused by the presence of the stone itself. These cases are fully described in surgical works; they are happily rare in practice, and each one must be dealt with, or left alone, according to the judgment and skill of individual surgeons. I allude rather to those cases of sacculation of the bladder which occur chiefly in the aged, or in those who have experienced continued obstruction to the outflow of the urine, whether from stricture of the urethra, from enlargement of the prostate gland, or from other causes. The mode of formation of these sacculi is well understood and easily explained. The impediment to the escape of urine necessitates increased expelling power on the part of the bladder; this leads to hypertrophy of the muscular walls and interlacing columns; the equal pressure of the fluid in all directions forces the mucous membrane, which is capable of great distension, into the spaces between the interlacing muscular columns; and in this way sacculi of every size, shape, and character are accounted for, from the simple recess between the muscular columns to the perfect hernial protrusion through the entire muscular wall, in which there is no covering to the sac except the peritonium. Muscular hypertrophy of the bladder, as of the heart, may exist under two conditions, simple hypertrophy, or hypertrophy with dilatation. The former is seen most frequently in cases where the obstruction is due to stricture, where the patients are of middle age, and in the possession of fair vital power; the latter, in the aged, whose enlarged prostate is the

impediment, whose vital power is on the wane, and in whom the bladder is apt to exhibit atony or even paralysis. In simple hypertrophy, the result of stricture, sacculation is far less frequently met with than where there is a dilated bladder from prostatic obstruction. In the latter case, judging from my own observation in *post mortem* examinations and of specimens in museums, sacculation of the mucous membrane exists in the majority of cases.

Given, then, such a sacculated condition of bladder, let us inquire what may happen when a calculus passes into it from the kidney. From the impediment to the escape of urine which always exists in these cases, the stone is very likely to remain in the bladder and increase in size. It may pass at once into one of the sacs, remain and grow there, and cause the symptoms characteristic of encysted stone; or it may not, and I believe, as a rule, does not, at first enter a sac, but remains free in the bladder, and causes the usual symptoms of stone with which we are all familiar.

Then comes the question of operation. The patient either submits to lithotomy, in which case he would probably recover as if no sacculation existed; or to lithotripsy, in which case some of the small fragments or *débris* will be very likely to find entrance into one or more of the sacs, and lead either to immediate fatal inflammation extending to the peritoneal membrane, or to prolonged incurable cystitis, recurring stone, and ultimate death. These chronic and deplorable results, however, do not manifest themselves at once; the present and immediate effects of the operation are satisfactory. The mass of the stone, excepting only a few imprisoned pieces, being well removed, the bladder is for the time happy and comfortable; the symptoms almost disappear; only a slight irritability remains, which is attributed either to the enlarged prostate or to the effects of the frequent recent use of instruments; the patient goes home; and the case swells the lists of triumphant successes of lithotripsy which now and then appear in the medical journals. If you scrutinise these lists of successful cases, you will find a not inconsiderable number described somewhat in this way: "A gentleman, aged 70; six sittings; all the stone removed, but some irritability of the bladder remaining." Now, in many of these cases—these so-called "successful" cases—I believe that some fragment has entered one or more of the numerous sacculi, and keeps up the irritability; that by degrees it increases in size, and projects into the cavity of the bladder, and is again met with by the sound, and is probably reduced in size by the lithotrite, and the patient's condition is for a time improved. But the imprisoned stone can never be removed (or but very seldom) from the cyst; it soon sprouts up again into the cavity of the bladder, to be again attacked by the lithotrite; and so the process goes on, until the patient is worn out by continued suffering and repeated operations. No one, I apprehend, will deny the truth of this picture; but it is said that such cases are very rarely met with. Is it so? I have looked closely through my own cases, and, finding half a dozen at least in which this accident (if I may call it so) has occurred, the conviction is strong in my mind that it is of more frequent occurrence than writers on lithotripsy have been willing to allow. It is probable that provincial surgeons, who draw their cases mainly from their own neighbourhood, are better able to trace the subsequent history of their patients than those who practise in London; and to them, therefore, we must look for a note of warning, such as that which I am now attempting to give.

Permit me to illustrate these points by briefly narrating a few cases.

CASE I.—In 1868, a Jewish gentleman, aged 64, from Yarmouth, consulted me for stone in the bladder. For four or five years, he had had chronic prostatic retention, and passed all his urine by the catheter. For some months, he had experienced sharp symptoms of stone, in addition to those of enlarged prostate, with cystitis. I examined him with a lithotrite, and found that there was more than one stone, the largest of which measured seven lines. After four or five sittings, in which the stone was well broken, and the fragments removed partly by repeated introduction of the screw-scoop, and partly by Clover's exhausting syringe, all the stone appeared to be gone, and the symptoms were greatly improved. Very soon, however, the cystitis returned; small atoms of phosphatic stone began to escape through the large eye of a large catheter; and in a month or two I was enabled, after several vain explorations, to detect a stone, which then, and always afterwards, appeared to be fixed and encysted at the lower and right side of the bladder. At first, it was very difficult to find this stone, or rather the small point of it which projected through the mouth of the sac; but by degrees it grew up into the bladder, and was from time to time attacked by the lithotrite; that is to say, it was broken off level with the aperture leading into the sac, and the loose pieces removed. For nearly two years I did this for him at frequent intervals, and his condition was one of persistent cystitis. He is still living; and his surgeon, Mr. Meadows, I believe, carries on the same

* Read at the annual meeting of the East Anglian, Cambridge and Huntingdon, and South Midland Branches, at Cambridge.

treatment, though at longer intervals, and with less cystitis. The future of this patient must be one of recurring stone and persistent misery. Could I have told that his bladder was sacculated, and had subjected him to lithotomy, he would probably have recovered and remained well afterwards.

CASE II.—In August 1868, I admitted a man aged 63 into the Norfolk and Norwich Hospital, who had undergone five or six sittings of lithotripsy by a surgeon in the country; the last, six weeks before admission. He had voided a good deal of calculous *débris*; but he had still acute vesical pain and tenesmus, with foetid alkaline urine and mucopurulent deposit. I found, on examination, a very tender, hard, distended bladder, having a few small pieces of stone lying loose in it. I gently crushed these pieces once or twice, and ordered the bladder to be emptied by a flexible catheter occasionally; but his sufferings continued unabated, and he died worn out by pain in a month or so. *Post mortem* examination showed a thickened bladder, having numerous sacculi, one large enough to hold a walnut, in which were found two considerable pieces of stone. The mucous membrane was everywhere rather dark-coloured, and covered with pale tenacious mucus; but the inflammation was most acute, and the colour darkest, in and around this sac. There were several small fragments of stone still in the bladder; some of these appeared to be fixed, as it were, in little recesses or commencing sacs of the mucous membrane, and retained there partly by the hypertrophied muscular columns, and partly by the tenacious mucus, which seemed to glue them to the membrane. In this case, it is clear that, even had the cystitis not proved fatal, he would ever after have suffered from encysted stone; and it is equally clear that his best chance of recovery would have been from lithotomy.

One other similar case deserves mention.

CASE III.—Captain B., aged 70, came to Norwich in July 1868, from Brighton, for treatment, under the following circumstances. In August 1865, a lithic acid stone was crushed repeatedly by an eminent lithotritist in London. Recovery was nearly complete; he was supposed to be cured, and returned home to Brighton. In a month or two, however, the symptoms returned, and he consulted another distinguished lithotritist, who examined him, and could find no fragment. I mention this because, although these two distinguished surgeons could find no stone remaining, he not unfrequently passed pieces of lithic calculus then and for some time after, showing that, in all probability, these pieces occupied pouches or small sacs of the mucous membrane, and so eluded their practised touch; and yet, under favourable circumstances, they were occasionally discharged. After a time, cystitis came on, with severe suffering; the urine became fetid and alkaline; the bladder lost its tone; and the catheter became necessary three or four times a day. This was his condition when he came under my care. For months he had been treated by homœopaths, who attributed all his distress to enlarged prostate. I examined, and found a phosphatic stone of no great size, fixed and apparently embedded in the lower and right side of the bladder. It seemed very improbable that a permanent cure would result from a repetition of lithotripsy. It had already failed in very skilful hands, and when the bladder was fairly healthy. Now, when the bladder was unable to empty itself, and was chronically inflamed, there seemed less chance of a good result. Moreover, the patient was tired of the plan, and there was clearly either an embedded or an encysted stone. I therefore performed lithotomy. Owing to the large size of the prostate gland, the forefinger could barely reach the bladder. After some trouble, several portions of rough phosphatic stone were removed. I then became aware that there was still an encysted stone on the right side of the floor of the bladder, behind the prostate. I could just reach it with the finger-nail; but by no device could I dislodge it by a scoop, or seize it with forceps. By pushing a stick-sponge, well oiled, far into the rectum, and hooking the bladder forcibly towards the perinæum, I have once or twice been enabled to remove an encysted stone, but could not in this case. Sometimes the searcher would not touch it, and the bladder would feel empty; then again it became evident; but finally I was obliged to desist, as it was not prudent to do too much to his diseased bladder, and in his enfeebled state. He slowly recovered from the operation; and slowly too, but very surely, came back the symptoms of stone. This gentleman lived nearly four years after the operation I have just described; and these years were years of continual distress, of the constant sprouting up of stone from the encysted portion, and the frequent use of the lithotrite to break off and remove that which was removable. But at length he yielded, and died from exhaustion; and again the only remark I can offer is that, had his stone been fortunately removed at first by lithotomy, he would in all likelihood have been spared all his after-misery, and enjoyed a longer term of life and health.

I said at the outset of my remarks, that sometimes fragments of

stone passed into the sacculi, and produced rapid fatal peritonitis. Let me mention two cases in point.

CASE IV.—In October 1866, a feeble white-haired man of 76 was admitted into hospital with severe symptoms of stone. His prostate was large; he could retain water about two hours; the urine was alkaline, specific gravity 1008; no albumen; some mucus and phosphates. I measured the stone, and found it one and a quarter by three-quarters of an inch. This examination, short and gentle as it was, caused a rigor; which, however, passed off and did no harm. In a few days, I crushed the stone. The operation was simple enough, and did not occupy two minutes. Cystitis, however, followed in a day or two, with much pain and vesical tenesmus, and with the deposit of much pus in the urine. There were also abdominal pain and tenderness, but no tympanitic distension. His strength gradually failed, and he died fourteen days after the operation. After death, I found signs of general peritonitis, and a large effusion of lymph, particularly in the pelvis. The bladder was rather small, with thick muscular walls. The mucous membrane was deeply injected. A large sac existed at the lower and right side, larger than the bladder itself; the aperture of communication would just admit the tip of the forefinger; its walls consisted simply of mucous membrane and peritoneum, and were dark-coloured and almost sloughy. It was from this part that the fatal peritonitis commenced; some fragments of stone were found in it. An oval stone, partially broken, was lying free in the bladder. The prostate was enlarged to four times its usual size. The ureters were dilated and inflamed; and the kidneys were coarse in structure, and unhealthy.

CASE V.—The other case was very similar, and occurred almost at the same time. The patient was a feeble pale-faced man, aged 75, admitted November 1866, with symptoms of stone, increasing in severity. He voided water every hour or hour and a half, with much straining and pain. There were proofs of the presence of more than one stone; but they were small. The prostate gland was not much enlarged. I broke one of the stones. The bladder was quiet; and the operation was easy, and apparently satisfactory. Cystitis, however, ensued, and was followed by abdominal pain and fulness. He became gradually exhausted, and died fifteen days after the operation. Peritonitis was found, chiefly on the right side of the abdomen. The bladder held about half a pint. There was hypertrophy of its muscular wall, with prominent interlacing columns. The mucous membrane was much injected and inflamed. Sacculi were present everywhere; some large enough to hold a walnut; others, a horse-bean. In one or two of the larger ones, the mucous membrane was almost sloughy, and formed the starting-point of the peritonitis which caused death. Three small stones were found in the bladder, one of which was thoroughly broken, while some of the fragments had passed into the inflamed sacculi.

These two cases exhibit the disastrous results of lithotripsy where sacculi exist. Beyond question, these patients would have had a better chance of recovery if lithotomy had been performed; but, as I have said, they were feeble old men, not well fitted to undergo so serious an operation for the removal of stones which, so far as regards their size, were confessedly within the reach of lithotripsy.

I could easily report other similar cases, were it necessary, and did time permit; but when five such instances occur in the practice of one surgeon in the space of two years, it shows, I maintain, that such cases are not so rare as they have been supposed to be, and that the risks of lithotripsy from this cause in old men with prostatic obstruction are real and positive.

I hope it will not be thought that I am seeking to throw a stone at lithotripsy—an operation which I deem to be one of the most splendid contributions of modern surgery, and which I find myself adopting in practice more and more. By overstating the merits and advantages, and understating the drawbacks and risks, of any mode of practice, we retard rather than advance its progress, and tend to bring it into ultimate discredit.

It will naturally be asked, How can this state of sacculation of the bladder, with or without stone, be recognised during life? It must, I fear, be admitted that the indications are few and unreliable. By noting that a man, having an enlarged prostate, makes water slowly and with considerable exertion; that, when a catheter is used, and after the bladder is apparently emptied, there is still a further flow; and particularly if the appearance of the urine during this double flow vary considerably,—we may infer that cysts or sacculi do exist, although we cannot surely know it. What I desire is to show that sacculation does frequently occur; that it is a real danger and drawback to lithotripsy; and that, by remembering this, we may, in those doubtful cases in which a difficulty is felt which operation to select, feel inclined to give the preference to the old rather than to the new practice.

ON AUSCULTATION OF THE ŒSOPHAGUS.*

By T. CLIFFORD ALLEBUTT, M.D.,
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DISEASES of the œsophagus often prove somewhat difficult of investigation, and it is not likely that we shall ever succeed in bringing this tube within the range of vision, as we have brought the larynx, the inner eye, and even the cavity of the bladder. Diseases of the œsophagus, moreover, even when benign in character, have a peculiar terror in the peril of starvation which threatens the sufferer. Any help, then, which we can obtain either in our diagnosis or our treatment of disease in this part, should be carefully cherished; and for this reason I venture to bring before you a means of diagnosis which, in my opinion, has been unduly neglected. The only means used in cases of alleged disease of the œsophagus are the catichising of the patient and his friends, and the exploration of the tube with the sound; and not infrequently this latter cannot safely or judiciously be employed; in which case we are wholly dependent upon more general clinical observation and inquiry. The method of auscultation of the œsophagus which I have found to be useful is especially useful in cases of this kind, and will tell us much that we could not otherwise discover with any certainty. Nevertheless, I do not find that auscultation of the œsophagus is commonly practised. Nay, I cannot call to mind a single consultation in a case of this kind where the patient's medical attendant had used auscultation, or had even heard of it before I pointed it out to him. Nor, again, in the ordinary text-books on medicine do I find any allusion to auscultation of the œsophagus; nor is it described in special treatises on auscultation. So far as I know, the only systematic account of the method is to be found in the papers of Hamburger, which appeared in the *Österreichische Medicin. Jahrbücher* for 1867-8-9. My own initiation into the plan was through these papers; but whether Hamburger was the first to introduce it into practice, I know not, nor in this place does it much matter. During the six or seven years that I have tested Hamburger's statements, I have found that, although there is much exaggeration, inaccuracy and whim in his way of putting them, nevertheless, after all deductions, there remains a solid residue of valuable observation.

The method of auscultation of the œsophagus depends upon the audibility of the swallow both in the neck and thorax. It is best, of course, to educate the ear at first upon a healthy subject. The subject is requested to take a mouthful of water, and to swallow it at a signal. The operator then places the stethoscope (Sibson's stethoscope is the best for the purpose, I find, but any stethoscope will do) first upon the trachea anywhere between the hyoid bone and the supraclavicular fossa. The signal being given, the patient now swallows; and, as he does so, a very distinct resonant gurgle is heard at the place of the stethoscope. This sound, which is very loud at the hyoid bone, where the water is as it were slung through a tube into the observer's ear, becomes duller as the instrument is removed to deeper parts of the neck. Below the cricoid cartilage, the sound is more heavy or solid in character, and the morsel is as it were shoved downwards with a whiz. To examine the lower part of the œsophagus, the instrument must be removed to the spine, and must be carried down the left side of the spines of the first eight dorsal vertebrae. Here the sound is still more distant, though still very distinct, and is like a smooth body slipping through with a sort of cluck.

By repeated observations upon the healthy subject, the operator must make himself thoroughly familiar with the tone, with the apparent size of the morsel, with the energy of the œsophageal contraction, with the rapidity of it, and also with the direction of the morsel. The rapidity of the passage of the morsel is ascertained by putting the instrument over the cardiac orifice while a finger is placed upon the larynx. The moment of commencement of deglutition is known precisely by the rise of the larynx; the moment of its completion is recognised by the ear. The rate of the swallow varies a little in individuals, and is generally distinctly slower in weakly persons at all times, and in healthy persons after a prolonged meal. The direction of the swallow may be reversed, as in regurgitation. In this case, the gulped fluid eddies as it were in a funnel with a prolonged resonant gurgle; or the direction of the swallow may be diverted, as in one case under my notice, where the œsophagus was perforated, and the matters escaped into the pleural cavity. Hamburger had more than one case of the kind; and he prepared me to recognise this condition, which was quite easy when one was thus forewarned. The small quantity of diverted fluid passed through the chink in the œsophagus with a kind of sizzling murmur. Pyopneumo-

thorax of course was present as a consequence, and there was thereby a metallic quality added to the tone. Or, again, while the swallow still runs in the tube, it may be heard to cross the vertebral column, and to appear on the right side only for a greater or less distance. Hamburger relates a case of this kind, in which it was found, after death, that the œsophagus had been pushed over by an aneurism of the descending aorta. The swallow was in no way interfered with, so that it seems desirable to auscultate the œsophagus as a routine in cases of suspected aneurism of the descending aorta. The energy of the swallow must be considered apart from its rapidity. In cases of dilated œsophagus, the fluid may pass the tube quickly enough; but the absence of energy of contraction is known by the want of grasp. The fluid passes down the tube with a squirting or running sound, not as though slung in a piece. It must be remembered, however, that in obstruction at the cardiac orifice, the accumulation of mucus may, and often does, modify or prevent the usual sounds for some five or six inches above the seat of the disease. In tender places, as in ulcers of the œsophagus, Hamburger says that the morsel may seem to stick or recoil. My own experience does not enable me as yet to speak decidedly on this point. It sounds to me rather like an over-refinement. So, again, with the rubbing or friction-sounds in inflammation of the tube, which I certainly have never been able myself to detect. But the tone of the swallow, on the other hand, is changed in quality by the presence of rough ulcers and the like on the inner surface of the tube, so that it becomes deadened; though the more common and more easily known result is the prolongation of the morsel. It is, indeed, the prolongation of the morsel which, more than all other changes, has caught my own ear. Almost all changes in the inner surface of the tube may be regarded as diminutions of its calibre, and as checks to its peristalsis: so that, where disease exists, be it ulcer, be it contraction, be it tumour, we hear there a slackening of the rate at which the morsel is slung downwards, and a prolongation of the morsel itself. It tails off and slackens as it passes by. If the stricture be tighter, the morsel, when it reaches the spot, eddies through with a creak, or even with a squeak. If the stricture be tighter still, we hear the resonant regurgitation of which I have already spoken.

After thus describing the changes in the swallow readily to be heard in the various states of disease, I need not stay to point out how valuable these signs must prove in the consulting-room. My hearers will be astonished, when they put it to the test, how readily they will spot the exact site of an organic stricture, and how easily they may prove the nervous nature of a dysphagia which causes no stethoscopic disturbances in the swallow. Time will not allow me to read notes of the numerous cases in which I have found œsophageal auscultation of value; but among the best of them are many in which the absence of organic stricture was thus almost proved, to the infinite satisfaction of timid patients and their timid friends, who shrank in fear from the name of the sound; while in others the unmistakable signs of a local stricture have forbidden us to nurse any hopes of a spasm which might pass away. For spasmodic dysphagia is unknown to the stethoscope.

SYME'S OPERATION MODIFIED AND IMPROVED BY SAVING THE PERIOSTEUM OF THE OS CALCIS.

By JOSEPH BELL, F.R.C.S.Ed.,
Surgeon to the Edinburgh Royal Infirmary.

PIROGOFF's operation is by some preferred to Syme's, as it leaves, or is said to leave, a more useful stump, while at the same time it avoids the difficult and tedious dissection of the soft parts from the os calcis.

A plan I have used for some three or four years, and practised in ten cases, will, I believe, be found to give the advantages promised by Pirogoff's method, and yet to avoid the risk of recurrence of disease of bone in the portion of os calcis left in Pirogoff's operation.

It is a very simple and slight modification, and consists in leaving attached to the flap the periosteum of the posterior part of the os calcis, and instead of dissecting the soft parts alone off the bone, stripping along with them the whole periosteum. In the case of amputation for disease of tarsus in children, this is done with the most perfect ease. It adds to the chance of vitality of flaps, diminishes the risk of sloughing and number of vessels to tie, and gives the most excellent results. Especially if the patient be encouraged early to move his flap by means of the tendons which soon take on new adhesions, we find that a considerable power of moving the heel flap over the end of tibia is saved, and, in some cases, a deal of new bone is formed from the periosteum. So much so is this the case, that in

* Read before the Medical Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

one patient on whom I operated in 1874, it was hardly possible to persuade those who saw the stump, that it was not a portion of astragalus which had been left, with the integrity of the ankle-joint preserved. As all the cases in which I have practised this modification have survived and been successful, I have not found any objection to it, nor had the opportunity of making any *post mortem* examination.

One case had to be taken down about the fifth day for secondary hæmorrhage from the posterior tibial, yet I did not find that the presence of the periosteum implicated in any way the subsequent secondary union of granulations which healed the wound.

ON THE TREATMENT OF BROKEN-NOSE BY FORCIBLE STRAIGHTENING AND MECHANICAL RETENTIVE APPARATUS.*

BY WILLIAM ADAMS, F.R.C.S.,
Surgeon to the Great Northern Hospital, etc.

THE treatment of broken nose is a subject which does not appear to have sufficiently attracted the notice of the profession, although the importance of the accident to the patient in producing a permanent and conspicuous deformity, as well as in many cases interfering with the voice and breathing, is very great.

It has been too generally supposed that no permanent benefit can be derived from treatment; and in the cases which I propose to describe, nothing whatever had been done, although high surgical authorities had been consulted. It occurred to me, however, that, by the operation of forcibly straightening the nose under chloroform, and afterwards employing some retentive apparatus, varying according to the nature of the case, much good might be done, and in some instances the deformity entirely removed.

All cases of so-called broken nose may be divided into two classes: viz., 1. Those in which the injury is limited to the anterior or cartilaginous portion of the nose, and consists essentially of depression, with lateral bending of the cartilaginous septum; a partial displacement of this septum from its attachment to the vomer also occurring in many cases. 2. Those in which the nasal bones are fractured, in addition to depression and displacement of the cartilaginous septum from the vomer. Several examples of both these forms of injury have fallen under my observation in private practice, but all the cases, with one exception, in which I have been consulted, have been at periods varying from one to six months after the accident. In one case, however, that of a young lady eleven years of age, the accident occurred six years previously in a fall down a sloping bank, forty feet in height.

In all these cases, the principle of treatment which I have adopted has been, whilst the patient is under chloroform, to straighten the bent cartilaginous septum, and bring it into a direct line with the vomer, using for this purpose a pair of strong forceps, with flat parallel blades, represented in Fig. 1; and, when the nasal bones are depressed, to raise these also, by carrying the blades of the forceps directly upwards. In some cases the two blades, when closed, may be forced up each nostril, under the lower portion of the nasal bones, and lateral pressure may be made externally by the thumb, at the same time that the bones are raised from within. This was done in the second case reported—that of C. R., in which sufficient force was employed to refracture the left nasal bone.

After this operation of forcibly straightening the nose, I employ a retentive apparatus, consisting of the steel-screw compressor, represented in Fig. 2, which is applied so as to support the septum, one blade

(a) being introduced into each nostril, and the screw (b) tightened just sufficiently to hold it in position, and bring the blades into contact with the septum, but without making any pressure upon it. This apparatus can be worn for two or three days and nights without removal. After this, I introduce the ivory plugs represented in Fig. 3, which the pa-



Fig. 2.—Steel Screw Compressor.

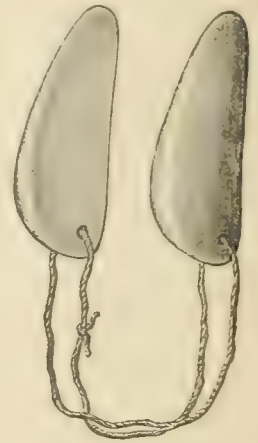


Fig. 3.—Ivory Plugs.

tients can remove at pleasure, and reintroduce, so that both nostrils are kept moderately distended, and support given to the cartilaginous septum.

It would not be possible to support the nasal bone by any plug introduced in the upper part of the nasal cavity, from its small size, and the sensitive character of the lining membrane. When the nasal bones have been fractured, I have employed a retentive apparatus externally,



Fig. 4.—Nose-Truss, with Screw-Pads.

by means of a pad adjusted by cog-wheels, and attached to the front part of a steel band passing round the head, forming a kind of nose-truss, if it may be so termed. This apparatus is represented in Fig. 4, and was first used in the case of C. R., and found to answer extremely well. This truss can be worn day and night for two or three weeks, according to the extent of the injury, and in the case above referred to was worn for a still longer period.

The operation of forcibly straightening the nose does not require to be repeated, except in cases of great severity; but it may in some instances have to be repeated once or twice before the deformity can be rectified, the retentive apparatus being afterwards employed. When the nose has been straightened, I have not found that there has been any disposition to relapse of the deformity: the nasal bones and the cartilaginous septum retain their improved position and relations the more readily, as they are not subjected to any muscular influences tending to cause displacement.

Although I have not had the opportunity of applying the treatment above described at an earlier date than a month from the accident, there can be no doubt that its employment would be more easy and effectual in proportion to the early period at which it was adopted after the accident; but, should there be much swelling and ecchymosis, it would be advisable to wait until these had subsided, and in a week or ten days the treatment by forcible straightening and retentive apparatus could be employed with every probability of success. In recent cases, however, it may not always be necessary to employ any retentive apparatus.

* Read before the Medical Society of London.

The first case which came under my observation, and was submitted to treatment by forcible straightening, was one belonging to the series described in the first class.

CASE I. *Depressed and Bent Cartilaginous Septum of the Nose rectified by Forcible Straightening, on Monday, 12th of July, 1861.*—L. I., aged 16, was brought to me on the 12th of July, 1861. He had received a blow on the nose a month previously from a cricket-ball at Eton, and two surgeons who had been consulted considered that nothing could be done. The external deformity was slight, consisting of a depression a little above the tip of the nose, at the junction of the cartilage with the bone, with some lateral inclination of the former; but since the accident the voice had become completely altered, and the breathing through the right nostril much interfered with.

On examination, I found the right nostril obstructed by the cartilaginous septum, which had been bent by the blow from the cricket-ball, and now projected into the cavity of the nostril, so that a probe could not be made to pass through it. The cavity of the left nostril was much enlarged, by the depression and bending of the cartilaginous septum into the right nostril. Considering all the circumstances of this case, I advised that some attempt should be made to straighten the septum, in the hope both of rectifying the deformity and restoring the voice, and in both these respects the result was successful.

On the following day, consent was given by the parents, and I gave instructions to Mr. Blaise of St. James' Street to prepare the forceps, screw-compressor, and ivory plugs, which are represented in figs. 1, 2, and 3.

On July 16th, the first attempt to straighten the septum was made, with only partial success, in consequence of the patient not being allowed by his father to take chloroform, and the pain and sneezing rendering it impossible to proceed. The steel screw-compressor was, however, worn for three days and nights, and afterwards the ivory plugs were used with as little intermission as possible. This did not cause much pain or inconvenience, and the improvement was very decided, although incomplete. Consent to the administration of chloroform was now obtained; and on July 30th I repeated the operation, the chloroform being administered by my friend Dr. Allan, the medical attendant of the family. I now completely straightened the septum, and the obstruction of the right nostril was at once removed, so that the forceps, with the blades closed, could readily be passed through it. The retentive apparatus was used as before, the ivory plugs being worn at night for several weeks. It was not necessary to repeat the operation; the external deformity was so far removed that a trace of it only could be said to remain, and the voice was completely restored.

CASE II. *Fracture of the Nasal Bones, with Depression and Bending of the Cartilaginous Septum, much improved by Forcible Straightening Six Months after the Accident.*—This was one of a much more severe character than the preceding. C. R., aged 22, an officer in the army, first consulted me on June 6th, 1871, having sustained a very severe injury to the nose by a fall in the previous December. This gentleman was wearing one of the new-fashioned Ulster coats, and, having both hands in the pockets, fell down flat at a railway station, the nose coming into contact with an iron rail. The nasal bones had been fractured, and projected towards the left side; the cartilaginous septum was also much depressed and bent, projecting into the left nostril, whilst the tip of the nose was directed towards the right side, somewhat in the shape of a half-moon, giving to the face altogether a most unsightly appearance. In this case, also, more than one surgeon of eminence had been consulted, and the opinion given was, that no treatment could be adopted with any probability of success. I advised the same treatment as in the former case, and this was assented to.

On June 9th, I performed the operation, chloroform being administered by Mr. Braine. The cartilaginous septum was straightened, but very little improvement effected in the position of the nasal bones. The steel screw-compressor was used continuously for three days and nights, followed by the use of the ivory plugs. The improvement, so far as the front part of the nose and cartilaginous septum were concerned, was satisfactory; but the nasal bones being still depressed and displaced towards the left side, I directed Mr. Blaise to construct a kind of steel truss (represented in Fig. 4) to pass round the head, having a small oval pad connected with the front part, and capable of accurate adjustment, by means of two cog-wheels, so as to be applied to the left nasal bone, as a retentive apparatus, after the bone had been forcibly bent or rebroken.

On June 21st, chloroform was again given by Mr. Braine; I then rebroke the nose. In this operation, considerable force was employed in the attempt to bring the nasal bones into their natural position by a firm and long-continued pressure on the left nasal bone. Very considerable improvement was effected, and the steel truss and pad were immediately applied as a retentive apparatus. I also more completely

straightened the cartilaginous septum; and the steel screw-compressor, followed by the ivory plugs, was used to support the septum, at the same time that the truss was applied to support the nasal bones externally.

After this operation, the progress was satisfactory, and the improvement very marked and well maintained; still, however, from the severity of the case and its duration, neither the depression, nor the lateral deviation of the nasal bones, was entirely removed.

On July 5th, 1871, I repeated the operation, chloroform being given by Mr. Braine. Still further improvement was gained, with very little force, and the retentive apparatus used as before for several weeks.

On November 27th, I saw him for the last time. I found the improvement had been well maintained, and the appearance of the nose so much improved that it would scarcely attract attention, and the result was considered to be very satisfactory.

CASE III. *Both Nasal Bones, and Depressed between the Nasal Processes of the Superior Maxillary Bones, producing Flattening of the Upper Part of the Nose: Cartilaginous Septum also Depressed and Bent, projecting into the Right Nostril: the Tip of the Nose deviating towards the Left Side.*—Miss F., aged 11, was sent to me by my friend Mr. Walter Coulson, on the 9th June, 1874, and the nose then presented the general appearance indicated in the above description. The accident occurred six years previously, when she was only five years of age, by her falling down a sloping bank forty feet in height, the nose coming into contact, probably with a stone, when she first rolled off the embankment. In addition to the external deformity, the breathing was very much interfered with in this case; the voice was also much altered, and an offensive discharge constantly occurred from the nostrils, as in ordinary ozena. No evidence of necrosis of bone could be obtained by examination with the probe, nor was this indicated by any tenderness to pressure externally. I therefore advised the operation of straightening as in the preceding cases.

On June 10th, 1874, chloroform being administered by Mr. Braine, I straightened the cartilaginous septum with the steel forceps, and to some extent succeeded in improving the position of the nasal bones. The steel screw-compressor and ivory plugs were worn without inconvenience.

On July 2nd, I endeavoured still further to raise the depressed nasal bones, with the assistance of Dr. Sliman of Hackney, who administered chloroform. The blades of the forceps were carried directly upwards in a direction to elevate the nasal bones, and a firm lateral pressure applied externally at the same time. A marked improvement in the shape of the nose was thus produced, and the same retentive apparatus employed, but it was difficult to maintain sufficient lateral pressure externally. The general improvement in the form and shape of the nose was considerable, and much of the depression removed. The offensive discharge from the nostrils entirely ceased, and both the breathing and voice were much improved.

Several other cases have fallen under my observation, in which the injury has been limited to depression and lateral bending of the cartilaginous septum, with partial displacement from the vomer, as in the first case, and in every instance the treatment has been perfectly successful.

A CASE OF PERFORATING ULCER OF THE DUODENUM, WITHOUT DIAGNOSTIC SYMPTOMS.

By EDMUND J. SPITTA, L.R.C.P. Lond.,

Late Demonstrator of Anatomy at the School of St. George's Hospital.

ULCERS of the duodenum are by no means rare, but in nearly all such cases symptoms occur which are diagnostic. In the one, however, which I am about to relate, no such symptoms were present, and perforation occurred most suddenly without a single warning.

X., aged 61, came to see me on Monday morning, June 21st, complaining of pain in the epigastrium. "He had always had good health, never knowing a day's illness." I prescribed some opium pills, of which he took a few, with much benefit. On the following morning, however (June 22nd), he again appeared, the pain, although much better the previous day, having now become worse. I told him he had better go to bed, apply warm poultices, and continue the pills. As he was leaving, he stopped and asked me "to call and see him some time when passing by". I did so in about two hours, and found him sitting up in bed (he said it was more comfortable than to lie down), and still in pain. His pulse was slightly irritable, but his skin cool. His appearance was natural, and his countenance wore no anxious expression; he was able to move in bed and to talk. His wife told me he enjoyed

good health, excepting for the last two years, when he had occasionally complained of wind in the stomach. This was always relieved by hot brandy and water, which caused him "to bring up a quantity of wind". I ordered a continuance of the treatment.

Two hours later, his wife came to ask whether there was anything else to be done, as he was still in great pain. I ordered hot poppy fomentations, and the pills every half hour until the pain abated.

I heard nothing more of the case that day, and, therefore, presumed he was better. But when I went the next morning, to my astonishment, I found the patient dead. On inquiry, I learnt that the deceased appeared so much better in the afternoon that his wife only gave the pills every hour; but that in the evening, after straining at stool, he felt faint, perspired profusely, and in a quarter of an hour died.

On hearing this account, I assured the friends that there must be something unusual to account for so sudden a death, and that perforation of the bowel had probably taken place. I therefore desired a *post mortem* examination, which I was permitted to conduct thirty-six hours after death. On examination, the peritoneal cavity was found much distended with foetid gas and fluid, the latter consisting of fluids swallowed, fluid feculent matters and bile. The peritoneum was healthy throughout. In the first portion of the duodenum, there was a large old ulcer, about the size of a sixpence, which had perforated the bowel and opened into the peritoneal cavity. Its edges were thickened, but the adjacent parts presented no signs of inflammation, neither was the peritoneum, even at that part, at all inflamed. The peritoneal aspect of the perforation showed that the ulcer had for some time entirely eaten away all the coats of the bowel excepting the peritoneal, for the flaps of that membrane were distinctly visible. The parts adjacent to the bowel were healthy.

Such is a condensed history of the case; but the fact to which I wish to draw attention is that the patient, who most likely had had the ulcer for one or two years, never presented any specially diagnostic symptoms until the perforation occurred. He never had vomiting of blood nor pain after food; neither was there any history of bloody stools, with occasional attacks of faintness; and up to the very last there were no signs of peritonitis.

Of course, it is a matter of doubt whether the perforation took place before I saw him at his house or whilst straining at stool. I should think the latter, seeing that he appeared so much better in the afternoon, and that when I saw him in the morning there were certainly no symptoms of collapse. So lightly did he think of his pain when he called upon me in the morning, that he only asked me to see him "sometime when passing by"; and, indeed, the very fact of his walking home seemed enough to allay any suspicions of so rapid and fatal a result.

The only case I know precisely similar to this, is one which occurred in the practice of Dr. Barlow, many years since, of a brewer who died suddenly, without any marked symptoms, and in which a *post mortem* displayed an old ulcer of the duodenum, evidently similar to that of my own.

ETHER AS AN ANÆSTHETIC.

By THOMAS SKINNER, M.D., Liverpool.

So far back as July last, I had prepared the following remarks on Ether as an Anæsthetic. The letter in this week's JOURNAL from the pen of Mr. Clover has induced me to precipitate its publication; and all the more so, as Mr. Clover has arrived at the same conclusion as myself as to the best specific gravity of ether for anæsthetic purposes.

Everyone knows how much I prefer chloroform to ether or any other liquid as a general anæsthetic and in midwifery, whilst it is not a long time since I stated my belief in these pages that there are special occasions and operations where ether is much to be preferred to chloroform, namely, in all operations on the eye, head, and abdomen, such as cataract, iridectomy, hernia, and ovariectomy. This being so, it behoves us to ascertain the most convenient form of the drug and the readiest and simplest mode of administering it effectually.

After a number of experiments, I have ascertained that the specific gravity of the ether is of the greatest importance to be attended to. If accurately adjusted ether-inhalers are used, such as Snow's, Squire's, and the like, it matters little about the specific gravity, as the patient is pretty certain to get the entire of the vapour; all that is necessary is that the ether shall be chemically pure. Of course, the only substances affecting the specific gravity admissible are alcohol and water. In other respects, as I consider all mechanical inhalers as cumbersome, not unattended with danger to the patient, and the very reverse of the readiest, simplest, and most economical methods of inducing anæsthesia by means of any drug, I cannot advise their use.

When we come to the simpler and readier methods of inhaling ether, however, the tables are turned. Ether of a low specific gravity is a very great mistake. I have used it from .720 up to .735 (I am certain that it varies a good deal by keeping, especially if it be not kept in a very cool place), and I have no hesitation in declaring that I have given up using any other than that of the *British Pharmacopœia*, which has a specific gravity of .735, and which is spoken of so highly by Mr. Clover. With ether of this specific gravity, the patient gets far more of it with very much less loss; and less of it goes a much greater length. As to the comparative safety of ether according to specific gravity, if alcohol and water are the only foreign ingredients affecting it, it is *nil*, and need not enter into the calculation. I have not used ether made from methylated spirit as yet, but I believe it to be quite as safe as that made from the best rectified spirit; and I should not hesitate to use it, even though "methylated ether leaves an odour after it has evaporated" (*Squire's Companion to the British Pharmacopœia*, 1871).

Among the ready methods of administering sulphuric ether of specific gravity .735—which is the simplest and handiest? If any man have been at the trouble to devise a method, and come to the conclusion that he has succeeded, it is but natural that his own will, in his estimation, eclipse all others; but the world must be the judge, and not he. I am perfectly willing to be judged by such a tribunal in the present instance—as all who have seen my mode of administering ether of any specific gravity, and in particular of .735, are agreed that it is all that can be desired for simplicity, durability, portability, cleanliness, economy, and effectiveness.

Apparatus.—A good sound cork perforated with a glass or metal tube, the same as that of my chloroform bottle, only larger in the bore. The cork must fit an ordinary half-pint or pint bottle, and the tube must be sealed at the point to the diameter of the twelfth or sixteenth of an inch, sufficient to admit of a free and straight flow of the ether from the bottle when inverted. The tube must not be drawn out to a point which is certain to be broken off, but round, and the tube ought not to extend above three-quarters of an inch beyond the cork. A closely fitting cap of cork, or leather, or leather and cork (not India-rubber, as the ether destroys it) might be added with advantage, as it would prevent the escape of the ether in the interval or *en route*. If the tube be made of metal, a cap of the same material will be most suitable. I have generally placed my finger on the end of the tube, but this is not so necessary when the ether is of a higher and more manageable specific gravity, such as .735 of the *British Pharmacopœia*. The bottle, a half-pint or pint, should be of actinic glass, yellow being the best if obtainable, or it may be covered with leather or thick paper of any or no colour (yellow is the most actinic) for the purposes of excluding the light, lessening the chance of breakage and of protecting the ether from the heat of the hand. If covered with leather, a slit or tell-tale should be cut in it in order the more readily to ascertain the amount of fluid remaining in the bottle.

Inhaler.—It is composed of an interior of thick white felt, and an exterior of patent or black enamelled leather. It is altogether close, having no aperture except where it fits over the nose and mouth, which it closes very perfectly, if need be. The enamelled leather cover is reflected for the distance of an inch, inwardly, over the thick white felt, the internal and external surfaces of leather being temporarily stitched through the felt and the two plies of leather to keep all firm. After administration, the stitches are cut or undone, the felt is removed and washed, dried and returned, and restitched ready for another patient, or a second felt may be kept ready for use. I beg here to repeat a rule which I have previously laid down in these pages, namely, that cleanliness and decency demand that no two individuals should be made to breathe through the same inhaling apparatus without its being thoroughly cleansed—a step which is perfectly impossible with permanent mouth-pieces, tubes, and evaporating or air-chambers. The leather cover admits of washing the same as the felt, inside and out. The form of the inhaler is that of "Punch's" nose, seven inches in the longest diameter by five inches. It is a professional black, and folds perfectly flat, occupying the space of a flat and folded pocket-handkerchief.

The mode of using the inhaler is very simple. The ether-bottle being only three-fourths or two-thirds full, pour about half an ounce of ether (.735 *British Pharmacopœia*) into the inhaler, directing it especially on the sides of the felt; then insert the tubed-cork into the bottle of ether. Apply the inhaler over the nose and mouth of the patient, but not too close at first, although the sooner it can be closely applied, the sooner the patient will be anæsthetised. In renewing the ether, lose no time; invert the inhaler and quickly sprinkle the surface of the felt with a free allowance from the bottle; as quickly reapply the inhaler, never giving the patient time to rally from the previous inhalation. At one time, I had the leather cover perforated, so as to enable me to give additional

ether without the necessity of removing the inhaler; but I soon found my mistake, as more vapour escaped through the aperture than was introduced, and the patient took a much longer time to get under its influence. At times, it is advisable to remove the inhaler a little way from the mouth and nose; especially is this advisable after the patient is once fairly off—that is, when it is desirable simply to keep him under. A great deal is said about patients becoming dark in the visage while getting under the influence of ether. I have hitherto observed very little of this, and I cannot help thinking that its occurrence is greatly owing to the unnecessary exclusion of atmospheric air and too large a quantity of vapour being administered at a time. By the apparatus I now recommend, the passage of air is very little impeded, as anyone can learn by applying it closely over his air-passages and breathing. If the patient's countenance should become dark or livid, give more air by withdrawing the inhaler a little way, say an eighth of an inch or more, and increase the ether vapour by a fresh and free supply. It is a great mistake to suppose that a patient's respiration can be sustained on the vapour of ether alone; he must have air, and he gets it, whether the observer is aware of it or not. In administering ether, it is well to have no naked flame of any kind in the room. As with chloroform, so with ether, food ought not to be partaken of for at least four hours beforehand. I have no doubt that ether of a still lower specific gravity will do. I have not tried it, but that of .735 is so good that I could scarcely wish a better.

If anyone will try this inhaler and mode of feeding it with sulphuric ether of specific gravity .735 *British Pharmacopæia*, he will soon be satisfied that, for simplicity, durability, portability, cleanliness, economy, and effectiveness, it is not to be surpassed.

The inhaler and cork or bottle are to be obtained from Messrs. Maw, Son, and Thompson, of 11, Aldersgate Street, City; and from Mr. Wood, Church Street, Liverpool.

SOME REMARKS* ON THE CONDITION OF THE CEREBRAL CIRCULATION PRODUCED BY STIMULANTS AND HYPNOTICS.

By HERBERT L. SNOW, M.D.Lond., Bayswater.

It appears to me that the science of therapeutics is at present much impeded by the want of a rational system of classification; and also by the vagueness of the general terms in ordinary use: that when men speak, for example, of a stimulant or narcotic, their ideas of what constitutes a stimulant or narcotic, of the essential feature in the stimulating or narcotising process, are more or less hazy and empirical. Since Dr. George Johnson's discoveries have directed attention to the contractility of the arterioles, it has become obvious that nearly all our drugs (excluding those prescribed merely for their chemical affinities) produce their effects upon the body—of course, through the agency of the nervous system—by the alterations they induce in the calibre of these vessels. The fact is one which it is especially important to bear in mind, in the case of remedies which affect the functions of the brain or spinal cord; inasmuch as, by empirically administering such potent agents, we are sure occasionally to do harm; and, as it is of the highest importance to form definite ideas of the influences that are brought to bear upon parts of such extremely sensitive and marvellously complex organisation, I venture, in the present paper, to offer a few suggestions upon this topic, hoping that, if my views are erroneous, they may be speedily corrected by some one qualified to pronounce upon them authoritatively.

Premising that the arterioles are dilated by the vaso-motor nerves, which belong to the cerebro-spinal system, and contracted by the fibres of Remak (sympathetic), I will first notice the medicines, which are commonly called stimulants, and which agree in producing exhilaration of the mind, a genial feeling of warmth throughout the body, and increased force and frequency of the heart's contractions. The primary and essential feature of this process, I take to be dilatation of the arterioles (*teste* the flushed face), to which the increased energy of the heart is but secondary, following as a necessary sequence.

If the dilatation be slight, the vessels soon return to their normal condition; and the above is all that is necessary to the action of a pure stimulant. Tea, coffee, and guarana seem to be the purest we have; most of the others, as alcohol and opium, are only purely stimulant in small doses. After a larger dose, that is, after a greater dilatation of the arterioles, a train of other symptoms succeeds; and the former stimulant now becomes either a hypnotic or a narcotic. Either the dilatation gives place to contraction; when the previous excitement is followed by healthy sleep, in which the essential feature is a moderate and sustained contraction of the cerebral arterioles, lessening the supply of blood, and so of oxygen, to the nerve-tissue. Or, secondly, if the

dilatation be extreme or protracted, a state of abnormal sleep or *coma* supervenes; when, although the vessels are widely dilated, the blood moves sluggishly through them, its ordinary chemical properties being at the same time more or less modified.

To the last, when not fatal, succeeds another stage, indicated by the headache following a debauch. There is now pallor of the countenance; the vessels are slightly contracted, and their muscular walls have lost their tone. A repetition of the stimulant dose speedily relieves the prostration, but may aggravate the headache; this being apparently due to distension of the veins, which, dilated by the previously accelerated blood-current, do not readily recover their former calibre, when the *vis à tergo* is removed, supposing the latter to have been protracted. Alcohol and opium furnish us with the most familiar examples of this train of events.

Respecting the phenomena of sleep, I believe that much uncertainty of thought and of language prevails in medical works—at least, so far as regards artificially induced sleep. It was long since proved that, during healthy slumber, the brain is anæmic; in other words, that the arterioles are contracted. Yet, it seems to be generally thought that opium acts as a hypnotic by causing venous congestion. As sleep is dependent upon a diminution in the supply of oxygen to the brain-tissue, it is manifest that the veins cannot have any share, at least primarily, in its causation. The arterioles alone regulate the quantity of oxygenated blood which is supplied to the cerebral or to any other tissue, and are the sole agents to be regarded in examining these phenomena; although it is true that, in the case of a mechanical impediment to the circulation, the veins would exert a retrograde influence upon them. As a general rule, congestion of the cerebral veins would cause headache, but not sleep. Opium, therefore, acts as a hypnotic by contracting the arterioles; and it is worthy of note, that the face is at first pale in cases of poisoning by this drug. As has been already explained, however, after a very large dose, the arterioles may be dilated, with the current greatly slackened, and the blood chemically altered. *Post mortem* venous congestion is not constantly present, and only indicates the prolonged action of a stimulant.

So also in slumber brought on by chloral or by bromide of potassium, the same condition of the arterioles obtains; and these medicines have been found experimentally to contract the vessels in the frog's foot. They differ, however, from opium in the absence of a primary stage of stimulation; and hence their use is less frequently followed by headache. They, besides, do not check secretion, and so do not interfere with the purification of the blood by the excretory organs. In some cases, nevertheless, chloral has a marked stimulant effect. Both these drugs cure ordinary headache by contracting the arterioles, and thus shutting off a portion of the blood-current from the already distended veins, so as to give these last time to empty themselves. In sick-headache, when we have violent action of the sympathetic, and when the pain is neuralgic and due to the suddenly increased tension of the arteriolar walls, they usually fail; then guarana, strong tea, or alcohol, which dilate the vessels, prove effectual. Probably nitrite of amyl would afford speedy relief, but I am not aware of its having been tried in megrim.

Of medicines which more especially affect the functions of the spinal cord, belladonna in moderate doses contracts, while strychnia dilates the vessels. In large doses, belladonna also has the latter effect, when flushed face, intoxication, and occasionally trismus, supervene.

A good many experiments have lately been made with numerous remedies, by injecting them subcutaneously, apparently under the impression that the effect would thus be different in some way from the ordinary symptoms which follow their absorption through the alimentary canal. Although, when the drug is not such as to cause any local mischief, we administer it by this method with greater precision and celerity, still I would venture to point out that in the case of morphia, which may serve as a type, the effects are identically the same as would follow a dose given by the mouth, excepting only a mitigation of those caused by its actual contact with the alimentary canal. It is obvious, therefore, that with drugs which do not occasion embarrassing gastric or intestinal symptoms, the use of the hypodermic method will rarely be attended by any special advantages.

I trust the day is not very far distant when we may be able to predicate of all the medicines we employ, not only what each is expected to do, but also by what peculiar channel it effects this result. When we have attained absolute certainty upon these points, and when the vast multitude of compounds called into existence by organic chemistry—a field which has already yielded rich results to investigations of comparatively trifling extent—have been pressed into our service, then medicine will take its place among the exact sciences, and the healing powers of its professor will become, what is certainly very far from being the case now, a true measure of his scientific knowledge.

THERAPEUTIC MEMORANDA.

A CASE OF RHEUMATIC HYPERTYREXIA CURED BY ONE COLD BATH.

DR. WALKER'S case of rheumatic hypertyrexia, published a few weeks ago in this JOURNAL, induces me to publish the following case, treated by my friend the late John Foster and myself about eighteen months ago.

Miss C., aged 18, was seized with acute rheumatism. The attacks were at first mild, but became afterwards rather more severe. For the first two days, her temperature was under 102. On the fifth day of her illness, it rose to 102.8, and remained between 102 and 104 for four days, when the fever gradually declined. She had pericarditis and endocarditis, and an attack of pleurisy with slight effusion of the left side. The fever had almost left her on the eighteenth day of her illness, and we considered her quite convalescent; but she had not left her bed. On the nineteenth day, however, in the evening, the temperature rose to 103.6; and at 11 the same night it was 104. Next day, at 5 A.M., it was 104.4; at 11, 105.4; at 12, 106. During the night, she had been very delirious; and as her temperature rose, she grew much worse. At 12, she was rapidly becoming comatose, could be roused with some difficulty, and had lost her sight. We determined to employ a cold bath. The following table shows with what effect she was put into the bath about 12.50.

12.55...106.2 in the rectum	2	...99.2 in the rectum
1 ...106.8 "	2.10 (...9)	" "
1.5 ...106.2 "	3	...100 in axilla
1.10 ...104.6 "	4	...101.6 "
1.15 ...104.4 "	5	...101.2 "
1.20 ...103 "	6	...101.4 "
1.25 ...102.2 "	7	...101.4 "
1.30 ...101.4 "	8	...101.8 "
1.35 ...101.2 " left bath	9	...101.6 "
1.43 ...100.4 "	10.30...102.	" "
1.50 ...99.8 "		

Unfortunately, I have no notes of the temperature of the bath; but, to the best of my recollection, we began with a temperature of 90, quickly reduced by the addition of ice to 60. The bath produced no bad effects, and only a very small quantity of brandy was given during its employment. As soon as the temperature began to fall, consciousness returned. There was no delirium; in fact, all the serious symptoms were removed during the day. Miss C. felt almost well. Next day, after the bath at 6 A.M., the temperature was 100.6; it then gradually fell, and at 1.30 it was 99. At 8.45, it was 99.6; and at 11.15, 100.2. The next day, the second day after the bath, the temperature fell to 99.6, and never rose higher. From this time, all fever disappeared, and the patient rapidly improved, and is now quite well.

SYDNEY RINGER, M.D.

TREATMENT OF WHOOPING-COUGH WITH CARBOLIC ACID INHALATION.

THE short abstract of my remarks on this subject has led Dr. Burchardt to infer that I considered the method of treatment of whooping-cough by carbolic acid inhalation as original. For many years, the volatile products of coal distillation have been known, or at least believed, to possess a distinct influence on whooping-cough. The most satisfactory account of the effect of the inhalation of the vapour of carbolic acid has been furnished to me by Mr. Harrison of Her Majesty's convict prison, Dartmoor, where a severe epidemic prevailed not long since, and where two apartments were used for the express purpose of trying the carbolic acid treatment. A report of these cases will, I trust, be sent to the JOURNAL by Mr. Harrison. The simple inhalation of carbolic acid vapour for a few minutes, such as is obtained from a jug or basin of boiling water, can not be compared to the effect produced by two or three days' confinement in the same room, the atmosphere of which is constantly and highly charged with the vapour of the acid; and if there be much difference in the results obtained by different practitioners in their observations on the effects of carbolic acid inhalation in whooping-cough, I should be inclined to attribute it to the method of inhalation adopted. With young children, it is by no means difficult to arrange the bed-curtains in such a way as to enclose the vapour of the acid during the hours of sleep; but, under any circumstances, effective inhalation is a matter of difficulty. I am indebted to Mr. Harper, of 16, Red Lion Street, Clerkenwell, for a simple and improved inhaler, constructed on a principle of which I pointed out the advantage in the paper alluded to by Dr. Burchardt.

(ROBERT J. LEE, M.D.,

British Medical Journal)

TREATMENT OF WHOOPING-COUGH WITH CARBOLIC ACID INHALATION.

As Dr. Burchardt of Berlin has written in the last number of the JOURNAL, claiming priority over Dr. Robert J. Lee in the use of the vapour of carbolic acid in the treatment of whooping-cough, stating that he had used it in 1873, will you allow me to inform both those gentlemen that in the autumn of 1866 I employed the same remedy in the cases of my own children, and with wonderful benefit, after the failure of other remedies? The plan I adopted was to drop a few minims on to a piece of cotton-wool, and insert it into the bowl of a tobacco-pipe, directing the youngsters to smoke it, which they readily did, thinking it great fun. It is said that it is the last dog that kills the hare. Be that as it may, I certainly attribute their speedy recovery to it, after about a fortnight's continuance of the carbolic inhalation. There were five of them afflicted; and, not having previously been constantly in the house watching such patients, I candidly admit I did not thoroughly realise before what the sufferings of pertussic patients were. I am sorry now I did not publish their cases. My friends the late Drs. Salter and Tanner kindly saw them, and were aware of the treatment pursued. As I cannot appeal to them now as to the truth of my statement, I may mention that Mr. T. M. Stone, of the Royal College of Surgeons, who is so well known and respected by every member of the profession, and who is a frequent and welcome visitor at my house, perfectly remembers all the particulars.

As the use of carbolic acid is not without danger, I now prescribe the solution of chlorinated soda with permanganate of potash, in the form of spray, both for inhalation and disinfection; at the same time always ordering a small portion of iodine to be suspended in a chip box from some part of the room. In addition to this, I generally adopt the usual custom of giving an emetic at bedtime to dislodge the mucus, and an antispasmodic mixture of bromide of potassium with tincture of belladonna. With this treatment, a month or six weeks is the outside of the continuance of my cases of whooping-cough.

GEORGE P. RÜGG, M.D., Clapham Road.

SURGICAL MEMORANDA.

REVOLVER BULLET ENCYSTED IN THE PALM: REMOVAL.

A BOY, 15 years of age, applied to me the other day with a hard mass exactly in the centre of the palm, and apparently, from the partial contraction and want of power over the middle finger, associated with the flexor tendons. Six months previously he had been playing with a revolver, and had been struck by its bullet just over the dorsal aspect of the wrist, where the scar of the wound was visible. The projectile was never found, the wound healed, and, beyond some little stiffness, no more was thought of the matter. A little time ago, however, the middle finger grew stiff and numb, and a hard body presented at the spot named. A surgeon had cut down on it, but thought better of interfering with the structure of the palm, and let it alone. I, however, cut cautiously down upon the mass and exposed the flexor tendon, and, on turning it a little on one side, found a small conical bullet firmly encysted beneath it, and completely enveloped with the bursal tissue common to the tendons. It lay immediately below the superficial arch, and close upon the digital nerve; I lifted it out and immediately closed the wound, placing a stout compress upon it. The interest of the case lies in the course taken by the bullet, its lying amongst such important structures for so long, and no untoward symptoms being set up by its presence or by the incision into the palm for its subsequent removal. It must evidently have passed through the first interosseous space to have gained the position in which I found it.

EDWARD BELLAMY, F.R.C.S.

TRACHEOTOMY IN CROUP AND DIPHThERIA.

In the excellent paper "On Tracheotomy in Croup and Diphtheria", by Professor George Buchanan, contained in the BRITISH MEDICAL JOURNAL of the 4th of September, 1875, two signs are given as tending to show that the false membrane has extended into the smaller bronchial tubes, and that, therefore, the operation of tracheotomy is contraindicated, viz.:

1. The amount and loudness of the stridor, which is always great in proportion to the patency of the small tubes, and, therefore, less in proportion as the latter are filled up with false membrane.

2. A view of the naked chest, when, if the small bronchial tubes be

stopped with the membranous effusion, the muscular efforts at respiration are seen to be comparatively feeble and the chest to remain puffed out.

Some years ago, a remarkable case came under my observation which induces me to believe that occasionally there is a third sign indicating that the false membrane has extended beyond the trachea into the smaller ramifications of the bronchi, viz., the symptom of rapidly supervening coma. The following are a few notes of the case.

On a morning in December, I was called, at 11 o'clock, to see J. W. R., aged six years. The child was lying on the sofa quite comatose; the breathing was of a croupy character; but the latter symptom was not very marked, and the lips and face were of an intense livid hue. The father told me that he had taken his son out shopping with him the evening before, between 9 and 10 P.M. He had rather a cold on him at the time, but did not seem much out of sorts. He was put to bed; but, about midnight, he began to breathe heavily; and, towards 6 or 7 on the following morning, the respiration became very difficult. Soon after this, he began to be blue in the face. When I saw him at 11 A.M., he was in the condition described above. The child never regained consciousness, and died at 4 P.M. of the same day, about sixteen hours after the breathing had become first affected.

Post mortem examination, twenty hours after death. On opening the head, the brain and its membranes were seen to be exceedingly congested. On the inside of the larynx and trachea, was a complete cast of false membrane, extending into the right and left bronchi, and continued into the smallest ramifications of the bronchial tubes. The lungs were oedematous, but otherwise healthy.

This case was, of course, hopeless from the first, as there was every reason to believe that the false membrane in the minutest bronchi was thrown out simultaneously, or very nearly so, with that in the larynx and trachea.

GEORGE SCOTT, M.D., Southampton.

CASE OF URETHRAL STRICTURE: DILATATION BY THE LAMINARIA BOUGIE.

On the 21st of last June, I was consulted by a gentleman aged 45, who had suffered from symptoms of stricture for five years, which he attributed to a severe attack of gonorrhoea. Recently he had been troubled occasionally with attacks of retention, followed by the passage of thick urine. Owing to the reduction in size of the stream, he was induced to apply for relief. On examination with the elastic bougie, an organic stricture was detected, situated about four and a half inches from the meatus. A No. 3 silver catheter was, after some little difficulty, guided through the stricture. The patient being anxious to have the dilatation accomplished as soon as possible, I determined to attempt it by the gradual introduction of the laminaria bougie through it. With this view, a laminaria bougie, corresponding in size to No. 3 silver catheter, previously dipped in warm water and oiled, was introduced into the anterior part of the stricture, and retained there by firm pressure for half an hour. During its retention, the patient complained of slight smarting pain. The following day this was again repeated, a bougie one size larger being introduced further into the stricture. On withdrawal, the patient observed he was able to pass his water more freely. The next day an instrument one size larger was introduced, and retained for thirty-five minutes. A No. 8 gum elastic catheter was subsequently passed without much difficulty, and the patient continued to introduce it daily up to the 28th June, when he was able to substitute a No. 10. He now finds it necessary to introduce the instrument once a week.

In a case that recently came under my care, I adopted a similar line of treatment; but, owing to the density of the stricture, was obliged to have recourse ultimately to subcutaneous division.

SAMUEL LEE, M.R.C.S.

OPHTHALMIC MEMORANDA.

SEVERE PURULENT OPHTHALMIA IN A YOUNG CHILD, PROBABLY CAUSED BY DISCHARGE (NOT GONORRHOEAL) FROM THE PATIENT'S VAGINA.

The following is a short note of a case in which an attack of ophthalmia, resembling gonorrhoeal in severity, was probably due to the ordinary vaginitis of little girls. It is possible that outbreaks of severe purulent ophthalmia in schools may now and then start from such a cause.

Grace G., aged 2, was brought to me at the South London Ophthalmic Hospital on April 7th, with intense purulent ophthalmia of the right eye of four days' duration; the lids were much swollen and of dusky

red colour; the cornea could scarcely be seen, but was thought to be rather steamy. On the 14th, the other eye was attacked, but did not suffer so severely as its fellow. During the course of the disease, a central ulcer formed on the cornea of the worse (right) eye; perforation, however, did not occur. The severity of the case led me to inquire as to the possibility of gonorrhoeal contagion; nothing was discovered in support of this, but I found that the child was suffering from vaginitis with yellow puriform discharge, and considerable pain in micturition. It seemed, therefore, most probable that the child had inoculated its right eye with its own vaginal discharge; the ophthalmia in the second (left) eye being most probably caught from the first. Under the daily application of a ten-grain solution of nitrate of silver to the inverted eyelids, and the frequent use of an alum lotion, the ophthalmia was cured in three weeks; the vaginal discharge soon ceased with the use of alum injection and great cleanliness. A central opacity is still present on the cornea of the right (more severely affected) eye (July 19th).

EDWARD NETTLESHIP, F.R.C.S.

CLINICAL MEMORANDA.

HISTORICAL NOTE ON DIPHTHERITIC PARALYSIS.

THE following quotations show that by one old author the existence of symptoms which we now recognise as paralytic was noted. This fact is of interest in connection with Dr. Johnson's able lecture on the relation between Croup and Diphtheria in the last number but one of the JOURNAL. The book from which they are extracted is entitled:—"An Historical Dissertation on a Particular Species of Gangrenous Sore Throat, which reigned the last year among the Young Children at Paris. Translated from the French of Dr. Chomel, which was printed at Paris in the year 1749; by N. Torriano, M.D., London, 1753."

"Miss Blossac the younger, aged 6½. . . . The patient did not begin or seem to be quite free and out of danger till the forty-fifth day of the disease, having always a pain in expressing herself, speaking through the nose by reason of the fallen uvula. I have since been advised that, for two months together, they gave her, in order to lessen the disagreeable speaking through the nose, a little camphorated brandy with equal parts of lukewarm water to draw up her nose, and she used the remedy with pleasure." (P. 31.)

"Miss Bonac was taken ill of the disease at home and was cured. . . . I have since learned that this patient, after the fortieth day of the disease, spoke very much through her nose, became *squint-eyed and deformed, but that, as she grew stronger, she also regained day by day her natural state." (P. 37.)

"The patients grow leaner and leaner daily, speak much through the nose, have great trouble to *articulate their words. . . . The fever lasts dangerous even beyond the forty-fifth day; the uvula is a long time trailing or pendulous; the patients are a long time very weak and languid." (P. 41.)

This very graphic writer leaves no doubt that the disease of which he treats was veritably diphtheria.

W. F. WADE, F.R.C.P., Physician to the General Hospital, Birmingham.

PATHOLOGICAL MEMORANDA.

TOTAL DESTRUCTION OF THE RIGHT LUNG.

THE following notes, rough and imperfect as they are, of a *post mortem* examination which I made, assisted by another medical man, on the body of E. R., a girl aged about 18, will be interesting to pathologists. She had not been under my care, but the history of her case is as follows. Until within a few weeks previous to her death, she had been in service with a farmer, who, she alleged, knocked her down and kicked her; and to this she attributed her illness, which was characterised by a "dragging" pain in the side of the chest, lassitude, and debility. Leaving her service, she placed herself under the care of a doctor, who diagnosed her ailment to be pleuritic effusion, and, after some time, sent her to hospital. On coming thither, she was able to walk about the ward, but always with a languid air and feeble step. For two or three weeks before her death, she was confined to bed; her respiration became more difficult, her face somewhat dropsical, her colour rather livid, and she lay upon her back.

An inquest was held. On opening the thorax, we found the space previously occupied by the right lung filled with purulent fluid, and the

lung itself totally destroyed. Its former connection with the heart was marked by a semicartilaginous substance not more than two ounces in weight. There was also some serous effusion in the pleura of the left lung, but the lung itself appeared healthy. The heart was of normal size. When we had proceeded thus far with the examination, we were summoned to give evidence as to the cause of death, which was plain enough; and, on our returning to resume the examination, the girl's mother prevented our doing so. It is to be regretted that we were in consequence unable to ascertain what pathological changes, if any, took place in the heart and other organs; but the two remarkable features of the case are: (1) that life was maintained until all but the whole of one lung was converted into pus, which was confined in the thorax; and (2) that, while this change was going on, not a drop of blood escaped from the countless vessels that penetrate the lung; while, *a priori*, sudden death from hæmorrhage might have been anticipated. The latter fact seems to show that the process of suppuration is sometimes sufficient to occlude even vessels of the largest calibre.

JEREMIAH DOWLING, M.D., Tipperary.

P.S. There was no fracture of any ribs, nor had there been any marks of violence on the girl when first seen by the doctor.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

GUY'S HOSPITAL.

EPITHELIOMA OF LIP INFILTRATING LOWER JAW: EXCISION OF LIP WITH ALL THE BODY OF THE JAW: RECURRENCE AND EXTENSION ALONG THE COURSE OF THE INFERIOR MAXILLARY NERVE TO BRAIN: CEREBRO-SPINAL MENINGITIS, WITH ABSCESS OF THE BRAIN: DEATH.

(Under the care of Mr. HOWSE.)

[Reported by Messrs. J. A. MASTERS and PEYTON.]

J. O., AGED 47, a miner, living at St. Agnes, Cornwall, was sent up to Mr. Howse on October 10th, 1874, by Dr. Henry Whitworth of that place, under whose care he had been for a short period. He was admitted into Guy's Hospital. He stated that, twelve years previously, he had noticed a small swelling, about the size of a pin's head, on the right side of his lower lip. For four years, this did not give him any pain, and hardly increased in size, though occasionally there was a little scab upon it. At the end of that period, it began to grow; he then went to a provincial infirmary, where it was cut out and caustics were applied. During the ensuing six years, it again and again recurred, and was treated sometimes by excision, sometimes by caustics. The latter he learnt to apply himself with partial relief. During the last two years, the growth had increased very much, and had proved very troublesome, giving great pain and discomfort. He had also a constantly severe headache, for the relief of which he had been in the habit of taking chlorodyne.

On admission, there was a gap on the right side of the lower lip about two-thirds of an inch in breadth by a quarter of an inch in depth, the result of the operative proceedings adopted in the country, and chiefly of the after application of caustics. The mucous membrane occupying this gap was healthy, except on the right side, where it was continuous with an ulcerated epitheliomatous growth about an inch and a half in diameter, extending from the lip to the adjacent alveoli, to which it was firmly adherent. Below this well marked tumour the mucous membrane, though not so prominent, was evidently extensively infiltrated with epitheliomatous elements. On the left side of the above described gap, numerous small nodules could be felt in the mucous membrane, and close examination showed that all this part was more or less infiltrated. At the left angle of the mouth, there was another raised ulcerated epitheliomatous swelling, projecting externally, and about as large as a walnut. Within the mouth, the mucous membrane on this side was much infiltrated, and firmly adherent to the jaw as far back as the first molar tooth. The man was pale, cachectic looking, of about medium height. His medical attendant, however, reported that, previous to the advent of these symptoms, he had been healthy and strong.

From the above account, it will be clear that none of the mucous membrane from one angle of the jaw to the other was completely clear of the disease, and that any operative procedure, to be successful, would involve taking away the whole of this enormous piece of skin.

Moreover, the growth was so firmly adherent, and so deeply infiltrated in the jawbone itself, that that also must be sacrificed. This was the less to be regretted, as there would not be enough skin to form a fresh mouth without its removal, although that below the jaw remained in a healthy state. The nature of the operative proceedings to be adopted, together with the chances of life, both with the operation and without it, having been fairly put before the patient, he elected to have it done.

On October 16th, chloroform was administered and the tongue transfixed with a silk thread and drawn forwards, to prevent it falling backwards on the larynx when the genial muscles should be subsequently divided. An incision was then made from the right angle of the mouth to the corresponding angle of the jaw; a second incision was made along the inferior margin of the maxilla down to the bone from one angle to the other, and the skin incisions were completed by a third, similar to the first, from the left angle of the mouth to the corresponding angle of the jaw. The skin-flaps having been dissected from the jaw, the inferior maxilla was next sawn through on each side behind the last molar tooth, the cut in each case passing obliquely downwards to the angle. The mylo-hyoid and genial muscles were then cut away from the jaw, and the mucous membrane of the floor of the mouth dissected from the alveoli as high as it was healthy. In this way, the whole of the body of the jaw was removed with all the epitheliomatous skin covering it. It was then found easy to bring up the skin from the chin and to press the two side-pieces inwards, so as to construct a new mouth, the lip itself being formed from the skin of the chin, and partially covered by mucous membrane from the floor of the mouth. The ligature through the tongue was fastened by strapping to the forehead, so as to prevent it falling backwards now that it was deprived of support from the genial tubercles. The hæmorrhage throughout was very slight. During the following fortnight, primary union took place along nearly the whole course of this very extensive incision, especially about the left side, the cure of which appeared complete. On the right side, two small sinuses remained inside the mouth which communicated with bare bone, and it was thought that there was a small piece of maxilla to exfoliate there, probably from the point where it was cut through. Food was at first given entirely through the nose four times in the day, a pint of milk being administered each time. Later on, an egg was mixed with each pint of milk. The tension on the tongue was loosened seventy hours after the operation, although no inconvenience was complained of; but the ligature was not entirely removed until three days later, in case of any accident occurring. Although it had been *in situ* nearly a week, the hole healed immediately. The temperature throughout remained about normal. On the 29th, he was permitted to try to get up, but found himself so weak, that he could only sit up for a short space of time. The condition of the mouth then was as follows. Complete union had occurred everywhere externally; there was a slight amount of swelling about the left side, about which he complained occasionally of pain. The lower lip, though fairly prominent, was low and not easily raised, so that the mouth was not naturally kept closed. This was probably due to the total absence of orbicularis oris in it, and it gave rise to a tendency in the saliva to dribble over the skin. The skin of the lip had itself become considerably inverted, so that the beard appeared to go right up to the mouth. It was thought that this condition of the lip might readily be remedied by another plastic operation, if everything else went on favourably.

During the following two months, he was able to get about the ward and to feed himself with soft food; but he always complained of more or less pain about the right side of the jaw and in the temporo-maxillary articulation; sometimes also running up the side of the head in the position of the auriculo-temporal nerve. As there was no sign of recurrence, and as the presence of bare bone in the sinus had been detected, it was thought that this pain might be due to more or less inflammation going on about the cut ends of the inferior maxillary nerve, due to the necrosis. For some time, a Hainsby's truss was worn, so as to support and press in the side of the face; but, as it seemed to inconvenience him rather than to give relief, it was omitted after about a fortnight's trial. He was able to articulate sufficiently distinctly to be understood.

On January 4th, he had rigors, the face became red, and a smart attack of erysipelas manifested itself. The jaw on the right side had remained up to this time in much the same state, the sinus discharging; but there was no sign of recurrence of the growth. The necrosed bone was not, however, yet loose. He was removed to the special erysipelas ward, and treated in the usual way. The attack, though never very acute, was persistent, so that it was the end of the month before he was able to return to Lazarus Ward. On January 28th, examination of the wound showed that a great change had taken

place in it. Fungoid epithelial granulations had sprung up thickly all round the open sinus; the swelling of the face had greatly increased, and had extended into the neck. Scarcely any bare bone could then be detected by probing.

He now became very rapidly worse; complained of constant severe pain in the head; the hearing became affected on that side; ptosis and external strabismus came on, with diplopia and anæsthesia of the right side of the face: all these symptoms clearly pointing to extension of the growth along the course of the inferior maxillary nerve, through the foramen ovale, implicating the base of the brain. On February 6th, he became quite unconscious, and died on February 8th.

Post Mortem Examination by Dr. Fagge.—Body much emaciated. The wound produced by the operation had healed, the skin passing into continuity with the mucous membrane at the base of the tongue. There was no trace of the growth here, nor were any of the glands in the neck cancerous; but, on cutting into the masseteric and temporal regions, it was found that there was in this part much diffused epitheliomatous growth, with unhealthy inflammation, attended with the secretion of ichorous pus and blackening of the tissues. This condition extended up to the base of the skull in the pterygo-maxillary region.

Looking now to the base of the skull internally, it was found that the dura mater in the middle fossa over the site of the foramen ovale was blackened and sloughy. This lay on a mass of soft granular whitish growth, which extended into the Gasserian ganglion and converted it into a roundish tumour. Underneath this, the bone was destroyed for a considerable space, forming an aperture oval in form and three-quarters of an inch in its long diameter, extending through the middle fossa. Through this aperture, the growth inside the skull was in direct continuity with that outside. The brain showed a single nodule of the same kind of growth about the size of an almond, which lay on the right side of the pons, exactly corresponding with the superficial root of the fifth nerve. It was not adherent to the pons itself.

The right middle lobe of the brain presented a black discoloured patch externally, which corresponded with the patch on the dura mater. In immediate connection with this was an abscess of considerable size in the brain, with shreddy discoloured walls, and containing a foetid brown ichor. The cavity of this abscess led straight into the descending cornu of the lateral ventricle, which was also filled with the same brown ichor, and its walls were shreddy and uneven. On the other hand, the left ventricle contained only a slightly turbid pus, and a little greenish pus in its posterior cornu.

The base of the brain was covered with a rather thick layer of greenish pus; some of this was superficial to the arachnoid, but much of it lay beneath it. The spinal cord showed a considerable quantity of inflammatory effusion beneath the arachnoid in its whole length. Towards the lower part, this at one spot amounted to a thick layer of yellow pus, which could be pressed out as a milky fluid. The lungs were in part œdematous, in part solidified. The greater part of the left lower lobe in particular was hepatised, and of a dark greenish colour, as if disposed to slough. The bronchial tubes also contained a foetid greenish-brown fluid. No secondary epithelioma existed in the lungs nor in any of the other viscera. Microscopical examination of the growth, both of that removed at the time of the operation as well as of that which recurred at the base of the brain, showed that it consisted of the same elements; viz., well marked epitheliomatous structures, with, however, much lymphomatous tissue. The bone of the jaw appeared to be quite healthy where it was cut through, and, indeed, everywhere else, except where the growth was adherent to it. A small portion of the soft tissue was cut out of the dental canal and subjected to microscopical examination; but no epitheliomatous elements were visible here.

REMARKS.—The recurrence of the growth three months after the operation makes it questionable whether, in spite of the very extensive operation here described, the whole of the growth was completely removed; whether, in fact, it had not even then involved the base of the skull about the pterygo-maxillary region, and possibly even the base of the brain itself. The very severe headache of which he had complained for some time previously lends some support to this view. Be this as it may, there can be very little doubt that, if this severer operation had been resorted to earlier, before the constitutional infection had become so well marked, perfect success would have been the result. Twelve years is an unusually long time for such a tumour to run its course unchecked, and yet, when operated on in such an advanced stage, give such a large measure of success as here attended it.

The fact that all the central part of the cicatrix of the first operation, performed eight years ago, was free from any recurrence of the growth is an interesting thing histologically. Epitheliomata tend to arise in

membranes provided with abundance of glands or cuticular appendages. As, in the cicatrix, all these structures were quite destroyed, there was but little tendency in the growth to form again here. But, in the margin of the cicatrix, where glands began to reappear, nodules of epitheliomatous tissue had formed themselves. Cicatrix is generally considered a weak tissue pathologically; i.e., more liable to pathological changes, to become inflamed and to break down, than the normal tissue of the part. But it is evident that, as far as the recurrence of an epithelioma is concerned, it must be considered the very reverse, and hence that, the more the glandular tissue in the neighbourhood of an epithelioma is cut away, the less risk there will be of the recurrence of the growth.

THE GENERAL HOSPITAL, BIRMINGHAM.

CASE OF HÆMOTHORAX FROM CANCER OF THE LUNG, SECONDARY TO THAT OF THE OVARIES.

(Under the care of Dr. RICKARDS.)

[Reported by Mr. THOMAS F. CHAVASSE, Clinical Clerk.]

E. H., AGED 40, a charwoman, was admitted into the hospital, August 19th, 1875.

Previous History.—She was the mother of five children, two only being still alive. She had always enjoyed good health until six weeks previously to admission, when she first noticed that she had slight shivering attacks. They were followed by a slight pain in the left side, extending back to the spine. The pain gradually grew worse, and at length became continuous, but aggravated when lying down, unbearable when resting on her right side, easier on turning over on to the left. This pain slowly increased in severity, and the patient began to suffer from great difficulty in breathing, and a very severe cough, in consequence of which she passed very restless nights. Being now compelled to give up her work, medical advice was sought, five weeks after the first symptoms had appeared. A week subsequently, by the advice of her medical attendant, she came to the hospital. Her menstrual periods had always been regular, usually lasting a week.

On admission, the patient was pale and pasty, somewhat emaciated, and with a careworn expression of face. Dyspnoea and orthopnoea were great. There was no pain in the chest; she suffered from cough, although to a less degree than before admission. There was no expectoration; tongue white and furred; bowels constipated. Pulse, 110; temperature, 99.2 degs.; respirations, 32. The urine contained a small quantity of albumen, and a few hyaline and faintly granular casts. On examining the thorax, there was every indication of the left pleural cavity being full of fluid. The circumferential measurement in the mammary line of the right chest was sixteen inches, that of the left, seventeen inches. The heart was seen and felt beating on the right side of the sternum, two inches from the right border of that bone. She was ordered an ether mixture with spoon diet and stimulants, August 23rd. The cough and dyspnoea were worse. Mr. Bartleet introduced a fine needle of the aspirator into the left side of the chest, between the sixth and seventh ribs, in the posterior border of the axilla, and drew off five ounces of fluid. After the operation, patient's breathing was markedly improved. The fluid drawn off was clearly not blood coming straight from the circulatory system, and it had the appearance of a mixture of blood and porter. On standing, it did not coagulate, but separated itself into two strata, the upper one fawn-coloured, the lower one purple.

August 24th. The cough had been troublesome, and the patient had had a bad night. Her breathing was better; she had no pain; dulness remained as before. She was ordered a mixture containing morphia and digitalis. Pulse, 100; temperature, 99 deg.; respirations, 30.

August 25th. She had slept well during the night. The cough was less troublesome; she perspired excessively; the dyspnoea was much relieved, and the patient expressed herself as being in no pain whatsoever. She commenced to menstruate. Some chicken was added to the diet.

August 26th, 1.30 A.M. The dyspnoea was very great. Respirations, 50; she was almost pulseless. The heart beating in the right axilla. The aspirator was used, and twenty-four ounces of fluid were drawn off, similar to that previously extracted. Pulse distinct, 132; respirations, 32. 11 A.M. She had slept a little after the withdrawal of the fluid. She was sweating profusely; pale in the face, but in no pain. She coughed a little, but the dyspnoea was much relieved. The heart beat near the sternum.

August 27th, 10.30 A.M. She had been very restless all night, and slightly delirious. Even now she was rather wandering, but could answer coherently when questioned. The breathing was not quite so laboured. The pupils were contracted; the tongue was coated, but moist. Thirst was extreme. The heart was pushed more to the right side than before.

2 P.M. An attack of dyspnoea came on as before, and before aspiration could be performed the patient died. At the *post mortem* examination the pleural cavity of the left side was found full of fluid similar to that which had been drawn off. The pleuræ, both costal and pulmonary, of the left chest were studded with very vascular cancerous growths. The lung on the same side was collapsed to the size of a duck's egg; and its surface was covered with similar deposits to those on the pleura, varying in size from a pea to a filbert. One of these cancerous nodules had softened, and bled into the pleural cavity. Several growths were also found in the right lung. Both ovaries were cystic, and contained nodules of cancer, like those found in the lungs. Some of the cysts were larger than hen's eggs. The uterus was enlarged. The other viscera were free from the growths. Microscopically, the nodules were seen to be composed of nuclei embedded in an abundant stroma. Here and there the remains of hæmorrhages into the tissues were clearly perceived.

Remarks.—Dr. Rickards remarked that aspiration was repeated to prevent impending death by dyspnoea, for it was evident from the pulse, pallor, and perspiration, that the operation debilitated the patient. The attacks of dyspnoea were probably due to the encroachment on the right lung by the dislocated heart; a slight impairment of the right lung producing a great effect, since the function of the left was suspended. It is possible, also, that the direct pressure on the trachea by the fluid in the left pleura might have taken part in the causation of the dyspnoea. That cancer of both ovaries simultaneously was a rare condition. That, in this case, the same disease had affected two organs of the body far distant from each other, with one direct channel of communication, viz., the blood vessels. The blood from the ovaries going to the lungs, it would seem probable that any *materies morbi* carried in it from them would be stranded in the capillaries of the lungs, causing them, and no other organ, to be affected. Such was the case here. The multiplicity also of the growths, and their distribution in the lungs, argued in favour of these being due to secondary deposit. The implication of the left costal pleura was evidently due to local extension from the lung. There was nothing in the history of the case to lead one to suspect disease of the ovaries.

REVIEWS AND NOTICES.

ON THE RELATION BETWEEN DIABETES AND FOOD, AND ITS APPLICATION TO THE TREATMENT OF THE DISEASE. By ARTHUR S. DONKIN, M.D., etc. Pp. 186. London: Smith, Elder, and Co. 1875.

WHEN the student gets up the symptoms of "diabetes mellitus" for the purposes of diagnosis, he seeks out a typical case in the hospital, and he learns what systematic writers say of its special symptoms. He thus acquires a very distinct idea of a remarkably clearly differentiated disease. He concludes that there cannot be two opinions arrived at by unprejudiced observers as to the effect of treatment: this or that has only got to be tried a few times, and the good or bad result of it on such a peculiar set of morbid phenomena must be clear as daylight. Diabetes mellitus is diabetes mellitus, and it is nothing else. But when he comes to practise, it is to be hoped he will be observant enough to find that there are several classes of circumstances under which the disease of passing sugar in the urine presents itself—different in their accompanying phenomena, different in their results and indications for prognosis; and different, consequently, as tests of treatment. These are:

1. The temporary malassimilation of saccharine and amylaceous articles of diet, producing an evacuation of diabetic sugar, sometimes intermittent or alternating with healthy urine, sometimes ending in complete health, and sometimes in the manifestation of an uric acid diathesis or gout. Any of these results may happen without special treatment.*

2. The continuous malassimilation of an increasing proportion of the above-named articles, increasing more and more the amount of sugar excreted under equal circumstances. This state of things may be identified by the sugar entirely disappearing from the urine when no

* Some writers have designated these cases under the name of "hepatic glycosuria", a term we decline to adopt. The needless invention of a new generic name adds to the medical world in a pernicious proneness to redundancy in diseases rather than likeness—a proneness fatal to the progress of therapeutics. Moreover, there is no evidence of the liver being primarily at fault; in fact, the large quantity of animal sugar formed testifies in an opposite direction; for in all morbid affections of secreting organs, the secretion which is their proper function is diminished, and it seems certain that a proper function of the liver is to secrete sugar. The apparent augmentation of a secretion in quantity is always due to the addition of something which is not a part of it at all.

food containing starch or sugar is taken, and reappearing when it is resumed.

3. When not only these carbonaceous aliments, but also the nitrogenous, fail to be assimilated, and such of their elements as are capable of being converted into sugar are passed away in that form; the whole of the food is waylaid and robbed in its way to the tissues, and the patient is tortured by a more and more ravening appetite, and, at the same time, emaciated by starvation.

4. Where the essential tissues of the body (notably the nervous) are degenerated in consequence of the deficient supply of normal nutriment.

Now, the first form we should probably find to be the most common, if we analysed everybody's water every day; but it usually is discovered only accidentally; for cases of it, and also slighter cases of the second form, do not present at all the features which are distinctive of diabetes. The symptoms are, as enumerated by Dr. Donkin, "a general feeling of debility, considerable nervous and muscular prostration, lassitude and disinclination for bodily and mental exertion, occasionally a dull pain over the loins, loss of sleep, frequently dimness of vision, a feeling of numbness or loss of sensation over the surface of the thighs; a clammy condition of the mouth, without much thirst or preternatural dryness of the skin, which is frequently perspiring." But what are these symptoms other than those present at the commencement of all chronic diseases in which digestion or nutrition is affected? and if they should, as our author here suggests, be inserted in our text-books of diagnosis as the initial or earliest phase of diabetes, they would require to be repeated so many times over as the initial of other diseases, that an additional price, unrepresented by additional value, would have to be affixed to our manuals. We cannot but think that, instead of grumbling at not being *distinguishé* at an early period of its career, diabetes may congratulate itself on having the special sign of saccharine renal secretion to separate it from all other diseases in the nomenclature. At the same time, this well-marked symptom does not enable us to form a diagnosis of the different forms of the malady without long and careful investigation of the case—seldom, indeed, without waiting to see the result. Nor can we find in any of the monographs on the subject any other sign which can enable us to do so.

It seems probable to Dr. Donkin, as to us also, that the several forms in which the disease offers itself to our notice are stages leading to one another. He does not, indeed, say so categorically of the first of intermittent forms as he alludes to it only incidentally under the name of "glycosuria"; but we take leave to infer that such is his opinion. However, they are not stages which necessarily lead on to one another; for both the first and the second form often cease spontaneously, and more often merge their peculiarities in other morbid conditions. We meet, for example, with instances in old persons, to which Dr. Bence Jones was the first to call attention, of sugar being passed intermittently, and the urine in the interval being quite normal, without life being anywhere shortened by the disease. And in middle-aged men with an hereditary tendency to gout, we often find the first beginning of invalidism characterised by the appearance of sugar in the water. This ceases, and its place is taken by uric acid and lithates; and then, perhaps, by a swelling of the joints, and podagra fully declares itself—a disagreeable disease, indeed, but a subject of congratulation when it relieves one from the fear of confirmed diabetes.

The prognosis of the third form in which we encounter diabetes is necessarily bad. The duration of life depends on the more or less amount of nitrogenous food which can be assimilated; usually, but not always, bearing a proportion to the notable symptoms—emaciation, diminished temperature, thirst, dryness of skin, smell of hay in the breath, etc., familiar to the text-books.

Should any of the viscera break down into degeneration, as in the fourth form, death ensues in consequence of that failure, and is directly attributable to that cause. Should the brain get atrophied, the patient can be described as dying of "apoplexy"; if the lungs are affected, of "consumption"; or if the cellular tissue sloughs from want of nourishment, of "carbuncle"; and so on.

A consequence of the resemblance borne to one another by cases of which the termination is so different is a great difficulty in judging of the effects of treatment. There are few diseases for which so many cures have been confidently announced, and few in which the failure of these cures has been more positively shown. Of course, every curer is impressed, on beginning his treatment, without a moment's delay, on the finding of sugar in the urine; and if he have gained a reputation for this speciality, and takes care to analyse the secretions of all who come under his notice, the bulk of his list of diabetics will be formed of such as have a tendency to get well or to change into remediable cases. His statistics present, therefore, the most roseate hue of hopefulness. But, supposing he be a stern diagnosticator, who coldly resolves always to

make out what is the matter with a patient before he treats him, or a hospital physician who only cares for those bad enough to admit into the wards, a very different inference will be drawn from his case-book. If he hold that the interesting cases reported by Dr. Dickenson prove the cause of diabetes to be a degeneration of the structures of the brain about the fourth ventricle, he must, indeed, leave all hope behind when he presents his record. Not so, if he consider these pathological changes to be a result, instead of a motive, power.

These considerations ought to be allowed full weight when we read, as in Dr. Donkin's pages, of cases reckoned by hundreds where a special treatment has been beneficial, and by tens where it has absolutely failed or appeared injurious in consequence of the inevitable progress of the malady.

Though it renders the logical evidence of remedial measures more difficult, the fact of diabetes being spontaneously removed is the greatest encouragement we can have to expect benefit from art. Every single disease capable of beneficial therapeutics, from a cold in the head to tuberculosis and aortic aneurism, offers examples of idiopathic cure. And, *vice versa*, where we have never heard of an instance of restored health without treatment, we probably waste our time in search of a cure by means of it. Why are physicians sceptical about panaceas for hydrophobia? Simply because no report of spontaneous recovery is known to them. But now that we have learnt what nature can do in diabetes, we should open our hearts widely to faith in the resources of art.

The special treatment with which Dr. Donkin's name is associated is the use of skim-milk as a diet; and the point of the volume now under review appears to be to show that it is in accord with the teachings of organic chemistry and physiology to expect advantageous results from it. By no means uncalled for, or too soon, is the urging of this point; for, on chemical and physiological grounds, the earnest and accomplished M. Bouchardat has specially cut out this useful article—the dietician's model food, the type of perfection, the precious gift of godmother Nature to her most precious wards—from the bill of fare of the diabetic. Boldly confronting in a good cause even such an antagonist as the trusted M. Bouchardat, Dr. Donkin contends that milk-sugar differs so essentially from cane-sugar, grape-sugar, and pure diabetic-sugar, that it is not converted into it, and does not appear again in that form in the renal excretion. "Belonging to a different class of sugars, milk-sugar does not undergo alcoholic fermentation in contact with yeast; and, in addition, it does not precipitate the oxide of copper when treated with the reduction test. On the other hand, it is subject to lactic fermentation by the action of ferments. On account of these intrinsic differences, lactose, as an ingredient of milk, cannot undergo the same metamorphic changes as glucose in the processes of digestion and assimilation in health (nor be converted into it in diabetes); its conversion into lactic acid being *direct* and *immediate*, not by *intermediate* changes, through which the latter pass into this substance. For this reason, which is perfectly intelligible, milk-sugar, unlike vegetable glucose, is assimilated, and the reverse of injurious in diabetes."

It must, however, be noticed that milk-sugar, in the presence of acetic and several other vegetable acids, and also of several mineral acids, and other substances, of which koumiss-brewers are aware, was long ago observed by Simon* to be changed into grape-sugar, and so become liable to alcoholic fermentation, etc., and presumably as injurious to the diabetic as native glucose. This must be always borne in mind in clinical experiments on the subject. Milk-sugar may be utterly perverted and rendered poisonous by admixture with other articles in the stomach—a pickle, or a glass of wine or of lemonade, some sulphuric or hydrochloric acid given as a tonic, and many other substances probably; whereas, taken quite alone, it may be the best of foods to the hungry patient.

It is not, then, a fair trial of Dr. Donkin's skim-milk treatment, if any other food be allowed to mix with it in the stomach. The safest way is to make it the exclusive article of diet; but if the patient absolutely refuse to be so restricted, then we must take care that it is wholly absorbed (and diabetics absorb very quickly) before another meal be swallowed. But we must not reckon these abortive observations as equal in scientific value to complete experiments.

The use of lactic acid by Professor Cantani, Dr. Balfour, Dr. Foster, and Dr. Ogle, is quite distinct from the treatment recommended by Dr. Donkin. They prescribed lactic acid as a remedy, intended to make other foods wholesome; he skim-milk as a sole nutriment, which the mixture of other foods nullifies.

As to the quantity demanded, it appears that a patient can drink as much as a gallon and a half *per diem* (page 148); but that is an extreme ration; and, when the appetite is so keen, Dr. Donkin advises some of

the milk to be made into curd or "junks". But much less than a gallon and a half will suffice, for much less will supply the calculated daily wants of the digestive organs. Each pint of skim-milk contains half its weight* of casein in a fluid state, which, in fact, is liquid bodily tissue. There is 72 per cent. of water in combination with it, and there is 72 per cent. of water in the primest beef.† Thus, in five pints of skim-milk, a man would get as much nutriment as in 3½ lbs. of beef-steak, which, in an exclusively meat diet, may be reckoned sufficient even to do a day's work upon.‡ This is enough to show that Dr. Dickinson is not exercising his usual thoughtfulness when he represents the treatment now under review as "a course of starvation". We think that Dr. Donkin has made out a case for at least a temporary trial in all but exceptional instances of diabetes.

The diabetic may prudently board with the pastoral Polypheme, and may hope to grow sturdy as his host. But he must not cast envious eyes at Acis and Galatea.§ Cheese, even though it be made of skim-milk, as in Holland and in single Gloucestershire, has been found by Dr. Donkin to increase the sugar in the urine. And cream, too, which M. Bouchardat commends, he denounces as injurious. We are very jealous of any reduction of diet in disease, and hope that repeated trials may test this exclusion before it is definitely judged. May not the cheese used have been made tasty by storing, which is well-known to develop a variety of new compounds? Ought not fresh curd-cheese to be tried? It may be toasted, and otherwise cooked, with advantage. And as to cream, likely enough it is noxious when mixed with milk; but may it not be taken alone? An encouragement to hope it may be so used is given by the rapid absorption and conversion into adipose tissue of cod-liver oil, which almost always increases the weight of diabetics.

On the critical and pathological part of Dr. Donkin's volume we make no remark, as it is not the point of the work.

SELECTIONS FROM JOURNALS.

SURGERY.

ROUX ON TUBERCULAR ARTHRITIS.—Dr. J. Roux (*De l'Arthrite Tuberculeuse*, in 8vo, pr. 1, p. 50, Paris, J. B. Baillière et Fils) announces the following conclusions in a recent *brochure*. There exists in the category of white swellings a truly tuberculous variety, which deserves to be distinguished from all points of view. The tuberculous nature of this arthritis is demonstrated both by pathological anatomy and by experiment. The etiological relations between tubercular arthritis and pulmonary tuberculosis are evident, and well known in a general way, but are not precisely defined in detail. The symptomatology of tubercular arthritis is obscure at present. The diagnosis, in the majority of cases, only reaches probability, and not certainty. The existence of tubercular arthritis is commonly an indication for active interference: resection or amputation.

ANKYLOSIS OF THE HIP-JOINT TREATED BY FRACTURE OF THE SURGICAL NECK OF THE FEMUR.—M. Tillaux, at a recent sitting of the Society of Surgery of Paris, presented a female aged 32, the subject of bony ankylosis of the hip-joint, for whom he had successfully fractured the surgical neck of the femur. The case was a very successful one. The disease occurred after childbirth, and the limb was firmly ankylosed in the flexed position, with rotation inwards. The ankylosis was of a year's duration, complete and absolute. The patient was placed under chloroform; and M. Tillaux, placing himself on the left side, seized with both hands the lower extremity of the thigh, and, employing considerable force in drawing it outwards, broke it at the surgical neck; the crack being loud and clear, so as to leave no doubt in the minds of those present. The classic signs of fracture of the neck were observed. The limb was duly set in the straight position; and at the end of two months the patient had a straight firm limb, with only a slight lump from a very little shortening of the leg. This result M. Tillaux described as splendid. The method has no novelty in it; but, old as it is, he thinks it "infinitely preferable to the subcutaneous sections which are now fashionable with some surgeons, and are performed almost daily to counteract the effects of certain malformations."

* Dr. Donkin says three-quarters, but that hardly is consistent with M. Bouchardat's estimates.
† 70 to 74 per cent. (Dr. Letheby).

‡ Chambet, *Manual of Diet*, p. 10.

§ *ἡ γαλαταία* "the cheese-forms" still embrace the maritime village retaining the name of Acis, under the grumbling, smoking, one-eyed monster we now call Etna. The graceful myth, so familiar to all, is a good example of prehistoric physical history, which is easily unriddled at its birthplace.

* Simon's *Animal Chemistry*, vol. i, p. 65 (Svendenham Society's edition).

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st, Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, OCTOBER 2ND, 1875.

THE TWO SYSTEMS OF EDUCATION.

AT the beginning of a session the present status of medical instruction comes before us for review; and we turn naturally to the comprehensive and weighty address in which Sir R. Christison recently stated his experience and his views before the great assemblage of the profession in Edinburgh, at the late general meeting of the British Medical Association in that city. That address, as we have already pointed out, was a mine of solid ore; it will have to be referred to and consulted by medical reformers for many years to come. Educational institutions, like all other institutions, originate in, and are the reflex of, the national mind; and consequently great importance attaches to the history of such an influential educational institution as the Medical School of the University of Edinburgh. The Faculty of Medicine was initiated towards the close of the seventeenth century, by the establishment of a Chair of Medicine; and by a process analogous to the "proliferation of tissue" and "specialisation of function", of which students will hear a great deal by and bye, chairs became multiplied, and the teaching of special subjects was entrusted to specially instructed men. We would emphasise the cardinal fact that, although no doubt the Chair of Medicine was originally established to supply a popular want, yet it took its origin as an offshoot from the Faculty of Arts, which in those days was regarded as the peculiar handmaiden of Theology. This mode of origin and alliance could not but impress certain characteristics upon the Medical Faculty, and the teaching became from the first *dogmatic*. The student was taught ideas prior to facts; the indirect knowledge which is obtained from lectures, before the direct knowledge which is obtained from contact with things.

If we now look across the border, we shall see how different was the mode of origin of the institutions which gave character to the education of the great bulk of English medical practitioners. The Apothecaries' Company was incorporated by James I, and united with the Company of Grocers; and it was only by a statute early in the reign of George II "that the two callings of barber and surgeon were broken into two distinct corporations". These institutions, therefore, arose by natural differentiation from ordinary trading establishments, and must have been called into separate existence because their members were already performing an indispensable social function. It might have been expected that, to the student trained under the direction of these institutions, practical aptitude would be the one essential requirement; and there can be no doubt that these institutions have, on the whole, subordinated theoretical and systematic teaching to the acquirement of practical knowledge. The system of teaching fostered by them is what may be termed the *empirical* method. Each of these methods is properly a reflex of the mind of the nation in which it flourished. The dogmatic method is more adapted to the Scotch intellect, which finds its highest expression in a deductive philosophy; while the empirical method is better adapted to the English nation, which was more largely influenced by the Baconian inductive philosophy.

Each of these systems had its advantages and disadvantages. The dogmatic method pursued in Edinburgh has had some splendid successes; but many will be induced to think that, for the mass, the sys-

tem was largely alloyed with the elements of failure. If we glance, for instance, at the writings of Cullen, who may be taken as the highest exponent of this mode of teaching, it may be safely inferred that it was only a few of the highest order of intellects in his class who could follow his subtle reasonings. Starting from a few definitions, and an assumption with regard to the action of the solids, and of an occult power which he called the energy of the brain, he argued from principles down to facts; and, when the students came afterwards into direct contact with the facts, their observations could not help being swayed and dominated by the system of the master. Nor was this all. Having been introduced to large generalisations prior to the facts and cases from which the generalisations were drawn, they carried with them a form of words without corresponding ideas. Hence they were totally unable to criticise the truth or falsity of the generalisations; their independence of mind was lost, and an undue respect for the authority of the teacher inculcated. The consequence was, that the great bulk of medical men trained under this system inevitably degenerated into pedants, who were always ready to consult the nosology of the master, and find that this disease was caused by spasm, and to be treated by a sedative, and that by atony, and to be treated by a stimulant.

If we now turn to the results of the empirical method, there can be no doubt that this system produced a great many sound and useful practitioners. If its advocates could not boast of having so many brilliant successes as their opponents, they could at least plausibly maintain that they had fewer failures. If the knowledge imparted under this system was less, it was at least vivid, and always communicated in the way in which it could be most readily turned to practical account. The practitioners reared under this system were, however, often and largely deficient in general culture; their treatment of disease was mainly determined by example and precept; their minds could seldom ascend to take a grasp of general principles, and consequently were so cramped as to be deficient in powers of growth and expansion. But the greatest evil of all was, that the origin and traditions of the institutions under whose auspices they were trained kept up a trade association in the profession, so that it is to be feared that the highest aim of a great many practitioners was to induce their unfortunate patients to swallow as many bottles of physic and draughts as possible, so that they might be counted up in the day-book at the end of the day, as a grocer counts the number of pounds of tea or of sugar he retails.

It is not maintained that these methods of instruction were carried out in their full integrity either in Scotland or in England. The corrections of experience, and the collisions of thought from friendly intercourse and rivalry, induced the former to supplement dogmatic teaching by practical instruction, and the latter to give systematic lectures in aid of the means adopted for imparting practical knowledge. The mixed system is now in full operation both in the Scotch universities and in the English schools; but it is still true to a large extent that it is the systematic teaching in the former case, and the practical instruction in the latter, which give character and tone to the training of the student.

The question which the medical reformer of the present day has to solve in this reference is not whether the dogmatic is better than the empirical method, nor the empirical than the dogmatic, but what combination of the two methods will give the best results. It will be observed that, although these two methods are mutually helpful, they are also antagonistic. Whatever of the student's time is devoted to practical instruction is a deduction of the time which might otherwise be devoted to receiving systematic instruction; and *vice versa*. It becomes, therefore, very difficult to apportion the relatively short time for medical study duly between these two methods of imparting knowledge. Some reformers would get over the difficulty by extending the period of medical study to five instead of four years. This suggestion, however, does not find countenance from Sir Robert Christison; and the arguments he adduces against it are, in our opinion, unanswerable. But he makes various suggestions for economising time; not the least important being, that the student should "commence his professional

studies, not with the month of October or November, as is usual, but in the beginning of the previous May, so as to take his botany and natural history before commencing his statutory four years' curriculum". This device would practically extend the time devoted to medical studies by half a year; while, if it were generally adopted, it would by and by be possible to act upon Professor Huxley's suggestion, and detach zoology and botany from the subjects of medical study, and include them in the Arts curriculum. He also proposes to economise time by a redistribution of the subjects of study. He suggests that our present winter and summer sessions should be altered "to two equal periods of four months, with an interval of one month for holidays or graduation examinations"; and, by curtailing the less important courses of lectures, he would be enabled to lengthen the more important courses, such as "anatomy and practice of physic"; while a further margin would be left for practical study. This suggestion appears to us to be an extremely valuable one.

But, after economising the time of the student to the utmost by these devices, little enough of the four years remains for the practical and systematic study of the great subjects of medical education; and it becomes of extreme importance to distribute fairly the student's time between these methods of study, according to their relative values. Sir R. Christison is evidently afraid that the practical method is already encroaching too far upon systematic teaching, but in this fear we do not share; and we are compelled to dissent from his opinion that systematic is an essential preliminary to practical instruction. There can be no doubt that systematic teaching will always be succeeded by practical study; but it ought also to be, so far as is possible, preceded by it. Sir Robert Christison says, and no doubt with truth, that "in the same space of time the lecturer can go over in his systematic course three or four times the amount of details which the student can overtake in any plan of practical study". But this is the very reason why practical contact with the subject should come first. The knowledge imparted by the latter method being less in the same time, a greater opportunity is given to the mind to assimilate it. A true psychology dictates that the generalisations of science should be reached through the study of cases, and that the mind of the student should be introduced to principles through the medium of examples. The order of mental development is from the particular to the general, from the concrete to the abstract; and the order of education should pursue a parallel course, and should, therefore, be from the empirical to the rational. And, although we have no wish to advocate the revival of the Apothecaries' system of apprenticeship, its desuetude has not been all clear gain without loss. If there be one rule we would wish to impress upon the student more than another, on the eve of his beginning the study of medicine, after the usual exhortations of steadiness and enthusiasm in work, it is, that he should make a strenuous endeavour to acquire some practical acquaintance with every subject before attending the systematic course of lectures.

PSYCHOLOGY AND THE NERVOUS SYSTEM.

II.

WE first consider the anatomy of the substrata of visual ideas, although we must now and then at the same time speak of their modes of activity; that is, of their physiology. We wish to show that these substrata are not sensory only, but sensori-motor; we have to find out what parts of the periphery the sensory and the motor elements represent. We begin by drawing attention to the universal agreement that there are two qualities in bodies to which the two elements sensory and motor of the sensori-motor unit correspond.

The qualities in bodies we shall speak of are the Secondary and Primary, or, as Spencer calls them, the Dynamical and the Statical. In this article, we say nothing of the Secundo-Primary or Statico-Dynamical; we believe them to be estimated by retinal impressions and ocular movements represented in the cerebellum, these retinal impressions and ocular movements being symbolical of *pressures* and loco-

motor movements. On the other hand, chiefly from consideration of the facts supplied by cases of disease of the brain, we believe that colour and extension (secondary and primary qualities) are those qualities of bodies which are estimated by impressions and movements represented in the cerebrum; the retinal impressions and ocular movements representing these are symbolical of tactual impressions and movements. As it is not possible to make this difference of representation (cerebral and cerebellar) clear parenthetically, the reader may assume that we arbitrarily limit ourselves to the consideration of colour and superficial extension of bodies. We begin with the sensory element of the sensori-motor arrangement.

The secondary or dynamical qualities which we impute to bodies are such sensations as the bodies rouse in ourselves. We consider visual sensation—colour—only. But colour is a mental state; and we have to do with the correlated anatomico-physiological state. There is on the physiological side an excitation of an anatomical element, sensory or afferent. There is an impression on the retina, an excitation of optic nerve-fibres, and also of the very highest nervous centres connected with the retina and optic nerve. There is, indeed, no doubt that the secondary quality, colour, is parallel with an excitation of a sensory element. The popular notion seems to be, that there is nothing more in the substratum of a visual idea. This is, we think, a grave error; for bodies, besides being of some colour, are of some size and shape. By afferent nerves and centres we should obtain no notion of these primary qualities. We never saw, nor can we think of, a coloured object of no size or shape. Form is, indeed, more important than colour. Ruskin, who speaks at some length of the secondary and primary qualities of bodies in his *Modern Painters* (vol. i, p. 66), says: "He who has neglected a truth of form for a truth of colour has neglected a greater truth for a less one." For the estimations of these primary qualities, something more than sensory or afferent nerves are required. This brings us to the motor element of the substratum. For the estimation of size and shape, movement is absolutely necessary. There is wide agreement on this matter. Bain says: "In all that regards visible movement and visible form, the muscular consciousness, it is now contended, is the indispensable element; the optical sensations merely guiding the movements." (*Fortnightly Review*, April 1869.) This statement is very explicit. We have not, indeed, in this article to *prove* that ocular movements are as necessary in our seeing of objects as retinal impressions are, for that is the theory already "in possession". We shall, nevertheless, quote further high authority on the matter.

In his chapter (*Psychology*, vol. ii, p. 177) on the Statical Attributes of Body, Spencer says "that whether visual or tactual, the perception of every statical attribute of body [shape, size] is resolvable into perceptions of relative positions which are gained through *motion*." Again, vol. ii, *op. cit.*, p. 171: "Those motions of the eye required to bring the sentient elements of the retina successively in contact with different parts of the image, being themselves known to consciousness, *become components of the perception*." Again, p. 172: That "the primitive element out of which our ideas of visible extension are evolved, is a cognition of the relative positions of two states of consciousness in some series of such states consequent upon a subjective motion." Evidently the theory in possession is, that movement is essential in the estimation of the primary qualities of bodies.

Although proof of this cannot be demanded of us, we may give illustrations. There are many morbid conditions which show the importance of muscularity, or of action of nervous centres representing movements, in the estimation of the Extension of objects. By altering movements of our eyes, we alter the size of objects, if this expression may be permitted. For example, if we impress the retina with a flame, and thus obtain an after-image, we find that this varies greatly in size as we look near or into the distance. Yet the sensory element concerned—the retinal area affected—is unaltered during the differences of ocular adjustment. There is even more than this. By different adjustments of our eyes—that is, by altering the *motor* element—we may to some extent alter not only the size but the shape of these spectral images.

Thus, if we impress the retina by a circle, and then project the after-image on to an inclined sheet of paper, our spectral circle becomes oval; a spectral square becomes oblong. This is a very remarkable illustration, showing the importance of movement in the estimation of shape. In both cases, the retinal (sensory) element is unaltered. The differences in size and shape are owing to differences solely in the motor element. We have more to say on this after speaking of "ideal seeing".

We trust we have made a strong case for the belief that the substratum of a visual idea is not sensory, but sensori-motor; and that this anatomically corresponds to the long-standing division of the qualities of bodies into secondary and primary. We repeat that the retinal impressions and ocular movements are *symbolical* of tactual impressions and movements, by which latter the two qualities of Body are directly estimated.

One reason why movement is popularly ignored in considering the process by which we see objects is, that the retina being itself extended, an idea of extension of an object is supposed to result during the process, as it were, of its imprinting itself upon the retina. But a very little thought will show that this hypothesis starts with the question-begging assumption that the position of the several elements of the retina in regard to one another is known beforehand. Now, the relation of these elements to one another has to be learned before impressions on them can give a notion of extension; and it can only be learned by movements. (See Spencer's *Psychology*, vol. ii, p. 168.) Certain obvious objections arise here; but they are, we think, disposed of by Spencer's hypothesis of "organised experiences". We are born with nervous centres which represent the experience of the race; thus there is already at birth a rudimentary association betwixt particular retinal elements and particular ocular movements. In the chick, the association is almost complete. In the child, the associations, being only rudimentary, are gradually being developed; in the adult they are complete. Impressions on the retina, even when there is no actual or obvious movement of the eyes, give us a knowledge of shape and size, because the elements impressed provoke slight or nascent excitations in nervous centres for ocular movements. This statement may appear to the reader little better than a verbal one. Let him suspend his judgment until he has read, what will come later, on ideation occurring with strong excitations artificially limited to nervous centres.

So far as we know, the anatomical study of the substrata of states of mind has met with little favour at the hands of medical men. Centres for ideas has spoken of, but nothing is said of the anatomical constitution of these centres. Many physicians speak of a centre for the "memory of words", but the rule is that no attempt is made to discover the anatomical constitution of this centre. Dr. Hughlings Jackson, adopting an hypothesis of Bain, has long urged that the anatomical substratum of a word represents a highly complex articulatory movement; and this opinion seems to be confirmed by Ferrier's experiments. That movement should be represented in centres for ideas or memories of anything seems to very many an extravagant notion. "What can *movement* have to do with *ideas*? One is a physical process, the other a mental process." For, in spite of guarded definitions, many of those who thus criticise, seem to be unable to rid their minds of the notion that one is trying to explain mental states by nervous states. In reality, it is only said that movement enters as an element, not into ideas but into the anatomical substrata of ideas. Clearly, however, it does not seem strange to those who deny, or, perhaps we should say ignore, the motor element (efferent nerves and centres) to suppose that mental states arise during excitations of sensory (afferent) nerves. We may infer that those who, speaking at length of the sensory and say nothing of the motor element, believe that the anatomico-physiological process which goes on whilst we think of the shape and size of an object, is a sensory process merely. But we will speak of colour only. What we wish to point out is, that it is just as impossible to tell why we have the mental state colour from energising of certain sensory nerves and centres, as

it is to tell why we have ideas of shape from energising of motor nerves and centres. It does not, at first glance, *seem so* difficult, because the word "sensation" is often used in two senses. It is applied both to a physical state and to the mental state that occurs along with that physical state (see Mill's *Logic*, vol. ii, p. 436). For example, it is used for colour (mental state), and for the change which occurs in the optic nervous system whilst that mental state exists. This double use of the word leads to real confusion and to apparent simplicity. Thus, starting only with molecular changes in sensory nerves, we can with fallacious ease build up an orderly scheme of mental operations out of "sensory units", if we use the word sensation now for physical changes in afferent nerves and centres, now for the psychical states parallel with them. Physical states in this view evidently get so very fine in the penetralia of the highest divisions of the nervous system, that they fine away into mental states. There is, we believe, a double error in such systems. Physical states do not *become* mental states, and the substrata of mind are *not* merely made up of sensory (afferent) nerves and centres. The double meaning of the word sensation makes it fallaciously easy for us to "understand" how it is that we have mental states *from* the energising of afferent nerves and centres, whilst no thought is given to the much simpler assumption that mental states may arise *during* the energising of efferent nerves and their centres. It makes it seem easy for us to understand that energising of nervous arrangements representing only a sensory element, as retinal impressions, should give us visual ideas of objects whilst it leads to difficulty in accepting the opinion that energising of nervous arrangements representing articulatory *movements*, should give us ideas of words. The difficulty is just the same in the two cases. The real fact is that in neither case can we tell why during energising of cells and fibres we have ideas. This is so whatever the substrata represent.

The double use of the word sensation conceals the illegitimacy of certain comparisons and contrasts—as, for example, betwixt colour and active states of motor nerves and centres. Psychologically, the comparison and contrast would be betwixt colour and extension; anatomically and physiologically, betwixt excitations or discharges of sensory nerves and centres on the one hand, and excitations or discharges of motor nerves and centres on the other hand.

THE INCREASE OF LUNACY.

THE proposal to erect a third asylum for the county of Surrey has created much dissatisfaction among the Guardians of the various Poor-law Unions in that county, who held a conference at the Wandsworth Board of Works, on September 14th, to discuss the subject, and to devise, if possible, some means of avoiding the vast outlay with which they are threatened, in consequence of the increase of pauper lunacy. Their deliberations had a practical character given to them by an important letter from the Commissioners in Lunacy, in answer to an appeal made to them by the Chairman of the meeting, Mr. Simpson, setting forth their opinion, that a large number of the harmless idiots and epileptics, aged patients and paralytics, who now encumber all county asylums, might be properly placed in inexpensive buildings, containing few single rooms and otherwise simplified. In expressing this opinion, the Commissioners doubtless had in view institutions similar to the Leavesden and Caterham Imbecile Asylums, which were erected at a very moderate cost—much less than that entailed in the erection of an ordinary county asylum, with its expensive appliances for curative treatment—and which afford suitable and comfortable accommodation for the classes of lunatics enumerated by the Commissioners. It seems to us, that it would be judicious policy on the part of the county of Surrey at once to adopt and carry out the suggestion thus submitted to them. If the number of pauper lunatics in Surrey exceeds the existing accommodation, further provision is indispensable. And that provision will be more economically and satisfactorily obtained in the manner indicated by the Commissioners, than by any of the Utopian or objectionable schemes which were rife at the conference. A cessation

in the granting of public-house licenses will certainly not meet the difficulty for some time to come. The detention of the insane in work-house-wards has been authoritatively condemned, and no extension of that system will be tolerated, especially as the workhouses of the county of Surrey already contain upwards of 1,100 pauper lunatics. The boarding out of the pauper insane in cottages is not practicable to any great extent in a thickly populated county like Surrey, and has been already in some measure adopted, as about 130 lunatics are at present so boarded out in that county. The speakers at the conference were in error in referring to the practice of boarding out the insane in cottages as something characteristic of the Scotch lunacy system; the fact being that 12 per cent. of all the pauper lunatics in England are at present provided for in that way, against 22 per cent. so provided for in Scotland. We are yet without evidence that the insane in private dwellings in Scotland are better lodged or cared for than the insane similarly circumstanced in England, France, and other countries; at any rate, no further development of this system is to be anticipated south of the Tweed, and the only choice before the magistrates of Surrey is between a costly county asylum on the old model, and a cheaper imbecile asylum on the new one. Should they adopt the latter alternative, they may expect some but not an enormous saving, as the withdrawal of the quiet and imbecile patients and the substitution of recent and acute cases for them, will raise the rate of maintenance in the county asylums, and as even imbecile asylums are more expensive than workhouses to build and maintain. After all, modifications in the modes of accommodating the insane are mere palliatives with reference to the startling increase of lunacy or lunatics. It is in the application of medical science to the prevention and cure of mental diseases that our only hope of genuine succour lies.

THE House Committee of the London Hospital have determined to postpone any election to the post of Assistant Obstetric Physician for three months. This has been done with the view of allowing eligible candidates, not yet technically qualified, time to obtain the necessary qualification.

SURGEON-GENERAL SIR J. C. BROWN, K.C.B., of the Indian Medical Department, now on leave, is expected to return to Calcutta from the hills early in November, and will probably retire by the latter end of that month, by which time the tenure of his office expires, his services as surgeon-general having commenced on or about November 28th, 1870. Deputy Surgeon-General Beatson, his *locum tenens*, will be confirmed in his present appointment in November.

AT a sermon preached by the Rev. J. M'Connell Hussey on behalf of the Brompton Hospital for Consumption, it was stated that the hospital now contained 257 beds; and that, in addition to the inmates, large numbers of out-patients were seen daily. The expenses amounted to nearly £16,000 *per annum*; of this sum, four-fifths, or £12,800, were entirely dependent on voluntary contributions, donations, and subscriptions.

WE have the great pain to announce the death of Professor Hughes Bennett of the University of Edinburgh. The wearing illness under which Dr. Bennett has suffered for some time has been known to most of his professional brethren; the touching fortitude with which he endured those sufferings, the brave determination with which he nerved himself to the last to the fulfilment of professional studies; and the force and vigour which animated his attenuated features when detailing the last great work which he directed, the Report of the Edinburgh Committee of the British Medical Association on the Antagonism of Medicines, fitly crowned the life of a man remarkable beyond any of his fellows for unflinching devotion to science, courageous defence of his personal and scientific convictions, unsparing denunciation of what he believed to be error, and resolute furtherance of the objects which he believed to be good for the university, the profession, and the science

which he loved so much. He died from the after-effects of lithotomy on a system weakened by constitutional disease. He bore himself nobly during life; and he faced death with courage, resignation, and faith. We shall, next week, endeavour to do justice to the life, works, and character, of this distinguished physician and biologist.

By a coincidence such as strikes the imagination forcibly in reviewing the moving panorama of worldly affairs, we have to notice in these succeeding lines the retirement, in full mental and bodily vigour, from London practice to a career of continued usefulness elsewhere, of a physician, friend, and namesake for whom Dr. Hughes Bennett, sixteen years ago, predicted with pain, but in obedience to the rules of scientific and clinical experience, a very early premature end. Dr. Henry Bennet, then in full practice in London as a gynaecologist, was, sixteen years since, warned by Dr. Bennett and others to set his affairs in order, and to retire from practice; for he was then suffering from lung-disease so acute and advanced that he could not, according to ordinary experience, count on more than six months' tenure of life. How bravely and well Dr. Bennet followed that advice; how wisely he abandoned his London labours, which had made him already famous, and were beginning to make him wealthy; how judiciously he applied to his own case the principles of treatment by climate and by personal hygiene; and how brilliantly he succeeded in reconstituting his health, is known to most men; for is it not told with clearness and graphic force in his varied writings; and have not thousands benefited by the application of the precepts and the imitation of the example which his experience afforded, and which his sound judgment and literary skill have recorded in books of universal repute and just popularity? Dr. Bennet retires this season definitely from practice in England, and will henceforth occupy himself solely with professional work during the winter at Mentone, leaving his summer free for well-earned relaxation. His career has afforded a rare example of versatile energy and steady well-directed thought. In saving his own life, he has been the means of guiding others into a path of safety little known, and hardly well-studied before he so accurately mapped it out.

THE retirement of Dr. Henry Bennet recalls the mind to a past era of uterine pathology. Trained by five years' work as *externe* and *interne* in the *services* of Velpeau, Jobert de Lamballe, Gendrin, Ricord, and their contemporaries in the Paris hospitals, he brought to this country a wide and varied knowledge of the new facts in uterine pathology which the speculum was the prime means of bringing to light. Fortified by his own observations over a large field here and in Paris, he overturned the school of which Lever and Ashwell were the exponents, and of which the leading gynaecologists of the day were disciples. Bennet unquestionably laid the foundation in this country of a new school, we may fairly say the new school of uterine pathology. He met with great hostility from a number of leading practitioners in the metropolis, but the truth steadily bore down all opposition; and when the fiat of disease removed him from his London practice, he had already won the confidence and convinced the reason of the profession generally, and was already earning an income of £4,000 a year, almost exclusively from consultation practice, and mainly from the country practitioners, who were less accessible to the influence of local metropolitan prejudices. In the battle which he fought, he soon found eminent fellow-combatants; and to speak of the uses of the speculum now as an essential basis of the investigation of uterine pathology and of clinical uterine treatment would be to expose oneself to the reproach of discoursing platitudes, as formerly it would have exposed one to the reproach of something little short of imposture and immorality.

THE remarkable success with which Dr. Henry Bennet has, under circumstances which called for the display of courage, judgment and energy, twice carved out for himself a successful and useful career, recalls a *mot* of the late Dr. Henry Wright, a brilliant friend and pupil. Referring to his singular tact, energy, and judgment, Henry Wright used to say that "If Bennet were stranded on an iceberg in the Arctic

Ocean, he would infallibly create for himself a career among the whales, and end his life as consulting-physician to the North Pole, and director of a sanitarium at the Equator".

FOUND DROWNED.

"FOUND drowned", and "sudden death", are two pleasingly ambiguous forms of verdict in which coroners of the economic type, and juries of an easy turn of mind, are still wont largely to indulge. There are some circumstances in the evidence relating to Emma Chirms, whose body was found floating lately in the Worcester canal, which give peculiar point to the verdict. She was a servant; when last seen, she was "exceedingly cheerful", and "had never shown any depression of spirits". Further, "there was no evidence at all likely to suggest that the woman had committed suicide, or that she had recently suffered from melancholy". Whereupon, a boatman deposed that he had found her body floating in the water; and two policemen said that they had made a careful examination of the body, and had found no signs whatever of violence". Without further ado, without *post mortem* examination of any of the organs of the body, or of the contents of the stomach, the jury returned a verdict of "Found drowned". The intimation that the careful examination of the body is, at Birmingham, entrusted to two policemen, is, to be sure, an additional reason why no decent female should commit suicide; otherwise the utility of an inquiry of the sort, and the giving it a judicial character, seems anything but clear, unless indeed it were held in Middlesex, on a plan adopted to please the magistrates.

COLLEGIATE EXAMINATIONS.

THE Council of the Royal College of Surgeons will proceed to the election of three examiners on Wednesday, the 13th instant. Perhaps it will be interesting to them, and to the profession generally, to know the opinion formed just *half a century ago* by so great an authority as Sir Astley Paston Cooper, Bart., as to improving the manner of conducting the examinations of candidates for the diploma of membership of the College. In a letter addressed to William Lynn, Esq., Surgeon to the Westminster Hospital in 1825, when that gentleman was President of the College, he says:

"My dear Sir,—As I lecture this evening at 8 o'clock, I cannot possibly attend the meeting at the College. My suggestions for the improvement of ye examinations would be: 1st. That each person should attend two evenings; and that the first evening he should be examined in Anatomy, and the second in Surgery. 2nd. That each examiner should examine an individual applicant for examination, instead of two persons, as at present. Thirdly. That the person who examines in Anatomy *should not examine the same individual in Surgery.*—Yours very truly,

ASTLEY COOPER.

And, as showing the deep interest he took in this important matter, and desire to be present, he adds, by way of a postscript: "If I can, I will see you at 9 o'clock." This recommendation of just half a century ago is, we understand, likely to be adopted. Truly it may be said, "great bodies move slowly".

HEALTH OF THE CUSTOMS' OFFICERS.

THE report of Dr. Walter Dickson on the health of the outdoor officials of the customs possesses a peculiar interest, inasmuch as the complete system of registration of ages, occupation, dates and duration of sickness which prevails in the civil service give to these returns a greater exactitude than it is possible to attain in almost any other calling. The registration of sickness which necessarily prevails in the services gives it a special value and more exact data of the proportion of deaths to illness than is possible to obtain in private and public practice generally. The total strength of the outdoor establishment is 923, which, allowing for deductions from various causes, gives an average of 900. The mean age of those who died from disease or accident was 41 years, whilst those who were superannuated reached 56 years. The amount of sickness which occurred during the year among the staff was 534, the loss of time in consequence aggregating 11,223 days; whilst the deaths amounted, inclusive of two accidents, to 13 per

1,000, the average rate for several years past having been 12 per 1,000. This death-rate compared favourably with that of the whole metropolis, which amounted to 22.5 per 1,000. Dr. Dickson considers that this rate of sickness and death may be taken as being fairly typical of that of the adult community. We, however, are disposed to question this conclusion, inasmuch as the officers of the service are specially exposed to river fogs at all hours of the day and night, and hence peculiarly liable to disease of the respiratory organs. So apparent is this, that during the first quarter of the past year, when the fogs were most prevalent, there were 22 patients suffering from these diseases during 1,010 working days. In the last quarter, the same causes produced 36 patients; which aggregated 729 days. In the summer quarter, the patients numbered eight, and caused a working loss of 524 days. These latter cases may be therefore taken as chronic. During the summer months, gout causes a great amount of illness. The attacks seem to be irrespective of age, temperament, or personal habits, etc.; often most severe in abstemious men. In the majority of cases the malady is of hereditary character, and is influenced in a remarkable degree by the weather. Warmth and damp occurring in a generally dry season seem to be especially favourable to its development; on such occasions, as many as five cases have developed themselves. The return shows a remarkable immunity from zymotic diseases, notwithstanding the enormous number of foreign vessels which these officers have to inspect. The risk of contracting this class of disease, or of contracting or conveying infectious maladies, Dr. Dickson thinks is infinitesimally small. This may arise from the fact that the men are well fed and well clothed, and live generally speaking regular lives, without the weary anxiety and fluctuating income which fall to the lot of the artisan and lower middle class in other walks of life. They also, generally speaking, have an abundance of fresh air. Dr. Dickson's report is clear, concise, and full of useful information, and we should be glad to compare the health of his department with that of other branches of the Government service where similar strict records of sickness are kept.

SHALL WE DISPENSE OUR MEDICINES?

It is always well to hear both sides of a question. There is at present a strongly apparent current of opinion, among a large class of distinguished general practitioners, in favour of abolishing the old practice of supplying medicine, as a part of a general medical practice. On the other hand, a very large number, probably a considerable majority of practitioners still supply medicines. They contend that to cease to do so would be to cut off two-thirds of their income; and this not merely or mainly by reason of profit on the medicines, for the fee for attendance only is commonly as high as the old fee for attendance and medicine included, but because a prescription once given will often be used for years, and become even a family heirloom or the common property of a circle of friends, so that, as one practitioner lately wrote to us, "A patient subject to recurrent gout, who used to afford me an income of about £30 a year, has, since I gave him a prescription for a ten shilling fee, not been near me for three years; I meet him occasionally, and he salutes heartily sometimes with 'A famous prescription that of yours, doctor; it cost me only ten shillings, and I always have it made up when I feel the gout coming on, and it always cures me.' What is worse is, that he has given the same prescription to all his gouty friends, whom he would otherwise have recommended to me; and even the chemist makes it up now, and sells it as his 'famous gout pills and mixture'. Thus, for ten shillings, I have sold an income of, say fifty pounds a year; and I am not consoled by the reflection that my patient and his friends are really better off, for, though they are saving money, they are all, in all probability, abusing my alkaline colchicum mixture, and injuring their constitutions. But this warning they disregard, and, consequently, we are both probably worse off than we should have been if I had steadfastly refused to depart from the old ways." In America the rule is, we believe, pretty generally observed, that the prescription is not the property of the patient, but

of the doctor who writes it merely as a direction for this occasion, just as letters are ultimately the property of the writer; and that the fee pays only for the *user* of the prescription at the time mentioned on it. A chemist, therefore, will not make up a prescription more than once, unless redated by the writer, or by a qualified practitioner. Dr. T. H. Seyfert, in the *Philadelphia Medical Times*, advocates strongly, however, the return of medical practitioners to the practice of dispensing their own medicines. Among other things, he says:

"Perhaps one of the greatest inducements to recur to the old plan of dispensing, may be found in the pecuniary benefits to be derived therefrom. An eminent physician, in speaking of the general practitioners of England, declared that they would ultimately raise themselves to be the almost exclusive medical practitioners of the land; 'for low prices, with equal qualifications, will in the long run invariably carry the day'. People may be embarrassed in determining the qualifications of their medical attendants, but they are never confronted with this difficulty in estimating the expenses. Herein lies the chief attractive point of the 'homœopathic' practice. What can be more agreeable than to avoid taking the 'naïst medicine', which is almost as expensive as the doctor's visits? For this reason alone there are many who will employ these charlatans, while nature is working a cure, or until some alarming symptom induces them to drop the man of sugar and appeal to the wisdom of the 'old school' doctor, whom they usually regard as their 'sheet-anchor' in the hour of real trouble, but, like the sheet-anchor, he is only thought of when there is danger of a wreck. The druggist's bill is an item of no mean importance, particularly so to those in moderate circumstances, and we need not wonder that there exists a strong desire to escape a bill of this kind, which, in a case of tedious illness, is sometimes as large as that of the attending physician. It is said that a retired apothecary, upon being asked how he made his fortune, promptly responded, 'By selling aqua destillata'. Now, aqua *Schuykillensis*, though not so elegant, is in many instances quite as efficacious, and may be had for nothing. A few drops of aconite, nitre, or morphia disseminated through this vehicle will answer all the purposes of the same mixture put up in a bottle elaborately labelled, wrapped and tied, and will be the means of saving time, trouble, and expense.

"Many will be surprised at the number of remedies in daily demand that are, or can be, used in a very concentrated form, also at the number of solid substances capable of being held in strong solution. Dr. Squibb of New York has invented a ready way of accurately dispensing powerful fluids by using a pipette with a capacity of from one to thirty minims. This little instrument is used by plunging it into the liquid in the vial up to the minim mark which indicates the desired quantity, then, closing the upper end with the forefinger, the charge is transferred to the vessels in which the doses are to be mixed. Dr. Squibb also offers a list of forty-four articles of the active materia medica in their most potent and concentrated form.

"Did space permit, I might dwell upon the easy manner in which this mechanical duty may be performed, and enumerate the many valuable remedies that may be prepared in such a way as to occupy but a very small space in the pocket-case, from which they can be dispensed with advantage to ourselves and patients."

EPIDEMIC MEASLES AT FIJI.

THE account of Fiji during the continuance of the late epidemic, as described by an eyewitness in the *Sydney Morning Herald*, is of a most harrowing kind, recalling vividly Defoe's description of the plague of London.

"The death-rate is not yet made up, but the probability is that 40,000 Fijians died during the four months' plague. The native population of Fiji is now about one-third only of what it was when I landed here twenty-five years ago. Very few died of the measles, the majority dying of subsequent disease in the form of dysentery, congestion of the lungs, etc. Want of nourishment or starvation carried off thousands. All work was suspended for some months. You could pass through whole towns without meeting anyone in the streets, which were soon completely covered with grass. Entering a house, you would find men, women, and children, all lying down indiscriminately, some just attacked, some still in agony, and others dying. Some who were strong enough attempted suicide, and not always unsuccessfully. As the scourge became more permanent, four or five were buried together in one grave, and generally without religious service. In some cases, the dead were buried in the earthen floors of the houses; in others, just outside the house. The burials were hurried, and the probability is that some were buried alive. In many instances, the husband, wife,

and children all died. In one village all the women died, and in another all the men. It is interesting to read of the different mental effects produced by the tortures of disease. It is not surprising to find that some made fruitless appeals to their ancient gods. Some inland tribes, who had only recently embraced Christianity, considered that the disease was conveyed by the religious teachers, and they dismissed them, and then abandoned their new religion. Among these, some were for killing the teachers, but wiser counsels prevailed. It is said that one tribe buried alive the teacher's wife and children—whose husband and father had died of the plague—to stop infection. But while some in their distress fell back on their former superstitions, the greater number are said to have borne their calamity with fortitude, and to have suffered and died under the influences of Christianity."

THE PROPHYLAXIS OF CHOLERA.

THE BRITISH MEDICAL JOURNAL, of September 25th, contained a brief account of the opening meeting of the medical congress now sitting at Brussels. A letter from an occasional correspondent, giving his impressions of the *ensemble* of this interesting gathering, will be found in another column. Proceeding to the practical work of the congress in the section of medicine, the first question under consideration was the prophylaxis of cholera. M. Lefebvre, Professor at the University of Louvain, read his report on this question, and it was followed by a discussion, in which MM. Bonnafond, Sigmund, Semmola (Naples), Dr. Drysdale, and Professor Lefebvre took part. The section ultimately adopted the following conclusions. I. The prophylaxis of Asiatic cholera should be based on as complete as possible an etiological idea of the disease.—II. Cholera is a specific disease; that is to say, it is produced by a morbid principle which is always alike, and it cannot be produced by other causes.—III. The essence of the choleric principle is unknown to us, in the same way as is the generating principle of small-pox, scarlatina, etc., but we possess very important information from the prophylactic point of view with regard to its origin, attributes, and the laws of its propagation and solution.—IV. Origin. The choleric miasma is spontaneously developed in certain countries of India, especially the Delta of the Ganges and the flat lands which surround Madras and Bombay. Springing from these original foci, it has migrated on different occasions to Europe, Africa, and America, constituting those different epidemics still within our memories. However, since these great epidemics, more limited explosions of Asiatic cholera have occurred. It is a question whether these explosions are due to the spontaneous production of the choleric miasma on the European soil, or if they must be attributed to the slow development of miasma, left as it were in reserve by the preceding Asiatic epidemic. This last is the opinion most generally adopted; but, however it may be, it is none the less true that the Indian cholera can acclimatise itself in Europe.—V. Attributes of the choleric miasma—1. This miasma becomes regenerated in the subject attacked by cholera, and is transported from hence to healthy individuals, in whom it induces the development of the disease; in other words, the cholera is essentially contagious. 2. The choleric miasma behaves after the fashion of soluble and volatile bodies; thus, it becomes dissolved in water, diffuses itself in the atmosphere, where it remains in a state of homogenous diffusion; that is to say, without accumulating in the sloping points. 3. The morbid power of the choleric miasma is less powerful and fatal in its action than other known miasmata and viruses. 4. It is not very lasting, and appears to be very easily destroyed, especially when the air is strongly ozonised. However, in certain confined conditions, sheltered from the air, it may last a long time.—5. This miasma is destroyed by a high temperature (1,000 deg. and more) and by a certain number of chemical agents with powerful affinities. This question calls for further study in order to arrive at a really practical precision and clearness. 6. Persons exposed to the action of the choleric miasma acquire after some time a kind of acclimatisation to it which protects them from the disease.—VI. Laws of the propagation of Asiatic cholera. The choleraic contagion is seated principally, perhaps exclusively, in the dejections of the patient (matters vomited, and especially intestinal evacuations). 2. It

may be carried from the sick person to healthy individuals by different vehicles, amongst which, after the ejecta, may be noted the patient, the corpse, the body linen and clothes worn by cholera patients, the rooms, ships, or carriages of which they have made use, the latrines, water which may have been contaminated by choleraic ejecta, say the air at a short distance only of some hundreds of mètres, animals and merchandise which may have become impregnated with choleric miasmata.—VII. Choleraic impregnation and evolution. 1. The choleric miasma penetrates chiefly by the pulmonary and digestive passages. 2. The duration of incubation is generally very short. 3. Mental and hygienic conditions of a depressing nature favour the evolution of the choleraic poison.—VIII. The prophylaxis of cholera takes its rise from the following etiological ideas. The first indication is to destroy the original foci of the cholera in India and its secondary foci in Europe by sanitary works. The second maxim is to prevent the transport of the morbid principle into healthy countries by all really efficacious plans of isolation compatible with the exigencies of modern civilisation. The third prophylactic rule is to neutralise this principle by methods of disinfection still to be determined. The fourth precept consists in diminishing the ravages of cholera by well considered hygienic measures. Finally, the Congress hopes that the great sanitary works undertaken by England in India will be satisfactorily terminated, and will succeed in stamping out the Asiatic epidemic in its original home. The section admitted these conclusions with almost perfect unanimity. They are, in fact, the reproduction of those arrived at by the Vienna Congress in 1874. It will be observed that in these conclusions the word "quarantine" is replaced by "measures of isolation"; in fact, MM. Jaccoud, Sigmund of Vienna, and Semmolla of Naples have condemned the system of quarantine now in operation.

TRIPLETS IN A TENT.

DR. REES, Brightside, Sheffield, forwards to us a report of a case of triplets, which occurred at Canbrook, a suburb of Sheffield. The woman was confined in the open air in a gipsy camp, only sheltered by a blanket supported by saplings barely three feet in height. The children have since died, but the mother is doing well, notwithstanding the heavy rains and the fact of her lying on the bare ground. She has had seven children in this way before.

THE ARSENIC-EATERS OF STYRIA.

AT the annual congress of Natural Philosophers in Germany this week, Dr. Knapp is reported to have made some very interesting statements relative to the much-discussed practice of arsenic-eating in Styria. Among other things, he said:—

It is difficult to give any certain particulars as to the increase in number of arsenic-eaters. I have convinced myself that there exist many of them in Upper Styria, and also in Middle Styria; very many stable-boys, ostlers, woodcutters, and foresters are known to me as arsenic-eaters; even the female sex is addicted to the practice. Many began already at 17 or 18 years of age to take arsenic, and continued it to a great age. Most arsenic-eaters keep the matter secret, so that it is impossible to give accurate statistics. They all assign as their motives for indulging in the habit that it prevents illness; furthers their wish to look rosy and healthy; that it is a remedy against difficulty of breathing, and assists the digestion of indigestible food. A poacher in Upper Styria, who made experiments in my presence of eating arsenic, told me he had acquired courage by the habit. The appearance of the arsenic-eaters in all cases known to me is healthy and robust. I think only robust persons can become accustomed to the practice. Some of them attain a great age. Thus in Zeiring I saw a charcoal-burner upwards of 70 still strong and hearty, who, I was told, had taken arsenic for more than forty years. I heard, too, of a chamois-hunter of 81, who had long been used to eat arsenic. I never observed an arsenic cachezy in those addicted to the habit. It certainly happened once that such an arsenic-eater (a leather-dresser's apprentice in Ligist, 1865), while intoxicated, took too much, thereby poisoning himself severely. According to his own account, he had taken a piece as large as a bean. He entirely recovered, however, and ate arsenic afterwards, but more carefully. As far as my observations extend, white arsenic, namely, arsenic acid, As_2O_3 (also called flowers of arsenic), and the yellow arsenic, As_2S_3 (orpiment) are taken, and

that in a dry state, alone or on bread. The dose is, of course, very small at first, and is gradually increased, the largest quantity eaten in my presence by the poacher in Zeiring being fourteen grammes. A certain Matthew Schober, in Ligist, ate seven grammes and a half before me on April 17th, 1865. The intervals, too, at which arsenic is taken vary—every fortnight, every week, twice or three times a week. But all doubt as to the existence of arsenic eaters is now removed by the present experiments.

HYDROPHOBIA.

A CASE of hydrophobia terminated fatally at St. Thomas's Hospital on Saturday last. The victim, a boy, was bitten about five weeks ago.

CHOLERA IN INDIA.

WE learn from Indian advices that the usual outbreak of cholera which generally occurs at this season of the year has commenced. The epidemic, however, has not hitherto been of a severe character. At the latter end of August, several cases had occurred at the stations of Bhagoo, Ferozepore, Delhi, Morar, Lucknow, and Nowgong. The number of cases at each station was small, and the percentage of deaths not exceptionally high. Simla seems to be quite, and Umballa nearly clear of the disease, and the quarantine which was established at Kussowlie has been withdrawn.

THE WORCESTER INFIRMARY.

THE recent circumstances connected with the resignation of Dr. Inglis at the Worcester Infirmary, to which we have several times referred, have been considered at a meeting of the Worcestershire Medical Society held September 29th, 1875, when the following resolution was unanimously passed.

"This meeting has learned with much regret the differences which exist between the honorary medical staff and the Executive Committee of the Worcester Infirmary. Having confidence in the moderation of their professional brethren connected with it, this meeting assures them of their sympathy and approval in their attempts to obtain for themselves and their successors such protection by the rules as may be needful to secure them from unnecessary vexation in the responsible yet privileged position of honorary medical officers of that institution." This resolution confirms, and in all respects agrees with, the opinions which we have already expressed on this subject.

PECULIAR PEOPLE.

ISAIAH PAYNE, a member of the sect of Peculiar People, has been bound in the sum of £5 to come up for judgment when called upon by the Chelmsford magistrates. Considering that, through his neglect in calling in medical aid whilst his two children were suffering from fever, which terminated fatally with one child, and that his wife also caught the infection and died, the sentence appears to have been remarkably light. The wife was *particeps criminis* in the offence, as she refused to allow Dr. Fox, the medical officer of health, to enter the house. It is a fair presumption, therefore, to believe that she contributed to her own death by neglect of proper precautions; but it is certainly hard on the helpless children that parents should enjoy comparative immunity in the neglect of the commonest duties of humanity.

RECENT URBAN MORTALITY.

DURING last week, 4,874 births and 3,448 deaths were registered in London and twenty other large towns of the United Kingdom. The average annual death-rate was 23 per 1,000 persons living; and the rates in the several towns were as follows: Edinburgh, 17; London, Bristol, and Wolverhampton, 20; Portsmouth and Sheffield, 23; Dublin and Birmingham, 24; Glasgow, Leicester, and Sunderland, 25; Norwich and Newcastle-on-Tyne, 26; Manchester, 27; Liverpool, 28; Leeds and Nottingham, 29; Hull, 30; Oldham, 33; Bradford, 35; and Salford, 38. The average zymotic rate was 6.1; but was as high as 13.1 and 13.6 in Salford and Bradford. Scarlet fever was again fatal in Bradford and Bristol. Four fatal cases of small-pox were recorded in Leeds, where the disease threatens to become epidemic; the Small-pox Hospital in that town contained thirty-three small-pox patients on Saturday last, and, it is reported, that as many

more cases existed in different parts of the borough. In London, 2,127 births and 1,319 deaths were registered. The deaths were two above the average, and the death-rate was 20.0 per 1,000. There were 13 deaths from measles, 90 from scarlet fever, 12 from diphtheria, 49 from whooping-cough, 18 from different forms of fever, 125 from diarrhoea, and not one death from small-pox. In outer London, the general and zymotic death-rates were 16.6 and 3.6 per 1,000 respectively, against 20.0 and 4.7 in inner London. At Greenwich, the mean temperature of the air was 60.1 degs., or 4.7 degs. above the average of the week. Rain fell on each day of the week to the aggregate amount of two and a quarter inches.

SCOTLAND.

TYPHOID FEVER IN GLASGOW.

WE learn that an epidemic of typhoid fever has broken out in certain districts on the south side of the river. We understand that there are strong reasons to suppose that this epidemic owes its origin to milk from an infected farm, but it is not always easy to find absolute proofs of such a fact.

THE GLASGOW INFIRMARY AND THE HEALTH COMMITTEE.

IN reference to the Royal Infirmary, the dispute between it and the sanitary authorities of the city seems hardly at an end. As has been already noticed in these pages, the city local authority directed the attention of the infirmary managers to the fact that they were, in their opinion, illegally admitting cases of infectious disease from a conterminous local authority, without informing the sanitary authorities of Glasgow of the fact. The infirmary authorities were obviously in the wrong; but, instead of acknowledging their error, they have adopted the shabby and undignified policy of obstruction to the sanitary authorities of the city. They have been in the habit of supplying to the city a list of the cases of fever admitted to the infirmary, and the addresses of the patients; the only object of this being to allow the sanitary authorities to trace these cases, and use measures to prevent the spread of the disease. The policy adopted by the infirmary is to refuse such returns, simply out of spite, and so the public action of the Health Committee will be so far hindered. The infirmary authorities will soon awaken to the smallness of this policy when they find their subscriptions affected by it, and we have already heard of several subscribers who have refused their contributions till the matter is properly adjusted. The policy simply means this, if anything: We, the infirmary directors, are infallible, and having been found fault with—though we were in error—we refuse to have dealings with persons who can so far forget themselves as to impugn our infallibility.

IRELAND.

AT a late meeting of the Guardians of the Limerick Union, the salary of the medical officer was increased from £50 to £75 *per annum*.

LAST week, Her Grace the Duchess of Abercorn visited the Hospital for Incurables at Donnybrook, near Dublin, and distributed a large quantity of flowers among the patients, expressing herself much pleased with the Institution.

THE MAUNSELL MEMORIAL FUND.

WE are glad to state that the movement in favour of a substantial memorial to the late Dr. Maunsell has been successfully inaugurated, and has met with the unanimous support of the Dublin press. We would gladly quote the opinions of the Dublin journals with regard to our late friend, but it is sufficient to state that he was well known and much admired by Dublin editors. There were few Dublin journalists who were not willing to consult "Tom Maunsell", where medical,

sanitary, or Poor-law questions came to the front. We thank our Dublin cotemporaries for the generous manner in which they have written of our friend. At a meeting of the friends of the late Dr. Toler Maunsell, held on the 24th ult., Dr. H. Kennedy, Vice-President of the College of Physicians, presiding. The following resolutions were unanimously adopted: "That, considering the valuable services rendered by the late Dr. Daniel Toler Thomas Maunsell to the public and the medical profession, by his writings on the Poor-law and the Public Medical Services, and his zealous and untiring efforts to improve the position of the Poor-law medical officers throughout Ireland, his memory is entitled to some substantial mark of public respect." "That a subscription list be opened with a view of raising a Maunsell Memorial Fund. This fund to be applied to the educating and forwarding in life of Dr. Maunsell's family, who at present are insufficiently provided for." "That a committee, consisting of those present, with power to add to their number, be appointed with a view of carrying out the foregoing object." Dr. Speedy was appointed hon. treasurer, Drs. Grimshaw and Kenny hon. secretaries, and Mr. E. Spencer hon. assistant-secretary and treasurer. The treasurer announced that subscriptions to the amount of £130 had been already received, and that an account had been opened under the head of the "Maunsell Memorial Fund" in the Munster Bank, where, or by any of the committee or officers, subscriptions would be received. Dr. Haydon having been moved to the second chair, the proceedings terminated with a vote of thanks to Dr. Kennedy for presiding.

THE DUBLIN TENEMENT PROPRIETORS AND THE PUBLIC HEALTH ADMINISTRATION.

A MEETING was held on the 22nd ult. of the owners of tenement houses in Dublin. One object of the meeting seemed to be to try and oppose attempts to improve the sanitary condition of the dwellings of the poor in Dublin. The tenement owners were only represented by some twenty or thirty persons. The following circular fully expresses the objects of the meeting.

"SIR,—A society having been formed, entitled 'The House Proprietors', or Tenement Landlords' Protection Society', for the object of legally resisting the undue, unreasonable, unequal, unfair, oppressive, arbitrary, and often illegal proceedings of the sanitary authorities, as constituted in this city—we, without in the slightest wishing or meaning to offer any factious opposition to the administration of the Sanitary Acts, provided they be carried out in accordance with the true intention of the Legislature, do hereby invite every person having any interest in the matter to a cordial and determined co-operation, by at once joining the society and assist in making a stand against the virtual confiscation of our property, and to insist on evenhanded justice, as also to consider the means of remedying many grievances which we are obliged to submit to and suffer in connexion with the Landlord and Tenant Act."

We are disposed to believe, that the so-called "house proprietors of Dublin" will find that most of the ratepaying "house proprietors" in the better parts of the city will materially differ in opinion from them. The "virtual confiscation", we think, would more properly describe the position of the respectable citizens of Dublin, who are paying enormous poor and improvement rates as the result of the "rights" to breed disease and death, which are enjoyed by the tenement owners, who are possessed of about one-third of the city.

THE ROYAL COMMISSION ON THE FACTORY ACTS.

THE Factory Acts' Commission has held a sitting in Dublin. The information collected seems to have been of the scantiest character. We believe many persons willing to furnish information were unaware that the Commissioners were sitting in Dublin until the inquiry was nearly over. The inquiry elicited some very remarkable information with regard to the tailoring trade in Dublin. It seems that nearly all the tailoring business in Dublin is carried on upon what is called in trade phraseology "the sweating system", a plan not unknown in other towns. This system consists in a master tailor giving his work to an individual known as a "sweater", who seems to be a sort of foreman. This "sweater", it seems, is paid by the master by piecework. The

"sweater" employs a number of persons, men, women, and children, who make up work for him at a price much under that paid by the master tailor. This "sweating work" is all done at the workers' own houses, in order to avoid the Workshops Regulation Act, the result being that the work is carried on under most unhealthy conditions. It is stated that clothes are constantly made up in the most unhealthy and crowded tenements in Dublin; often in rooms with persons sick from contagious diseases. It is stated that but few of the Dublin master tailors have proper rooms for their workmen, and that members of the Public Health Committee of the city who are in the trade have their work made up under the sweating system. The Lord Mayor of Dublin himself is accused of promoting this system; while we believe that the statements are exaggerated to some extent, we have no doubt that there is too much foundation for some of the affirmations of the witnesses.

THE BELGIAN INTERNATIONAL CONGRESS.

[FROM A SPECIAL CORRESPONDENT.]

Brussels, 24th September, 1875.

THE Congrès Périodique International des Sciences Médicales, which is at present being held here, is now drawing to an end. To-morrow the meetings of the sections and the general meetings close; and a banquet in the Hôtel de Ville closes the proceedings.

This is one of the most interesting and active of medical organisations, and it is a pity that there are so few representatives of England here. Messrs. Bowman and Critchett, Dr. Chapman, and one or two others are present of their own accord; while America has sent six formal representatives, of whom, however, only two have as yet arrived. All other countries are well represented; even Turkey has sent three members to the Congress.

The arrangements differ greatly from those of the British Medical Association; and, while presenting the disadvantage of discouraging the element of individual original work, encourage a more thorough treatment of the leading questions of importance.

Weeks before the opening of the Congress, every member was made aware of the official subjects which had to be discussed; and, on the assembling of the Congress, these were minutely and conscientiously treated in the sections, and then brought before the general meetings for discussion and approval. The original communications followed in the section meetings after the official questions had been discussed.

The Congress was opened in the Palais Ducal by the King in person, and the members received the utmost hospitality from public and private quarters. The Secretary-General, M. Warlomont, has been kindness itself, and the kindness of him and his family to the strangers was most marked. The Bourgmestre, M. Anspach, gave a rout in the Hôtel de Ville, which was a brilliant success, and gave a tone of cordiality to the whole proceedings of the Congress. All the public works and museums were thrown open to the members, and the railway prices were diminished for them by one-half.

The Minister of the Interior gave a reception last night, and had provided everything that kindness could suggest for the pleasure of his guests.

The French *savants* are innumerable—it would be impossible to give the names of them; and men of eminence from Belgium, Holland, Denmark, Russia, etc., are all represented; while the German *savants* have sent Langenbeck of Berlin, Sigmund, Hebra, and Schmitzler of Vienna, and Grosz of Pesth.

The amount of work which has been got through is enormous, and I must content myself with a short notice of only a few points. The question of maternity hospitals was the most salient; and the warmth of the discussion was sometimes alarming, even for an assembly consisting mainly of our impulsive and animated French *confrères*. It was finally decided on the basis of suppressing large maternities and improving small ones.

Cholera received a great deal of attention, as also the question of prostitution.

In the Surgical Section, two days were occupied with the discussion of anæsthetics. Ether and chloroform were attacked and defended. Oré of Bordeaux and de Neffe were able advocates for the intravenous injection of chloral; and nitrous oxide found no one to say a word for it. I think I do not err in saying that the general opinion was that ether and chloroform are both sufficiently safe anæsthetics when carefully and skillfully administered.

The treatment of wounds was well discussed, though not at much length. Strangely enough, although the able orator who introduced the subject, Professor Debaiseux of Louvain, did every justice to the antiseptic treatment of Lister, it had not a single advocate whose appreciation of it was so thorough as it deserved, excepting Professor Langenbeck of Berlin. Some of the cases he had obtained by a method of his own, identical in principle with that of Lister, were as astonishing as the results obtained by Lister. Antiseptic surgery does not seem to suit the impetuous brilliancy of French surgeons.

To-morrow, little in comparison will be done, as the sections have finished the official programme.

MEDICAL ADVERTISING.

At a meeting of the North of England Branch of the British Medical Association, held at Sunderland on September 23rd—S. E. Piper, Esq., F.R.C.S., President—present, forty-one members of the Branch, Dr. J. W. Eastwood read a paper on the Prevalent Practice of Advertising Medical Works in the Non-Medical Press. At the close of the paper, Dr. Eastwood proposed the following resolution.

"That the members of this Branch regard the practice of advertising medical works in the non-medical press as injurious to the best interests of the profession, lowering to its dignity, and to be discountenanced by every means in their power."

The resolution was seconded by Mr. James Wilson, and supported by Mr. Mordey Douglas, Dr. Legat, and carried unanimously.

OPENING OF THE SESSION: REGISTRATION OF MEDICAL STUDENTS.

WE have more than once pointed out that the London medical student is subject to an unnecessary inconvenience in being called upon to "register" his tickets and the period of commencement of medical study at the Royal College of Surgeons, London, as well as at the office of the General Medical Council. The register of medical students of the General Medical Council is intended to supersede the individual registers of the separate examining boards, and is accepted in lieu of them by all the other medical corporations except the College of Surgeons. The reasons for the persistence of the College in maintaining its own registration, satisfactory at first, have now certainly ceased to have any weight. The registration of the College has always been exceedingly careful, and has been in the hands of an experienced officer, in whom the College places just confidence. It was not unnatural or unwise that it should hesitate to abolish a safeguard on which it had learnt to rely as a means of ascertaining that the initiation of study was duly effected, and that the full courses prescribed in the curriculum were duly undertaken; but we think now the accuracy and efficiency of the register of the Medical Council have been sufficiently secured by the tests of time and experience. We are very glad, therefore, to learn that the course which we have previously indicated as desirable is likely to be adopted, and that it is probable that this will be the last occasion on which medical students will be called upon to effect a double registration. The subject of our remonstrance has attracted renewed attention at the College, and it will probably be brought up for settlement at an early meeting of the Council.

GUY'S HOSPITAL.

AT Guy's Hospital, a large underground room, situated beneath the museum, has during the summer months undergone extensive alterations, to better adapt it for the preservation of subjects for dissection. This room is now capable of holding upwards of twenty subjects; and its ceiling has been so plastered as to prevent any escape of gases in the direction of the museum. The dissecting-room, demonstration theatre, and adjoining offices, have also been recoloured. On Wednesday last, we noticed eight subjects lying ready for dissection, and although some, as we were informed, had been preserved nearly two months, there was no odour likely to offend the susceptibilities of one quite unaccustomed to the atmosphere of a dissecting-room. In this respect the dissecting-room of to-day contrasts very favourably with that of former years, and the change is almost entirely due to the introduction of glycerine as a preservative. Not only is dissection rendered much more pleasant,

now that the bodies are carefully preserved, but it has become far less injurious to health—the diarrhoea of freshmen being much less frequent than formerly, whilst dissection-wounds are almost unknown.

The treasurer of the hospital is not yet sufficiently recovered from his recent illness to be able to be present at the introductory lecture to-day (Friday); in his absence the president, Lord Lawrence, is to distribute the medals and certificates gained during last session. The *Guy's Hospital Gazette*, which for a year has been conducted by the presidents of the Pupils' Physical Society, has just completed its sixth volume. During the recess, it has been a fortnightly journal, but, with the commencement of the new session, it will again appear once a week. It reports the principal medical and surgical cases in the wards, notes the surgical operations which are performed, gives occasional reports of the lectures by the staff, publishes a weekly list of the admissions into the wards, and details other most noteworthy incidents of the hospital. We are pleased to learn that it is well, though deservedly, supported by past and present Guy's men.

ST. MARY'S HOSPITAL.

THE authorities of this institution have taken advantage of the long vacation to effect very considerable repairs and alterations in the hospital buildings. More than 200 workmen have been engaged upon the work since the middle of July; and a portion of the building will be ready for the reception of patients during next week. It will be recollected by old St. Mary's men, that the water-closets were formerly placed at the ends of the wards, and were simply cut off from connection with the wards by double doors. They are now placed at the four angles of the building in four entirely new structures, and each water-closet is separated from its corresponding ward by a lobby having a thorough current of air from side-windows. The outer end of each ward is now occupied by three large windows, which, of course, afford extra ventilation. The committee have, however, still further increased the supply of fresh air to the wards by the introduction of numerous vertical tubes by which it is conveyed from both sides of the building, so that abundant supply is insured during all directions of the wind. The drainage of the building has been thoroughly examined, cleansed, and, where necessary, repaired. The out-patient department has been enlarged and improved. The whole of the interior of the building has been freshly painted, the ceilings limewhited, etc., and the exterior has been cleansed and repainted. We understand that the cost of these works will not fall short of £10,000. In connection with the school department, we learn that a new class-room has been made, the museum freshly arranged, and thereby greatly improved, and that the mortuary and deadhouse have also been thoroughly renovated and repaired.

THE MIDDLESEX HOSPITAL MEDICAL COLLEGE.

THERE are few medical schools which have grown more rapidly during the last three or four years than the Middlesex, and some twelvemonths since it became evident to the authorities that additional accommodation would be needed to meet the requirements of the largely increasing number of students. With this object in view, extensive alterations and improvements have been made during the past vacation. In the first place, the chemistry theatre has been raised, and a new laboratory has been constructed over it, for the practical teaching of the chemistry class, while the room formerly used for that purpose has been rendered available for instruction in practical physiology. The dissecting room accommodation has been extended, and the sanitary arrangements have been perfected. A new curator's room has been built, and additional library space has been afforded for the disposal of a large and valuable collection of works generously presented to the school by the executors of the late Mr. Swann. The museum is now being furnished with new skylights, which will render every portion of it available for use, and greatly facilitate study. The office of curator of the museum has been associated with that of pathologist, an arrangement which is alike convenient and conducive to the practical teaching of morbid anatomy. Two college tutors have been appointed, and one of them is daily in attendance to advise students as to their reading and to explain difficulties; in addition to this, the College tutors hold classes in almost every subject comprised in the curriculum, rendering private instruction unnecessary. Mr. Hulke has been associated with Mr. De Morgan in the chair of Surgery, and the practical surgery class will be conducted by Mr. Lawson and Mr. Henry Morris. Mr. Thomas Taylor, late lecturer on chemistry, will deliver the first part of the chemical course this year, and the vacancy caused by the resignation of Mr. Hiesch has been filled up by the appointment of Mr. William Foster of Sidney Sussex College, Cambridge, to the chair of chemistry. Special attention is paid to the practical teaching in the wards and out-patient rooms, and the appointments of clinical clerks and dressers are so arranged that every student may hold both a clerkship and a

dressership for at least six months during his attendance on hospital practice.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.

THE winter session of this school will commence on Monday the 4th instant, when the introductory address by Mr. Davy, and the distribution of the prizes by the Rev. Canon Conway, are fixed for three o'clock, as the evening will be taken up with the triennial dinner at St. James's Hall.—We are requested to state that visitors will have an opportunity of going over the school buildings after the distribution of prizes.—This year, for the first time at Westminster, several subjects have been properly prepared and preserved so that the students will be able to commence dissecting without any loss of time.—Dr. Sturges was nominated on Tuesday, September 28th, for the post of Physician, and Dr. De Havilland Hall for that of Assistant-Physician. Their election by the governors, on Friday the 8th instant, is tolerably certain. The triennial dinner of the old students and friends of the Westminster Hospital Medical School will take place at the St. James's Hall, on Monday, October 4th, at seven P.M.; C. Holthouse, Esq., F.R.C.S., in the chair.

THE LIVERPOOL SCHOOL OF MEDICINE.

WE understand that Professor Humphry of Cambridge will be present at the opening of the Liverpool Royal Infirmary School of Medicine on Saturday, October 2nd, for the purpose of distributing the prizes; and that he will also be one of the guests at the annual dinner of the School, which takes place the same evening at the Adelphi Hotel.

THE MEDICAL SCHOOLS OF GLASGOW.

THE medical session in Glasgow will be opened on Tuesday, October 26th. We understand that Dr. George Buchanan, the Professor of Clinical Surgery, will inaugurate the session at the University by an address. The coming session at the University promises to be a very successful one. It may be remembered that at the beginning of last session there was some little inconvenience experienced by the fact that the Western Infirmary was opened for the reception of patients simultaneously with the opening of the classes. Of course, it could not be expected that matters would shape themselves at once into the most desirable form, and no doubt both teachers and students had to reconcile themselves to a few inconveniences. The experience of last session, however, has enabled the arrangements for the next to be satisfactorily made, and, no doubt, with all the modern appliances at the new hospital, matters will go on to the complete satisfaction of all concerned. We understand that, under the supervision of Dr. Joseph Coats, the pathological department of the hospital has been very completely arranged, and it is expected that the course of lectures this session will be held under much more favourable auspices than formerly. This gentleman now lectures entirely at the Western Infirmary, and on an independent footing, his lectures being recognised by the University as qualifying for degrees in medicine. Among the advantages which this session will present, we understand that this department will be furnished with a very complete stock of new microscopes, by means of which the course will be illustrated.

At the Royal Infirmary, the proposed school seems for this session to be in an expectant attitude. Dr. Cameron will lecture on surgery in the Infirmary, and his lectures have been recognised by the University. No other course has been recognised, we believe, on the grounds adverted to on a former occasion in these pages. The University is ready to recognise independent lecturers, but, if the Infirmary makes a complete school of medicine and arrogates to itself the appointment of lecturers on each branch, then the University will not give its countenance to such an arrangement. We are assured that a true competition would be welcome to many interested in the University; but, in order to do this, the Infirmary would require to recognise absolute free trade in teaching. Meanwhile, there is to be one other course of lectures at the Infirmary, that on medical jurisprudence, by Dr. William Mac Ewen.

QUEEN'S COLLEGE, BELFAST.

THE session here opens on October 19th. The lectures to medical classes begin on Tuesday, November 2nd. By far the greater number of students (medical) of Queen's College, Belfast, are matriculated. The matriculation examination will be held on Thursday and Saturday, October 21st and 23rd. There will be a supplemental matriculation on Tuesday, November 16th. Only after that examination will it be possible to state the number of medical students in attendance. The number last year was 215 for the winter session; the number of students during the summer session was 131.

ABSTRACTS OF
INTRODUCTORY ADDRESSES
 DELIVERED AT
**THE METROPOLITAN AND PROVINCIAL
 SCHOOLS,**
On OCTOBER 1st, 1875.

ST. GEORGE'S HOSPITAL.

THE Introductory Lecture was delivered by Dr. ROBERT BARNES, Physician-Accoucheur.

Dr. Barnes observed that altered circumstances seemed to invite, if not to compel, those who have to give these addresses to select for their theme some of the wider and more general aspects of medicine; to endeavour to point out some of the relations of medicine to the public good; to expose some of the defects in the construction or administration of our laws that hinder the just and beneficent application of science to the public service. Thus, we may suggest to you some idea of the higher aims of the profession you have chosen, of the position you will occupy in relation to other professions and to society at large, and of the duties that devolve upon you in maintaining and extending that influence upon which the future welfare of mankind so largely depends. What was once called the "healing art" has now a far greater sphere than the term expresses. Medicine, in its modern sense and work, is "preventive" as well as "healing". Medicine is no longer simply an art directed to the alleviation or cure of individual suffering. Applied to the task of aiding in the administration of justice, of removing the causes of disease, of restricting or annihilating epidemics, of increasing the sum of national health, it becomes a moving power in government. State medicine, then, is the offspring and the complement of the "healing art". He hoped to be forgiven for pointing out that both religion and law will be strengthened the more they are brought into harmony with science. Each is the complement of the other two. But the day has come when science must lead. The last-born, perhaps, now that the day of her emancipation has arrived, the most vigorous, the most progressive, and therefore destined to exercise the greatest sway in the future. Theology and law are in their essence stagnant. Religion is wholly revealed. Presumption alone can add anything to its sublime and simple truth. Law, when not informed and vivified by science, is dogmatic—the slave of authority seeking a solution of its doubts in precedent, which is too often nothing more than error upon error crystallised by time. And so it must be with an almost purely subjective study. Deriving the bulk of his knowledge from oral or written tradition, the lawyer, according to the bent of his organisation, assimilates what he learns—makes it a part of himself. It thus undergoes a subjective transformation. And since men's minds differ in their constitution and construction, there results an infinite diversity of opinions, whilst there is no appeal but to the opinions of those who have gone before, and who from that very circumstance are more likely to be wrong than themselves. Hence those incessant conflicts in our law-courts, those frequent reversals of the decisions of one civil court by another, which are the despair of the uninitiated. If there were a court of appeal in criminal cases, reversals would probably be no less frequent; and still greater would be the difficulty of the Irishman, who, when asked to plead Guilty or Not guilty, replied, "Faith, how do I know till I'm tried". Recently the legislature has decreed certain changes in the machinery and proceedings of the law. He dared not, with profane hand, touch this mystery of mysteries. He hoped that the changes would result in more speedy justice and diminished bills of cost. There are certain flaws which are a real discredit to the law, which involve inconsistencies so gross as to be revolting, not alone to the scientific mind, but to the sense of the community. Of these, he instanced the well known practice when pregnancy is pleaded in bar of execution. The law directs that the prisoner shall be examined, not alone as to the bare fact of pregnancy—in itself sometimes no easy task for a skilled physician—but also as to whether she is "quick" with child. This latter fact it is often impossible to determine, and that for several reasons. In the first place, the so-called "quickenings" is with many women an entirely subjective phenomenon—a sensation they think they perceive, but which is not perceptible by others. She may affirm that she is conscious of having quickened, and the examiner is not in a position to refute her assertion, because he or she may not obtain objective proof. In the next place, some women never consciously quicken at all, and the examiner may equally fail to

get evidence of the event; and many women quicken, or think they do, who are not pregnant. Again, the movement or impulse felt by the examiner, and which is presumed to be proof of a "quick" child, is often fallacious. The late Dr. Tyler Smith insisted that the movements felt by the mother and by the examiner were not produced by the child, but by the womb itself; and it is now known that these movements of the womb can be detected before the earliest period assigned for the quickening of the child. After all, then, it may be answered, the appeal was made to science in time, and no harm was done. The law directs the judge to empanel a jury of matrons, but does not preclude him or the Secretary of State from referring the decision to an expert. He did not believe that a pregnant woman, who pleads her pregnancy, will ever again be hanged on the verdict of a jury of matrons, unless, indeed, we are destined to see juries of matrons selected from legally qualified "medical women". This may happen when Macaulay's Lord Chancellor will be sitting on the woolsack with twins in her lap. Let us hope not before. But the absurdity, the barbarity of the law in this relation does not end here. The law of England makes it felony to attempt to procure abortion. All right-minded persons will admit the wisdom, the justice, the necessity of this provision. But then see how lamentable is the inconsistency of the law. It declares that a pregnant woman may be hanged; it makes it felony to attempt to procure abortion. Justice in this case sanctions—nay, commits homicide and feticide, and with blind inconsistency punishes those who are guilty of the simple attempt to procure abortion. It is scarcely an extenuation to urge that the shocking consequences that would result if the letter of the law were rigorously carried out are practically avoided. It is no small evil that a law representing ignorance so gross should disfigure the statute-book, and that practice so clumsy and ridiculous should stain the records of our courts. The indirect influence of authorised error cannot fail to be pernicious. When the judges thus sanction the theory that the embryo in its early stage has no life, and may be treated as non-existent, how can it be expected that the ignorant masses will look upon the procuring abortion as a crime? This most deplorable doctrine is not accepted in other countries.

Here we are brought face to face with another relic of the age of ignorance which is still held in bigoted veneration. The irresponsibility of the insane is a question that is continually giving rise to the most painful discussions and the most conflicting decisions in our courts. In all civilised countries, it is a fundamental rule that responsibility is the attribute of reason, and, therefore, that insanity implies irresponsibility. In its dealing with this admitted principle, the courts practically abrogate the law. The judges, many years ago, in deliberation, put a definition upon the law, upon which their successors still hold themselves bound to act. This definition virtually declares that insanity does not carry irresponsibility. Their faith in the wisdom of their predecessors is absolute; their contempt for the teaching of modern science is unbounded. On a recent trial, a learned judge thus charged the jury: "It was not sufficient to show that the prisoner was insane, unless it was also shown that he did not know the nature of the act he was committing, or did not know that it was wrong. The jury must disabuse their minds of the medical notions as to insanity, for the reason that these medical men had not met the court upon the ground which they desired them to do, and that their opinions were founded on their own ideas as to what the law of insanity ought to be." Notwithstanding this charge, the jury, without any hesitation, found the prisoner not guilty, on the ground of insanity. What the judges declared to be the law was not really the law, but their arbitrary interpretation of it. We may claim the liberty to question whether this interpretation be the just one. It hangs upon an impossible postulate. No man who has been at one time sane, and therefore trained in accordance with the modes of thought of his fellow-men, can, even on becoming insane, be freed altogether from the influence of that training. The sense that killing is wrong may remain. It is transcendently absurd to look for a man so demented as not to know that striking another man on the head with an adze is likely to injure or kill him. Such a man can hardly be found in a lunatic asylum; and, *à fortiori*, can hardly be found out of one. He is a creation, not of nature, but a legal figment. Carried to its legitimate applications, the legal doctrine would simply abrogate the law of irresponsibility on the ground of insanity. The doctrine, then, must be revised by the light of science; for assuredly juries will continue to reject it. In spite of strong dictatorial charges, it is becoming practically obsolete, and it must at no distant date be given up even by the lawyers. The doctrine that it is right to punish, even to hang, madmen according to their knowledge of right and wrong, ought, in its logical application, to embrace a graduated scale of responsibility and penalties. The attempt to define the degrees in this scale will hardly be undertaken even by the trained analytical subtlety of lawyers. The truth is, that only one

line of demarcation is possible. That must be drawn with a resolute hand between sanity and insanity—responsibility on the one side, irresponsibility on the other. A not uncommon argument in favour of the legal interpretation is, that “the theoretical superiority of the medical criterion is far outweighed by the practical value of the judicial test. Its error on the score of excessive stringency is in practice corrected by the action of juries.” The fallacy of this reasoning is transparent. It is simply to assert that it is right to hang a madman if a jury will allow it. An argument of this genus was used—and too successfully—by the Attorney-General (Coleridge) who prosecuted the boy O'Connor for an attempted assault upon the Queen. He represented to the jury that it was better for the boy to be sent to prison for a definite term, than to an asylum. To prison he was sent; and there his insanity—the evidence in proof of which had been ridiculed at the trial—became manifest, and he had to go to an asylum after all. The prison did not cure him; it seldom does cure insanity. In that respect it is inferior to the gallows. The lecturer then referred to a matter immediately related to the theme: the mode of taking scientific evidence. He thought it would not be denied that, howsoever excellent the practice in force may appear to lawyers, it is eminently unsatisfactory to experts. Seldom, probably, does a scientific witness leave the box quite easy in mind as to whether he has spoken “the truth, the whole truth, and nothing but the truth”; and not seldom does he experience the mortification of finding what he said utterly wrested from its proper meaning by the perversity of counsel, or misunderstood by the court and jury. The theory that through the conflict of opposing counsel by examination and cross-examination, and the impartial interrogation of the court and jury, the truth is elicited, often signally fails in practice. The questions of counsel are generally prompted by hints gathered from books, or from experts sitting at their elbows. But they are very wary in accepting these suggestions. They may not understand them; and, if they do, they may in their discretion fear that the answer drawn will damage their case. Thus it constantly happens that the expert is only allowed to say so much of the truth as may suit the purpose of counsel, and every one knows how detached fragments of truth may be made to support a false argument. Those who are prepared to admit that the perfection of the practice in our courts is a question open to discussion, may probably see in the practice of foreign courts some points not unworthy of imitation. When an offence against the person is suspected, a judge of instruction appoints one or two experts to make the preliminary investigation; these make a formal report in writing, and this report is a document that has to stand the criticism of their professional brethren.

It must often happen that the scientific case as presented to a jury is inaccurate and imperfect, and that further inquiry would clear up all doubt. I am not lawyer enough to know whether the superior criminal courts have the power to do what a coroner or a magistrate sometimes does—that is, to adjourn a trial for the revision of the scientific conclusions; but I do not remember to have heard of such a course being adopted. Such a power of adjourning for further evidence would be the most efficacious check upon the perverse ingenuity of counsel in raising a cloud of doubt by insisting upon some defect or point omitted, and which could often be cleared up by proper reference. But this, the true scientific method, is not that of the law. As the case is presented, so it is dealt with. And here again we sometimes see the jury evades the difficulty by not agreeing to a verdict. A bungling proceeding, rather; for the result is simply a miscarriage of justice. In France, the president of the court may call for fresh scientific evidence, and appoint new experts; men so chosen are more likely to be free from bias than when they are chosen and paid by one side or the other. The way of taking the opinions of an expert in court is extremely ingenious. He is expected to hear the evidence; but he must not give his opinion upon it, for that would be to usurp the functions of the jury. He must answer upon a “hypothetical case” framed by the counsel upon data more or less accurately representing the facts given in evidence. It is not too much to say that the case so put often bears little resemblance to the true one; and the witness may be harassed by a number of discordant hypotheses. But the clumsiness of the process is best shown by the fact that it constantly breaks down; and judge and counsel are continually lapsing into common sense by putting questions directly bearing upon the case. The general effect of the mode of getting up evidence and of examining experts in courts of justice is to deter many of the best men from appearing as witnesses. This is a most serious injury to the public. In this way there is a virtual suppression or exclusion of the truth. Inexorable time warned him not to open new matter, or he might be tempted to say something about sanitary legislation. We have now a sanitary Parliament. Unfortunately, there are not half-a-dozen doctors in the house to inform and to control the overwhelming majority of

dilettants dabbles, or illegitimate practitioners in this branch of medicine; no very great success, therefore, has yet marked a policy whose intention is worthy of all praise. The most immediate result will at any rate be appreciated by our profession. The doctors are to do nearly all the work, with little moral help, at no small personal risk, for very little substantial pay. So much money is wanted for law, and for defensive and destructive armaments, that we must economise somewhere. As a humble conservative, he ventured to hope that our chief will continue to educate his party to the conviction that a successful policy can only be carried out by a proper appeal to medical science, and a more liberal treatment of medical practitioners. The lecturer concluded by animating the students to a career of diligence, by reminding them of the glorious traditions of St. George's. The light which Hunter the immortal; Young, second only to Newton as a natural philosopher; Sir Matthew Baillie, one of those who laid the foundations of modern pathology; of Brodie, who for intellectual power was second to no surgeon of the present century,—had shed over the civilised world, shone with peculiar brightness here at the centre whence it beamed. These men might be called our scientific ancestors. But such do not die. Each had left his soul stamped upon works which would last whilst history recorded the achievements of genius for the delight, the instruction, and the welfare of mankind.

KING'S COLLEGE.

THE Introductory Lecture was delivered by Dr. JOHN CURNOW, Professor of Anatomy.

The lecturer began by welcoming the students, and by referring to the changes in the medical staff during the past year, and to the completion of the new physiological laboratory, which is one of the most perfect in its teaching appliances either in Great Britain or on the Continent. After pointing out that the purpose of an introductory address was to benefit the student, and not primarily to instruct the lay public, he passed on to the question of “Medical Education, its Spirit and its Method”. Preliminary or general education was defective, and the standard low, and should be improved, in order that the student of medicine should not have to start under such disadvantages as at present; for, generally speaking, his training in the classics was very superficial, he possessed little knowledge of physics, and was entirely unacquainted with the most elementary facts and laws of biology. Those whose powers of observation and reasoning had been called forth during school-life had an immeasurable advantage; and the innovation by which a scientific training had of late years, in a few cases, taken the place of an early apprenticeship to the practical details of medicine and surgery, was greatly to be commended. The medical sciences were to be mastered in their liberal as well as in their technical aspects; for, although most students were fairly well informed in the latter, the benefits of mental discipline and of correct habits of thought were too little appreciated. Questions of mere utility were frequently allowed to overrule the advantages derived from a cultivation of the powers of observation and of the faculties of instituting proper experimental inquiries, and drawing just conclusions from them. Hence students rested too much on authoritative teachings, and made little use of their individual judgment, which was so necessary in their after-practice. Demonstration of everything that can be shown is the all-important means of education. Although this system had been greatly developed in late years, yet it was merely a return to the older plan of instruction, which had been temporarily thrust aside by the lecture-system, whose office was more to guide than to educate. Physiology particularly was now in need of this means for imparting a knowledge of its conclusions and the facts on which they were based; and the lecturer hoped that no penal regulations would retard the recent advances in extending or in teaching this science. Progress in medicine was “a function of two variables”, direct observation and novel experimentation; and an education of the faculties by which these could be secured was the chief essential. After showing that anatomy, physiology, and chemistry were the great means of obtaining this result, and referring to the care with which they were taught, as far as the healthy body was concerned, the lecturer thought that the teaching of morbid anatomy, and especially of pathology, might be improved and made more practical. He next adverted to the charms of scientific pursuits, especially of those which dealt with the phenomena of life; and to their uses in correcting the inevitable tendency of a purely mathematical training to lead us to expect definite results. In the medical sciences, probable and approximate data only could be obtained; and the anticipation of grasping all the factors engaged in the production of a diseased state, and of possessing certain and reliable means of combating it, was quite Utopian. The practical side or art of healing is, therefore, not necessarily dependent on theory; and

so especial care must be taken to acquire as good a knowledge as is possible by "bedside" study. Neither the scientific nor the practical excludes the other, but should be cultivated side by side. He alone is learned who reduceth his learning to practice; and practical skill without learning degrades our profession to the level of the days of barber-surgery and mediæval medicine. The history of medicine was then appealed to, in order to show that the scientific portion had reflected in every age the state of the sciences in general and the phases of speculative thought. Still a large amount of medical practice of great value was purely traditional; and this comprised the employment of many very important drugs. It was here that such scope was found for individual skill and dexterity. Some striking examples were quoted, where remedies had been neglected for long periods, and then again brought into every-day practice, so that the importance of tradition might be quite evident. The stages through which medicine had passed indicated that every succeeding age had drawn a wider circle round the knowledge of its predecessor; and the same process was still going on, and would go on in the future. Medical education two centuries ago was contrasted with the present method; and the address was concluded by pointing out the life-long nature of all education, the advantages of order, method, and a proper spirit in its pursuit, and the necessity of a never-ending patience for its consummation.

ST. THOMAS'S HOSPITAL.

THE Introductory Lecture was delivered by Dr. J. F. PAYNE, Assistant-Physician and Demonstrator of Morbid Anatomy.

The lecturer commenced by stating that he should take for his special topic the character and duties of the student, leaving further professional questions to other occasions. He thought the four years of student life would suggest by themselves far more than could be satisfactorily discussed in a single lecture. He thought the gradual disuse of the old words pupil and apprentice, and the gradual recognition of the position of a medical student in the commonwealth of learning, good signs. The profession of a student taken by itself was one of the highest a man could engage in, quite independently of its relations to after life. It was unfortunate that local and other circumstances had made medical students in England an isolated body, and not united them, as in other European countries, with the students of other faculties. But students should remember that, even if they did not strictly form part of an academical body, they might cultivate the academical spirit, a love of learning, a high standard of refinement, and a dignified *esprit de corps*. There was no reason why they should not attain these, as well as those did who were receiving what is called a liberal education. It was a mistake to draw too sharp a line between liberal and professional training. Studies not avowedly professional might be pursued in a purely technical spirit, as was often the case with classics and mathematics; while some professions, such as medicine, included in their curriculum a very great deal of what was necessary to make up liberal education. What is learnt is less important than how it is learnt. Medical studies offered, by their alliance with the physical sciences, all the advantages of one of the most powerful instruments of education—viz., scientific research. This alliance might be made as important to the medical profession as, after the revival of learning, the mastery of Greek and Latin literature was to the professions of law and theology. Their influence springs from their being associated with the dominant ideas of the day. But medicine is not only allied with the physical sciences; it is itself very largely imbued, if not wholly, with the scientific spirit. But it was necessary to inquire, What is the scientific spirit? This is difficult to fix in any form of words; but a very clear idea may be formed, by way of contrast, in tracing the history of an ancient pursuit like that of medicine, which has survived many phases of intellectual development. Examples were given to show how far medical science in former days fell short of scientific precision; and how greatly the moderns, though yet far from perfect, had improved in this respect. Some of the medical sciences were passed in review; and it was shown that, in anatomy and chemistry, the student possessed types of the two chief kinds of sciences, that of observation and that of experiment; while physiology, still in a transitional state, showed the immense increase of power gained by the introduction of experimental methods. Books were a great difficulty with the scientific student. Though continually misleading, by tempting the student to substitute words for things, they were still indispensable for understanding the things. The best style of text-book was that which, like a traveller's guide-book, was unintelligible without the objects. Some persons feared that too much science was now learnt in medical schools, and that the students became incapacitated for practical work. If this were true, it could only be because the so-called "science" was bad, and consisted of words only. True science is the

most practical of all things. Equally mistaken is the notion that there is some kind of practical science less rigorous and difficult than genuine knowledge, which may be a cheap substitute for it; but nothing of this kind can ever be useful in the long run. Finally, a word was necessary with regard to examinations. The present system had many evils; but in a practical profession, at all events, some system was quite indispensable, since the public demanded from us a guarantee of knowledge and capacity. The important thing for the student to remember is, that examinations are primarily for the benefit of those examined; and it is in a high sense most important to the candidate himself to know whether he is fit to undertake the responsible and arduous functions of a medical practitioner.

GUY'S HOSPITAL.

THE Introductory Lecture was given by Dr. STEVENSON, Lecturer on Chemistry.

The lecturer took up as his topic the Study of Medicine. He made reference to the varying esteem in which the profession of medicine had been regarded in different ages, showing that it has not been invariably in periods of the greatest culture and enlightenment that its professors have been most honoured. Taking a hopeful view of the future, he combated the assertion of Dr. Gregory, which has recently been publicly referred to, that medicine will soon cease to be considered a liberal profession; and asserted that on the members of the profession it depends whether medicine shall be regarded as a liberal profession or not. Should gain, greed, and applause be the aims of our profession, the worst anticipations may be expected to be fulfilled; whilst if knowledge of disease, culture, and an honourable professional spirit, be dominant, the medical profession need not fear adverse criticism. The qualifications necessary for the study of medicine were next touched upon, and thoroughness of study inculcated, the acquisition of accurate knowledge and a sound judgment. In the acquisition of these, the teacher can but assist; and, the requisite opportunities being given, it rested with the student to make right use of them. In the more detailed exposition of his subject, Dr. Stevenson drew a distinction between the preliminary and more scientific studies which first engage the attention of the student: the basis of medicine, and the study of medicine proper (in which term are included medicine and surgery in all their branches). When natural science first began to make rapid strides, too much was expected to be the immediate and direct result of scientific study; all our old notions were to be overturned and superseded. Such, however, has not been entirely the case; and now the mutual relations of science and medicine are, perhaps, better understood. Anatomy, chemistry, and physiology, were next considered; and then it was pointed out that these are ancillary to the study of clinical medicine, which, indeed, is to be the central object of the student. The mutual relations of patients and students were also dealt with. The desirability of making a study of preventive medicine and the use of statistics, in determining the healthiness or unhealthiness of communities, received notice; and it was urged that it should no longer be possible to say that medical men, as a rule, care nothing for sanitary science, and even view it with suspicion. The system of stimulating students by prizes was also defended, where not carried to excess; as also the moderate indulgence in manly sports. The lecturer concluded with an exhortation to the students manfully and at all times to do their duty to the profession and to their patients, and not cease the study of medicine when a qualification to practise it had been obtained, but to make it a life-long study.

SHEFFIELD MEDICAL SCHOOL.

THE Introductory Lecture was delivered by Dr. YOUNG, Lecturer on Materia Medica.

Dr. Young had much pleasure, in the name of his colleagues, in welcoming back the old students, as well as holding out a hearty reception to those who were there for the first time; he highly complimented the students of last year, and asked the beginners to take pattern from them in their industrious application to studies, kindly behaviour to each other, and general good conduct. He referred to the medical profession as a noble one, though sometimes basely represented in some of its members. There was in it more scope for all the finer talents with which an all-wise Creator had endowed humanity than in any other calling or profession. There was no doubt it was true, and he was sorry for it, that the practice of medicine and surgery had lost much of its inherent dignity by the ruling passion of modern times; viz., the spirit of trade. By many, a liberal art was degraded into a common trade; this is observable in manifold ways, such as in the great number of special hospitals; some necessary, no doubt, but the great ma-

larity more injurious than useful. Gave a short sketch of the early history of medicine, that from the earliest times, and amongst every tribe and race of men, certain believed-in remedies had always existed for the cure of disease; and, to give relief from pain, some of the most useful medicines of our *Pharmacopæia* were used in much the same way as now, such as opium, iron, etc. Still the development of the science had been slow; prejudices of one kind or another always being thrown in the way, retarding its progress. Instanced the valuable discovery of Jenner as an example: a discovery that had probably saved more lives than have been sacrificed on the battle-fields of the earth was for a considerable time ridiculed by many of the most eminent medical men of their day. In our day, a change for the better has taken place; anything good was now readily received and adopted. Hoped each student had considered what it was, as a medical man, he would have to do with; if he have, he will have found that medicine, in its broadest sense, is perhaps the most difficult of studies; it occupies itself with the most abstruse of all problems; viz., life and organisation, etc. This word "life" means a great deal; doctors must try to understand it as far as possible. You have to learn that each organ and tissue has a life of its own; its study seems exhaustless; it is, therefore, necessary for your own sakes that you give an enthusiastic diligence in all departments of the school; it is not by merely listening to a lecture on a given subject is going to make you master of it; he who trusts solely to his lecturer will probably fail; self, and self alone, can make a man master of any subject. Lectures are principally intended as a guide to study, etc. Your lecturer does not profess to do much more than simply steer the course you ought to take. You will find the agents used for the annihilation of disease are nearly all double-edged swords, able to cut two ways, able to destroy as well as restore; knowing which, it is your duty to leave nothing undone, so as to be masters of the science. The first things to be learned were anatomy, physiology, and chemistry; they were not the first by mere accident; it is on these three subjects that the great temple of medicine can be built. Referred to the results of the recent examinations of the Royal College of Surgeons in proof of this. The licensing boards were becoming more and more alive to the necessity of the first departments being not merely "crammed" into a man, but rooted and grounded in him. There was nothing to frighten beginners in the results of the examinations as published, only a wholesome lesson. The ignominy of being "plucked" is, in the great majority of cases, the result of non-self-reliance and application; it was a necessary a man should work, and, compared with what work is considered in these days, it was downright hard work. If any thought the study of the practice of medicine was a mere empirical art, a mere routine, he was much mistaken; if there were any here, the best advice he could give was, do not come back again; let this day terminate your medical studies. He then gave some hints as to how the first year's man ought to study. In anatomy, he specially impressed the importance of knowing well the osseous system before commencing the soft parts. Physiology was most important; it taught how the organs he dissected in the dead body acted in life. Chemistry was every day becoming more and more important; our large populations are calling loudly to medicine in sanitary matters. He advised the second and third year students to be good pathologists; he thought the importance of pathology was not sufficiently realised. He put great stress on the importance of a regular attendance in the wards of the hospital. In conclusion, he said he thought it advisable that medical men should not devote themselves exclusively to medical studies; they ought rather to give themselves up to the pursuit of general knowledge, keeping in view the main thing, but still cultivating such other branches as bear more or less upon medicine generally. Medicine was a progressive science, and could only be studied from a broad platform.

ASSOCIATION INTELLIGENCE.

YORKSHIRE, AND EAST YORK AND NORTH LINCOLN BRANCHES.

It having been decided by the respective Councils of the above Branches that the autumnal meeting shall be held conjointly at the York Museum on October 13th, 1875, members of these Branches intending to read papers or cases are requested to forward the title to either of the Secretaries on or before the 27th instant, so that a notice thereof may be included in the circular convening the meeting.

Dinner at the Station Hotel at 5 o'clock. Tickets (exclusive of wine) 7s. 6d. each.

W. PROCTER, M.D., York, } Hon.
R. H. NICHOLSON, Hull, } Secs.

York, September 18th, 1875.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Office of the Association, 36, Great Queen Street, London, on Tuesday, the 12th day of October next, at Three o'clock in the afternoon.

FRANCIS FOWKE,
General Secretary.

36, Great Queen Street, London, W.C., September 23rd, 1875.

SOUTH-EASTERN BRANCH: COUNCIL MEETING.

A MEETING of the Executive Council of this Branch will be held at the Terminus Hotel, London Bridge, on Wednesday, October 6th, at 3.15 P.M.

CHARLES PARSONS, M.D., *Honorary Secretary.*
Dover, September 29th, 1875.

WEST SOMERSET BRANCH.

THE autumnal meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, October 14th, at 5 o'clock.

The following question has been settled by the Council as the one on which members should be invited to express their opinion at the said meeting after dinner:—"Is the disuse of Bloodletting in the Treatment of Disease in accordance with the principles of Pathology?" Dr. Cordwent proposes to read a paper "On Tissue-Change in Fevers".

Dinner (on the table at 5 o'clock), 4s. a head, exclusive of wine.

W. M. KELLY, M.D., *Honorary Secretary.*
Taunton, September 16th, 1875.

BATH AND BRISTOL BRANCH.

THE first ordinary meeting of the Session will be held at the York House, Bath, on Thursday, October 28th, at 7.15 P.M.: W. M. CLARKE, Esq., President.

R. S. FOWLER, Bath, } *Honorary Secretaries.*
E. C. BOARD, Clifton. }

Bath, September 24th, 1875.

STAFFORDSHIRE BRANCH.

THE second annual meeting of this Branch will be held at the London and North Western Railway Hotel, Stafford, on Thursday, October 28th, at 2.30 P.M. precisely. President, R. GARNER, Esq., F.L.S. The President-elect (H. DAY, M.D., F.R.C.P.) will deliver an address. Dinner at 5 P.M. precisely. Tickets 10s. 6d. each, exclusive of wine.

VINCENT JACKSON, } *Honorary Secretaries.*
RALPH GOODALL, }

Wolverhampton, September 27th, 1875.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

THE next meeting of the above Branch will be held at the White Hart Hotel, Reigate, on Thursday, October 14th, at 4 P.M.; J. WALTERS, M.B., in the Chair.

Dr. Daldy will read a paper on Tetanoid Affections associated with Imperfect Development of the Cranium.

Mr. Gandy: Notes on some Cases of Puerperal Fever.

Mr. Hallows: Cases of Cerebral and Spinal Hæmorrhage.

Dr. Holman will move a resolution with reference to advertisement of medical works.

Dr. Walters: On the Treatment of Colles' Fracture, and will exhibit pathological specimens.

Dinner at the White Hart Hotel at 6 P.M. Tickets 6s., exclusive of wine. JOHN H. GALTON, M.D., *Honorary Secretary.*

Woodside, Anerley Road, S.E., September 27th, 1875.

SOUTHERN BRANCH: SOUTH-EAST HANTS DISTRICT.

THE next ordinary meeting of the above Branch will be held at the India Arms Hotel, Gosport, on Wednesday, October 13th, at 4.30 P.M.

Notice has been received of the following communications:—

1. Dr. W. Hoare: Venesection.

2. Surgeon-General J. Mouat, V.C., C.B.: Pyæmia.

3. Dr. Ward Cousins: Case of large Cystic Tumour of Lower Jaw.

Dinner will be provided at 6.15 P.M.; charge 6s., exclusive of wine. Members intending to be present are requested to communicate with Dr. Kealy, Gosport, on or before October 10th.

J. WARD COUSINS, *Honorary Secretary.*
Southsea, September 23rd, 1875.

NORTH OF ENGLAND BRANCH.

THE autumnal meeting was held in the Queen's Hotel, Sunderland, on Thursday, September 23rd; the President, S. E. PIPER, Esq., F.R.C.S., in the Chair. There were present forty-one members and two visitors, one of whom was Professor De Chaumont, Netley.

Papers.—The following papers were read.

1. Dr. J. W. Eastwood: The Prevalent Practice of Advertising Medical Works in the Non-medical Press. Dr. Eastwood proposed; "That the members of this Branch regard the practice of advertising medical works in the non-medical press as injurious to the best interests of the profession, lowering to its dignity, and to be discountenanced by every means in their power." The resolution was seconded by Mr. James Wilson, and supported by Mr. Mordey Douglas, Dr. Legat, and carried unanimously.

2. C. J. Jeaffreson, Esq.: Remarks on some of the Recent Advances in Surgical Pathology and Therapeutics.

3. Edward Jepson, jun., Esq.: The Mechanical Treatment of Intestinal Obstruction.—Mr. Jepson also showed a Tumour, "cystic", which had been removed *post mortem* from the neck. The tumour was about the size of a child's head.

4. G. B. Morgan, Esq., recounted the particulars of a case of Cystic Tumour of the Neck, which he had removed, and afterwards treated by the antiseptic treatment.

5. Dr. Ayre Smith: Report of a Case of Femoral Aneurism treated by Pressure. The pressure had been applied with the thumb. The patient was exhibited.

Dinner.—The members and their friends, to the number of thirty-four, afterwards dined together; the President in the chair; and the Honorary Secretary, Dr. Philipson, in the vice-chair.

MIDLAND BRANCH: QUARTERLY MEETING.

THE quarterly meeting of the above Branch took place at Matlock Bath on Thursday, September 23rd; A. H. DOLMAN, Esq., President. In consequence of the very unfavourable state of the weather, the attendance was not so large as expected. After inspecting Willersley Castle and Grounds (permission having been kindly given by the owner, F. Arkwright, Esq.), the members, to the number of twelve, adjourned to the New Bath Hotel.

Papers.—The following papers were read.

1. Beverley Morris, M.D., Nottingham: Spontaneous Cure of Ovarian Cysts.

2. W. Webb, M.D., Wirksworth: The Waters of Matlock.

3. J. W. Baker, Esq., Derby: Cases of Ununited Fracture.

Dinner.—A good dinner was duly discussed, and an agreeable evening spent.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

SOCIETY OF MEDICAL OFFICERS OF HEALTH FOR SOUTH WALES AND MONMOUTHSHIRE.

A MEETING of this Society was held at Neath on September 21st, when the following resolution was passed: "That it is expedient that a Society of Officers of Health for South Wales and Monmouthshire be formed, and it is hereby resolved that it shall be constituted."

The President and other officers were then elected for the ensuing year. *President:* T. J. Dyke, F.R.C.S. (Merthyr). *Vice-Presidents:* G. Ryding, M.D. (Neath), and Mr. D. P. Saer (Pembroke). *Treasurer:* E. Davies (Swansea). *Committee:* J. Rogers (Swansea), H. J. Paine (Cardiff), B. Thomas (Llanely), R. Smythe (Abergavenny), G. Griffith (Pembroke), and W. M. North (Cardigan). *Secretary:* E. R. Morgan (Neath).

The meetings shall take place twice a year, on the last Tuesdays in March and September.

The Bye-laws were then framed, and ordered to be printed and circulated among all the Officers of Health, inviting them to co-operate.

About fourteen sat down to dinner, and a very pleasant afternoon was spent.

Mr. D. P. Saer (Pembroke), Vice-President, gave notice that he would read a paper on Disinfectants at the next meeting.

POOR-LAW MEDICAL APPOINTMENTS.

ADAMS, R. S., M.R.C.S., appointed Medical Officer for the Lymington District of the Lymington Union, *vice* N. Adams, Esq., resigned.

WATERWORTH, E. A., M.D., appointed Medical Officer for the Carisbrooke District of the Isle of Wight Union, *vice* E. P. Wilkins, L.R.C.P.Ed., resigned.

MILITARY AND NAVAL MEDICAL SERVICES.

AN INSTRUCTIVE INQUEST.

THE extreme economy with which the army authorities are endeavouring to carry out the "unification" of the Army Medical Department is leading to results of which the dark side was exemplified at a recent inquest at Aldershot, which is, we imagine, likely to attract the attention of all who are interested in the welfare of the soldier. It so happened that, after a considerable period of treatment in the insane ward of the Aldershot South Camp divisional hospital, a private of the 78th Highlanders managed to make his escape, and was found dead on August 24th, with his throat cut. On inquiring into the circumstances of the case, the coroner naturally expressed some surprise at the defective supervision which could render such an accident possible; and evidence was taken to show that, owing to constant changes in the medical attendants on the deceased, great confusion had arisen, not only in the records, but in the general arrangements of the hospital. Considering that the patient appears to have been transferred to the care of nine successive doctors within the space of one month, we can hardly wonder that this divided responsibility led to disastrous consequences, and that the coroner felt it his duty to censure in severe terms a system which seems specially devised to frustrate sound professional treatment. We understand that Sir Thomas Steele has ordered a court of inquiry to make careful investigation into all these facts; and we feel that further comment would be unbecoming until we learn the verdict pronounced by the thoroughly competent tribunal which will shortly assemble for this purpose.

OBITUARY.

THE LATE GEORGE ROSS, M.D.

GEORGE ROSS, Graduate of the University of St. Andrew's, M.D., L.R.C.P. Edin., M.R.C.S. Eng., etc., was born at Stonehouse, Devon, on August 2nd, 1815, and was educated at Penzance Grammar School. In 1832, he entered the medical profession as a pupil of Mr. T. G. Phillips of Albion Street, Hyde Park. During his stay with this gentleman, he attended St. George's Hospital. At an early age, he developed a taste for literature. When 20, he wrote leading articles on æsthetic subjects for a weekly paper, tales and poetry for a monthly magazine, and various reviews, including one for the Royal Academy. Soon after leaving Mr. Phillips, he went to reside with and assist Mr. Asbury of Enfield, in whose extensive practice he acquired a large amount of clinical experience. While at Enfield, he wrote various papers, amongst others those on Typhus Fever, published in the *Lancet* in 1842. A year or two after this, papers on Digestion and Nutrition appeared in the same journal. In these papers, he established from his experiments the fact then in dispute, that lactic acid was found in the stomach, but not in the intestines. He afterwards contributed to the same periodical papers on Albuminuria, Epidemic Influenza, Cholera, and some political articles. His first essay in political life occurred in connection with the "General Medical Protection Assembly". When the memorable National Association was established, overtures were made to him to undertake the office of secretary, which duty he accepted and performed for many years, and resigned only when its labours had become incompatible with increasing professional duties. During the time of his connection with the Association, and while that body was battling for professional rights, he wrote all the political leaders in the *Medical Times*. In the year 1852, Dr. Ross established, in conjunction with the late Mr. Yearsley, the *Medical Circular*, of which he was for many years sole editor. It was in this journal that he ventilated the idea of a system of cottage hospitals, following up the leader which appeared in the issue of August 8th, 1858, and in which the conception was first advanced by an article on September 22nd of the same year, wherein the scheme is more thoroughly enunciated. The general acceptance which this plan of suburban cottage hospitals has obtained is now well known in the profession, although it is not so generally known in whose fertile brain it originated. It was also in this periodical his remarkable annual addresses to medical students appeared.

About the year 1854, he became a member of the corporation of London, taking an active part in all sanitary business, such as improving

the dwellings of the poor, establishing baths and wash-houses, and especially in bringing to a successful issue the project of covering Smithfield with a new dead meat market, for which, on his retirement from the Common Council, a testimonial was presented to him by the Ward-mote which he represented. In the year 1850, Dr. Ross was appointed Medical Officer of Health for St. Giles's and Bloomsbury, which post he held, with the highest credit and usefulness, until his death. Dr. Ross filled various positions, and in all was an active and able worker. He was a member of the Commission of Sewers, of the Charity Organisation Society, Vice-President of the Society of Medical Officers of Health, a member of the Civil Engineering Committee and the Sanitary Subcommittee of the International Exhibition, 1874, etc. Dr. Ross was a man of whom the age has reason to be proud; always interested and active in every movement of progress and philanthropy, and earnestly employed in promoting the welfare of the masses. He was a man of great and versatile mental powers, who could think for himself and judge for himself. A student all his life; art studies as much occupying his hours of recreation as science his graver moments. His character was marked by devotion and indomitable energy; kind of heart and gentle of manner, he was loved and esteemed by all who knew him.

Dr. Ross married, in 1849, Mary, eldest surviving daughter of John Hunter, Esq., of 11, Hart Street, Bloomsbury, who, with three sons and one daughter, survive to mourn his loss. He departed this life on September 26th. *Requiescat in pace.*

G. L. COOPER, F.R.C.S.

We have to record the death of Mr. George Lewis Cooper, which took place on the 17th instant. The deceased surgeon, who was sixty-five at the time of his death, was a nephew of the late Samuel Cooper, F.R.S., for many years professor of surgery at University College, and author of the well-known surgical dictionary. He received his professional education at St. Bartholomew's Hospital, University College, and Paris, and was admitted a member of the College of Surgeons in 1834, and a fellow in 1843. Mr. Cooper was surgeon to the Bloomsbury Dispensary in Great Russell Street, the National Vaccine Institution, and teacher of vaccination at University College Medical School and at the Great Northern station. He was the author of *The Life of Samuel Cooper, Esq.*, in *Cooper's Surgical Dictionary*, vol. II, new edition by Mr. Lane; besides numerous contributions to the medical periodicals.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, September 10th, 1875.

- Archer, Robert Kendrick, Cathart Hill, Hazelegate
- Dearden, John Alfred, Douglas, Isle of Man
- Todd, John, Union Road, Fulwell Park, N.

The following gentlemen also on the same day passed their primary professional examination.

- Cant, William John, Queen's College, Birmingham
- Pratt, Alfred, Queen's College, Birmingham

The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, September 23rd, 1875.

- Jackson, Ernest Caff, 41, Harley Street, W.
- Scott, William Edward, 7, Robert Street, Hampstead Road

The following gentlemen also on the same day passed their primary professional examination.

- Dod, Joseph Francis, Guy's Hospital
- Harvey, Thomas Prickard, London Hospital

MEDICAL VACANCIES.

The following vacancies are announced:—

- BRISTOL HOSPITAL FOR SICK CHILDREN**—House-Surgeon. Salary, £200 per annum, with furnished rooms, coal, gas, and attendance. Applications on or before the 7th instant.
- CITY DISPENSARY**, Watling Street—Physician. Applications on or before the 8th instant.
- COUNTY TIPPERARY INFIRMARY**—Surgeon. Salary, £100 per annum. Applications on or before the 14th instant.
- DENBIGHSHIRE INFIRMARY**—House-Surgeon. Salary, £80 per annum, with board, lodging, and washing. Applications on or before the 14th instant.
- DONCASTER INFIRMARY**—House-Surgeon. Salary, £200 per annum, with board and lodging. Applications to be made on or before the 15th instant.
- ESSEX and COLCHESTER HOSPITAL**—House-Surgeon and Apothecary. Salary, £80 per annum, with board and lodging. Applications on or before the 7th instant.

- GLOUCESTER COUNTY ASYLUM**—Junior Assistant Medical Officer. Salary, £200 per annum, with board, lodging, and washing. Applications on or before the 14th instant.
- HASTINGSDEN UNION**—Medical Officer for the Averington District. Salary, £200 per annum.
- HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST**—Resident Medical Officer. Applications on or before the 14th instant.
- INVERNESS DISTRICT ASYLUM**—Assistant Medical Officer. Salary, £200 per annum, with board, lodging, and washing. Applications on or before the 14th instant.
- LONDON HOSPITAL**—Assistant Physician.
- NEWCASTLE UPON TYNE UNION**—Medical Officer for the First District. Salary, £200 per annum.
- NORTH WALES COUNTIES LUNATIC ASYLUM**, Denbigh—Assistant Medical Officer. Salary, £200 per annum, with board, lodging, and washing. Applications to be made on or before the 14th instant.
- NORWICH DISPENSARY**—Salary, £100 per annum, with unfurnished residence and apartments.
- PEMBROKE UNION**—Medical Officer for the First District.
- RICHMOND INFIRMARY**—House-Surgeon. Salary, £200 per annum, with board and lodging. Applications on or before the 14th instant.
- ROYAL HOSPITAL FOR DISEASES OF THE CHEST**, City Road—House-Surgeon. Applications on or before the 14th instant.
- ROYAL ISLE OF WIGHT INFIRMARY**, Ryde—House-Surgeon and Secretary. Salary, £200 per annum, with board, lodging, and washing. Applications on or before the 14th instant.
- SETTLE UNION**—Medical Officer and Public Vaccinator for the Bentham District. Salary, £200 per annum. Applications on or before the 14th instant.
- STROUD GENERAL HOSPITAL**—House-Surgeon.
- TIVERTON INFIRMARY and DISPENSARY**—House-Surgeon and Dispenser. Salary, £200 per annum, with furnished apartments, coal, gas, and attendance.
- TORRINGTON UNION**—Medical Officer for the Peters Marland District. Salary, £200 per annum.
- WEST NORFOLK and LYNN HOSPITAL**—House-Surgeon and Secretary. Salary, £200 per annum, with board, lodging, and washing. Applications on or before the 14th instant.
- WEST SUSSEX, EAST HANTS, and CHICHESTER GENERAL INFIRMARY and DISPENSARY**—House-Surgeon. Salary, £200 per annum, and £50 per annum as Secretary, with board, lodging, and washing. Applications to be made on or before the 14th instant.
- ASSISTANT HOUSE-SURGEON to the Dispensary**—Salary, £50 per annum, with board, lodging, and washing. Applications to be made immediately.
- WORCESTER GENERAL INFIRMARY**—Physician. Applications on or before the 23rd instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

- ADDY**, Boughton, M.D., Lend, M.R.C.S., L.S.A., appointed Honorary Medical Officer to the Pendleton Branch of the Salford Royal Hospital.
- BEVERLEY**, R. Morris, B.A., M.D., M.R.C.P., appointed Physician to the Hospital for Women, Nottingham.
- BOWER**, David, L.F.P. and S., Arbroath, Forfarshire, appointed Resident Medical Superintendent to the Saughton Hall Asylum, near Edinburgh.
- *DOUGLAS-LITHGOW**, R. A., L.R.C.P.Ed., L.R.C.S.Ed., L.S.A., appointed Government Medical Inspector for the Port of Wisbeach by the Board of Trade.
- *FLETCHER**, George, M.B., C.M., appointed Surgeon to the Hospital for Women, Nottingham.
- *FLETCHER**, Edward, I.R.C.C.P.I., L.R.C.S.I., appointed Physician to the South City Dispensary, Dublin.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTHS.

- CLAYTON**, N. On September 23rd, at 14, Upper House, Merrimalee Place, Edinburgh, the wife of T. S. Clouston, M.D., F.R.C.P.E., Physician-Superintendent, Royal Edinburgh Asylum, of a son.
- FOX**,—On September 19th, 1875, at Widford, near Chelmsford, Essex, the wife of Dr. Cornelius Fox, Medical Officer of Health of East, Central, and South Essex, of a daughter.
- OLIVER**,—On September 16th, at West End Park, Haregate, the wife of George Oliver, M.D., Lond., of a daughter.
- WOMERSLEY**,—On September 1st, at Tinkerley, Teignmouth, the wife of Charles J. Womersley, M.D., of a daughter.

MARRIAGE.

- SPRING-SYMME**,—At All Saints' Hall, on September 2nd, William Henry Spring, Esq., of Maryport, to Emma, eldest daughter of the late Edward Steward, Esq., of York.

DEATH.

- LAWTON**,—On September 23rd, at her father's residence, 34, St. Giles's Street, Oxford, Hannah Lawton, wife and daughter of J. R. Symm, and widow of Joseph Lawton, Surgeon, late of London.

CHILD KILLED BY A CAT.—See *the Atlanta Journal*, August 1875; and in the *Atlanta Journal*, a notice of this extraordinary occurrence in the case of an infant child of Mr. A. J. Longley, living near Gadsden, Alabama. The child, eighteen months old, whilst at play in the yard, was fatally attacked by a rooster, knocked down, and spinned several times. Dr. Longley, who attended, states that one stroke of the spur had entered the brain through an open suture of the skull, and resulted in death to the child. The doctor thinks this the first case of the kind in the history of the world.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY** Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
- TUESDAY** Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
- WEDNESDAY** .. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
- THURSDAY** St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.
- FRIDAY** Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.
- SATURDAY** St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- WEDNESDAY**.—Obstetrical Society of London, 8 P.M. Dr. George Robert, "On Prognosis of the Funis during Labour"; Dr. Galabin, "On the occurrence in Normal Labour of Lateral Obliquity of the Fœtal Head"; Dr. Heywood Smith, "Notes of a Case of Ruptured Vagina during Labour, with recovery"; Mr. F. H. Gervis, "Report of a Case of Inverso Uteri"; and other communications.—Royal Microscopical Society, 8 P.M. Dr. C. T. Hudson, M.A., "On a new species of *Meletema*".
- FRIDAY**.—Clinical Society of London, 8.30 P.M. Mr. Brudenell Carter, "On the Operation of Iridectomy, as performed for optical purposes"; Dr. Southey, "On a Case of Idiopathic Tetanus".

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with Duplicate Copies.

AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor: those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

WE are greatly indebted to Dr. J. Norris Mackey, the honorary secretary of the Northern Counties (Scotland) Branch of the Association, for the kindly words in which he expresses, on behalf of the Branch, "the general feeling of continued appreciation of the manner in which the JOURNAL is conducted".

EARLY MENSTRUATION.

SIR,—I have recently been attending a lady in her confinement (Sept. 6th), which was difficult. Being a primipara aged 38, she was delivered with forceps of a fine female child, who on the fifth day commenced to menstruate, and continued to be "unwell" for nearly four days. Previously to this, she was very restless. I attributed this to her mother not being able to feed her: she was fed on milk and water. On the appearance of this discharge, she became quiet and good, and has continued to thrive.

I have mentioned this case to a gentleman (one of great experience) who has never seen a case in so young a child; another gentleman informs me it is of frequent occurrence. The youngest mentioned in the books I have looked into is nine months. Any one giving information on this subject will oblige me.—I am, etc., Wigan, September 25th, 1875. SAMUEL CATHCART.

W. A. CARLIN, M.D. (Lincoln).—Any person legally registered under the Medical Act, or under the Pharmacy Act, can dispense medicines. For the purposes of a hospital, a dispenser need not possess any registerable qualification, but it is desirable that he or she should have one.

GELSEMIUM SEMPERVIRENS.

SIR,—Under the heading "Selections from Journals", in the JOURNAL of September 18th, p. 368, there is an account of the "gelsemium sempervirens" as an anti-neuralgic. I should be glad to know where, or by what means, I can obtain this drug, or a preparation of it.—You will greatly oblige your most obedient servant, C. S. WILLIS, Surgeon.

The Barracks, Ashton-under-Lyne, Lancashire, September 28th, 1875.

H. G. D. begs permission to thank the gentlemen who were kind enough to reply to his questions respecting medical practice in America.

CORRESPONDENTS are particularly requested by the Editor to address that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Powke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

PRESENTATION COPIES.

The Editor of the BRITISH MEDICAL JOURNAL will much oblige by giving an opinion on the following. B. has written a professional book on a special subject, and only advertises in the professional journals, but presents copies to several non-professional friends and well-wishers. 1. Does B. commit a breach of professional etiquette by so doing? 2. Has not B. a perfect right to present copies of his professional work to non-professional friends without laying himself open to the charge of acting unprofessionally? 3. Would you consider that this amounted to unprofessional advertising? C.

* * B. has an undoubted right to present a few copies to personal friends of any of his works in which he has reason to believe that they feel a personal and friendly interest; but there is reason to doubt how far such a present would be acceptable or in good taste.

BIBLIOPOLE.—There is in the library of the British Museum an unedited MS. of *John of Arderne*, giving the case of John of Gaunt having "a clappe and retention of ye urine". His works are in the library of the College of Surgeons.

POISONING IN LABURNUM.

MR. HENRY WILLIS, of 58, Old Broad Street, informs the *Times* that a horse was recently brought out of his meadow in very great pain, and afterwards vomited very much. The same circumstance occurred on two subsequent occasions, but not on the following days. Feeling sure that the horse must have eaten something poisonous, Mr. Willis examined most carefully a book upon the poisonous plants of England, and found that the laburnum was poisonous. He then cut down all the branches of laburnum within the reach of a horse. No harm has since occurred. This circumstance, he adds, fully confirms the paragraph in the BRITISH MEDICAL JOURNAL, which has been extensively quoted by the leading daily press, of so many children in Forest Gate School having been poisoned by eating the root of laburnum, supposing it to be stick-liquorice.

AN OLD MEMBER, A GUARDIAN, AND OTHERS.—Yes, there have been great changes in the regulations since you became a member. Consult our Educational Number, specially written for the object; it will give you all the desired information, both as to metropolitan and provincial schools. We cannot undertake to recommend particular hospitals.

PALPITATION OF THE HEART PRECEDING HEMIPLEGIA.

SIR,—Dr. Lane's very interesting cases of palpitation in connection with epilepsy, in the JOURNAL of September 18th, call to my mind the following analogous case.

D. H., an exceedingly temperate man, aged 56, complained to me on May 25th of violent palpitation and "dizziness". The heart was quite healthy. On the 29th, symptoms of paralysis of the left side set in, deepening in intensity to total loss of motive power about June 5th. After some improvement, he had a relapse on July 2nd. On July 10th, apoplexy set in, and he died in twelve hours.

In this case, as in Dr. Lane's, there was probably paralysis of the inhibitory fibres of the vagus.—I am, yours faithfully, W. MUNRO, M.D., C.M. Cupar Fife, September 23rd, 1875.

DR. J. EWENS, Cerne Abbas, wishes to hear of some institution, in or near London or elsewhere, which receives pauper imbecile children not altogether suited for an ordinary lunatic asylum.

POISONING BY COAL-GAS.

SIR,—I am reminded by the interesting paper of Dr. Lockie in last week's JOURNAL of a nearly similar case that occurred to me nearly two years since. A press of engagements, however, prevented me taking notes of it at the time, but one or two salient points are strongly impressed on my memory. The patient was a youth of about 18, a gentleman's groom; he slept in a loft over the coach-house, and was found between eight and nine o'clock one morning by the coachman insensible in his bed, with the gas-tap fully turned. The coachman stopped the tap, threw open the window, and then for his own sake quickly descended the ladder. He ventured back again, however, in a few minutes, when the air had become more respirable. I was then sent for. I was much struck by the intense purple flush of the face and the heat of the forehead. The pupils were dilated, and very slightly sensitive to light. There was no sign of consciousness. There was vomited matter on the pillow and bedclothes, and a semifluid motion in the chamber utensil. I at first, in addition to directing as much air as possible into the room, applied only an evaporating lotion to the head; but there being no sensible improvement after a couple of hours, I then had a bag of ice applied to the head continuously. Within a very short time after this application, symptoms of improvement were manifested. On being loudly spoken to and shaken, there were some signs of consciousness, and these signs steadily increased, so that by the evening of the same day consciousness and sensibility were complete. The next day the patient was almost quite himself. The account he gave of the transaction was, that entering his room in the dark, he groped his way to the gas-bracket, first turned the tap, and then felt for his matches, but found the box empty, and so quickly undressed in the dark and tumbled into bed, forgetting, he supposes, to close the gas-tap. He had no recollection of having had his bowels opened in the night; but he must have got out of bed in a half-conscious state for this purpose, the poison seeming to have shown its first effect on the gastro-intestinal tract. He had taken nothing out of the regular way for his supper.

The practical point that impressed me in this case was the marked good effect of extreme continuous cold to the head.—I am, sir, yours etc., September 26th, 1875. T. MORLEY ROOKE, M.D. Lond.

MALTA FEVER AND CHAGRES FEVER.

DR. F. PEYRE PORCHER, Physician to the City Hospital, Charleston, S.C., writes to us under date September 8th, 1875:—"In reading the paper by W. C. McLean, M.D., C.P., in your number for August 21st, 1875, on 'Malta Fever', I was struck with the resemblance which it seemed to bear to a form of fever sometimes brought here by persons who have contracted it in the Isthmus of Panama, and known as 'chagres fever'. I had several cases under my care, when physician to the Marine Hospital in this city, between the years 1855 and 1861, and there is a case in our City Hospital at present. This species or variety of fever may be well known to you; but I would state that it is distinguished by its protracted character, the absence of marked exacerbations, and high elevation of temperature, its non-yielding to quinine, but requiring arsenious acid for its management, etc.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

PAYMENT FOR SERVICES RENDERED.

SIR.—All district medical officers and some of the officers of health will, no doubt, be pleased to know that the Local Government has decided that it is competent for urban sanitary authorities, if they think proper to do so, to enter into an arrangement to pay district medical officers a reasonable remuneration for supplying the medical officers of health with information when he reports for the district discharge of his duties. Why wait for death, let us have sickness returns, was and is still the cry. But it may be asked, why wait for sickness? The new Public Health Act, in one of its rare compulsory clauses, provides that "it shall be the duty of every local authority to cause to be made from time to time inspection of their district, with a view to ascertain what nuisances exist calling for abatement under the powers of this Act, and to enforce the provisions of this Act in order to abate the same". It is evidently intended that the officer appointed by the local authority should not sit with folded hands waiting for nuisances, sickness, and death, to be reported to him. In some districts this district, make house-to-house visitation, and search for "in order to abate" nuisances, nuisances to health.—I am, sir, your obedient servant, GEORGE KEMBLE.

Trevelyan, Forest Hill, S.E., Sept. 20th, 1875.

THE BIOGRAPHER.—Yes, the gentleman in question agrees with a writer in the Saturday Review, that there are occasions when adherence to the maxim De mortuis nil nisi bonum is an idle as well as a foolish, and in some degree immoral, hypocrisy.

PREVENTION OF NAUSEA.

SIR.—To check nausea, I have found the best way to be the application of styptic colloid tannin in colloidum in a thin coat the end of each nail. It dries on quickly, forming a film, the bitter taste of which acts as a reminder. It must be reapplied, however, whenever the hands have been washed.—I am, sir, yours faithfully, T. C.

Faith, S.E., September 27th, 1875.

SIR.—In your issue of to-day's date, A Member says he would be pleased to hear of any suggestion for the cure of an inveterate habit of biting finger-nails. Before I begin in medicine, I will cure a college friend of none of the same inveterate habit, and now for the benefit of A Member will relate the mode of treatment. I first made my patient promise that he would continue, or allow me to continue, any treatment till he was cured, being fully convinced that my mode would eventually succeed. The promise being given, I secured a good stout ruler and sat next to him during all the lectures, and whenever he attempted—for I did never allow him to get his fingers as far as his mouth to bite his nails—finger-nails, I mean, for A Member is particular, I came down on his fingers with a vengeance. He first demurred, but, upon my reminding him of his promise, he allowed me to proceed. The cure was perfect in three weeks.

This treatment has the recommendation of being simple, safe, and effectual: the complication to be most dreaded is an acute attack of periostitis, but even this is less to be dreaded than the awful and "inveterate habit of biting finger-nails".

Hoping these suggestions will be of service to A Member, I remain, yours obediently, C. F. C.

Staleybridge, September 25th, 1875.

GALVANIC SUTURES.—The application of galvanism in the form of galvanic sutures for the purpose of inducing the union by first intention of poorly nourished and imperfectly organised surfaces, has been first made by Professor Pipping-köld of Helsingfors. In vol. iii, No. 2, of the British Medical Journal, Oct. 1874, p. 174, he reports two cases of vesico-vaginal fistula, which had resisted repeated attempts at an operative cure, and in which the surroundings of the fistula were composed chiefly of cicatricial tissue, the vitality of which was extremely low. These fistulae he united, after paring the edges, by means of alternate sutures of silver-plated copper and of iron wire, with the object of stimulating the low vitality of the parts, and in both cases with perfect success. That the supposed galvanic action of these sutures is not purely imaginary was demonstrated by his colleague Professor Hällstén, who found that when a silver and iron-wire suture were connected with the galvanometer, the maximum deflection of the needle of that instrument was 90 deg., the average deflection 35 deg.; when, on the other hand, the galvanometer was connected with two iron or two silver-wire sutures, the maximum deflection was 15 deg. to 20 deg., the average about 0 deg. This latter result would prove that every metallic suture, when bathed in the vaginal and vesical fluids, acquires a certain degree of galvanic power. Only a series of operations performed on cases which had previously withstood all attempts at cure by the ordinary suture would, of course, absolutely prove the value of this method.

CAPSICUM IN DIARRHOEA PULSA.

SIR.—In the many notices of the treatment of dysentery in your JOURNAL, the only forms in which I have observed capsicum recommended are either the tincture, or the powder made into pill or bolus, so that a man requiring a large dose must face either a terrifying number of bulky pills, a not very tempting draught, or certainly a very ugly bolus. I venture, therefore, to suggest capsicum as equally efficient, and, indeed, very agreeable, when made into pills, and nicely coated with sugar or otherwise. I have for some time used capsicum as an ingredient in some aperient and "dinner" pills, and prefer it greatly to the Cayenne pepper, which is not always easy to make into a good pill-mass, and of which even three grains will make as large a pill as most patients would care to swallow.

Of capsicum I have never given more than half a grain, and do not pretend to say to what limit the dose may be safely increased, but of course to a much further extent. When I add to the above, that capsicum may be procured at about one shilling per ounce, I think I have said enough to obtain for it the notice of some of your readers. I have sometimes blamed capsicum and its preparations for producing a hot smarting at the anus during and after defaecation, but it generally ceases on its continuing the drug. I should say that capsicum is sold generally as a thick viscid brown fluid.—I am, etc., W. I. HAKAM WOOD, L.R.C.P. & S. Edin., M.R.C.S. Eng.

12, Red Lion Street, Boston, September 4th, 1875.

CHEMICAL POLYSYLLABLES.

In a recent paper on Muscarin in a German periodical, the authors refer to a non-poisonous principle in the *amanita muscaria*, which agrees in all essentials with hydroxyethyltrimethylammoniumhydrate, and they remark that amanitin must be considered as a hydroxyethyltrimethylammoniumbase.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than Thursday, twelve o'clock.

INQUIRY BY A MEMBER.

SIR.—Will you kindly favour me with your opinion on the following case? A and B are in partnership in the business of a member of the Society of Apothecaries, and others being in the same business, but not themselves from the Hall. In the 2nd clause of the Articles of Partnership, it is stated that "profits and appurtenances thereto shall be divided equally among the partners, and otherwise, although it is expressly stated in the deed of partnership that profits and losses are to be equally divided.—I am, sir, your obedient servant, INQUIRER.

. This is a question which we hardly feel called upon to answer. It would, however, appear on the face of the facts, that discount on the purchase of drugs must be equally shared by both partners; it is otherwise on groceries, which are matters entirely outside the partnership.

W. L.—The following lines, a translation from the Greek pastoral poet Moschus, would perhaps, be applicable, though severe.

His mind is good, but his speech is sweet;
His words are good, but are not like a nut;
His words are good, but his meaning is ill;
He is a mischievous, deceitful child (fellow),
Beguiles with falsehood, laughs at the beguiled."

We are indebted to correspondents for the following periodicals, containing news reports, and other matters of medical interest:—The Bristol Daily Post; The Evening News; The Sheffield Post; The Metropolitan; The Blyth Weekly News; The Edinburgh Daily Review; The Glasgow Herald; The Western Daily Press; The Morning Post; The London Evening Observer; The Bristol Daily Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Sunderland Daily Echo; The Co-operative and Financial Review; The South Wales Daily News; The Macclesfield Courier; The Melbourne Argus; The Southampton Times and Hampshire Express; The Jarrow Express; The Farmington Daily Post; The League Journal; the Sheffield and Rotherham Independent, &c.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

- Dr. Thos. Thorpe, Llanely; Mr. D. Bower, Arbroath; Dr. Robert Bentley, London; The Registrar-General of Ireland; Dr. Charles Parsons, Dover; The Registrar-General of England; Dr. Randall Shoen; Dr. Curran, London; Mr. C. H. W. Louis, London; Mr. Alfred Sheen, Cardiff; Dr. Robert J. Lee, London; Mr. Waten Tey, London; Dr. R. A. Douglas Lithgow, Wisbeach; Mr. Thomas S. Dowse, London; Mr. A. D. L. Napier, Aberdeen; Dr. F. Peyre Porcher, Charleston; Dr. David Brakenridge, Edinburgh; Mr. John Dix, Hull; Dr. W. F. Wade, Birmingham; Dr. J. D. Wing, Tipperary; Dr. W. Munro, Cupar Fife; Mr. A. H. Martin, Evesham; Dr. Adam, Liverpool; Dr. Alexander T. Carson, Portrush; Dr. Thomas Skinner, Liverpool; Mr. John Ewens, Cerne Abbas; The Secretary of the Royal Veterinary College; Dr. G. Scott, Southampton; Mr. J. S. Wesley, Wetherby; Dr. Balfour, Edinburgh; Dr. A. Ogston, Brussels; Dr. E. P. Morgan, Neath; Mr. T. J. Dyke, Merthyr Tydfil; The Secretary of King's College; Mr. John Carter, Richmond, Yorkshire; Dr. Wm. Webb, Wirksworth; Mr. Edward Bellamy, London; Dr. Alex. Robertson, Glasgow; The Secretary of Apothecaries' Hall; Mr. T. M. Stone, London; Mr. Howse, London; Dr. Julius Althaus, London; Dr. Stevenson, London; Dr. John Galton, Woodside; Dr. Robt. T. Cooper, London; Mr. T. Edward Thurston, Ashford; Mr. Frederick W. Rees, Sheffield; Dr. Ambrose, Portsea; The Secretary of the Clinical Society; Dr. Smart, Haslar; M.D.; Dr. J. Hughlings Jackson, London; Mr. T. Churton, Erith; Dr. J. Crichton Browne, Wakefield; Mr. Augustus Johnston, Ambleside; Dr. W. T. Gairdner, Glasgow; Dr. J. F. Beattie, Glasgow; Dr. T. Morley Rooke, Cheltenham; Mr. W. L. Lane, Dunfermline; Mr. T. Vincent Jackson, Wolverhampton; Dr. Hinds, Birmingham; Mr. A. W. Stocks, Salford; Dr. A. B. Steele, Liverpool; Mr. C. F. Castor, Staleybridge; Dr. John Tripe, Hackney; Mr. Thomas P. Pick, Hackney; An Associate; Mr. Eastes, London; Mr. A. P. Watkins, Worcester; Dr. Young, Sheffield; Dr. Clouston, Edinburgh; Mr. Joseph Bell, Edinburgh; Mr. H. Thompson, Hull; Dr. Philpott, Newcastle-on-Tyne; Mr. P. Maury Deas, Macclesfield; Dr. MacKendrick, Edinburgh; Mr. W. Fairlie Clarke, London; Dr. Grimsbaw, Dublin; Mr. S. J. M'Mullen, M.A., Belfast; Mr. C. S. Wills, Ashton-under-Lyne; Our Dublin Correspondent; Mr. Thomas Marshall, Edinburgh; Dr. Wiltshire, London; Mr. Dixon, London; The Dean of Westminster Hospital; Mr. E. J. Spiller, Clapham; Mr. J. W. Norris Mackaye, Egin; Dr. Cassels, Glasgow; Mr. W. Cadge, Norwich; Mr. Walter W. Reeves, London; Dr. W. Munro, Edinburgh; Mr. W. Donald Napier, London; Mr. Samuel Lee, London; Dr. Lunn, Hull; Dr. Farquharson, London; Mr. E. Peel, Dublin; Dr. Robert Barnes, London; Mr. R. C. Lucas, London; The Rev. Dr. Haughton, Dublin; Mr. B. T. Lowne, London; Dr. Ward Cousins, Southsea; Dr. H. Barnes, Carlisle; Dr. Charles M. Crombie, Aberdeen; Mr. Samuel Cathcart, Wigan; Dr. D. Everett, Worcester; Dr. A. Cooper Key, London; Dr. Robert King, London; Dr. T. Clifford Allbutt, Leeds; Mr. Thomas Lyle, London; Dr. R. W. Falconer, Bath; Dr. Julius Mickle, London; Dr. Payne, London; Mr. George Rowland, Richmond, &c.

BOOKS, ETC., RECEIVED.

- Materialism. By J. M. Winn, M.D., M.R.C.P. London: R. Hardwicke, 19s. Price only 12s. 6d.
- Sanitary Report for the Province of Oath. 1874.

REMARKS

ON

THE STUDY AND PRACTICE OF PUBLIC MEDICINE:

Being the Introductory Address delivered at the opening of the Winter Session in University College, October 4th, 1875.

By WM. H. CORFIELD, M.A., M.D. (Oxon.), F.R.C.P. (Lond.),
Professor of Hygiene and Public Health.

GENTLEMEN,—In opening the Session here, it is customary for the one who addresses you, either to lay before you an outline of the studies you are going to pursue during your career, and to advise you how best to prosecute them; or to discuss some topic of especial medical interest at the time; or to do a little of both. As most of the public lectures given on medical topics of late years have related more or less to sanitary matters, as sanitary questions absorb the greatest amount of interest at the present day, and as not only medical men but all classes of society are interested in them to the highest degree, as they are now made political affairs, and a prime minister comes to us with his famous paraphrase, *Sanitas sanitatum, omnia sanitas*; and, as the teaching of sanitary science was first started here on a separate footing, and is now being brought into a position of greater prominence, you will hardly be surprised if I consider it my duty as well as my pleasure, to seize this opportunity of attempting to impress upon your minds at the outset of your career, the extreme importance to you as future medical men, on whom will devolve the care of the health of so many others, of a thorough knowledge of the laws which govern the health of individuals and of the community at large, and of the means by which suffering, disease, and death, may be prevented. As you are all probably aware, sanitary science is not yet, like most of the subjects of medical study are, compulsory. Medical students are not obliged to attend lectures on the laws of health; so I want to show you to-day how necessary it is for you as future medical practitioners to know something about those laws. Very likely and very naturally, the idea of many of you is that you come here to learn to be medical practitioners, to learn the art of healing, and not to learn how to prevent disease. Indeed, it may seem to you that, by studying to prevent disease, you are studying what is no part of your business. Now, let us consider this for a moment. Medical men study diseases from all points of view. They study how they arise, what their causes are, how they spread, how the pain they cause may be alleviated, and how they may be remedied. Medical men do all this of necessity in order that they may be able to practise their profession. They have to know more about diseases than other people do; they know the conditions of their origin, and how they spread; and they are thereby enabled to point out better than anyone else how they may be prevented. Are they not then bound to do so? Are they not bound (putting away selfish mercenary considerations) to use the knowledge they possess for the good of mankind and to make that knowledge as perfect as possible? Are not the claims of humanity of an importance vastly superior to any others which present themselves under the circumstances? And have not medical men always recognised this? Have they not studied the causes of diseases, and pointed out the ways of preventing them, from time immemorial? Hippocrates was the father of curative medicine—was he not also the father of preventive medicine? Did not Galen and Celsus, and those who followed them, instruct men in the art of preventing disease? Let us come to our own day, and let me call to your minds what our own Sir William Jenner has said on this subject. “To cure disease was the great aim of medicine in the last century. The idea of the vast majority of the public on medical subjects is the popular expression of the views held by the physicians of the generation just gone. The present popular idea of the science and art of medicine is, that it aims chiefly at the discovery of special cures for all special diseases.” And further on, “No one acquainted with the present state of the science and art of medicine will for a moment question that to prevent disease is its first and most important aim. That this is the great aim of medicine is a statement made in the opening lectures of all teachers of medicine, and in all their subsequent teachings they never lose sight of the fact.” So you will see that Sir William Jenner tells you the first important aim of medicine is to pre-

vent disease. Striving to cure comes after failure to prevent, the very fact of the disease being present showing that the means for preventing it have either not been taken or have failed. Or take the words of Sir William Gull, at the meeting of the British Medical Association at Oxford, “It is futile, if not worse, to speak as some do of leaving diseases to work out their own ends, as agents of a moral police. Medicine allows no such prerogative to our judgment. It is enough for us that diseases prevail to stimulate our best efforts for their prevention, without our asking a question beyond.”

Now let us consider some of the most remarkable discoveries that have been made by medical men to prevent disease spreading in the world. Who discovered the preventive of small-pox? It was an English medical man—Jenner—who made that discovery. Small-pox was the most terrible and the most fatal epidemic that had ever appeared on the earth. You think, perhaps, that I am exaggerating. Not so. Read the accounts of the small-pox epidemics before the discovery of vaccination. Read of the fearful mortality they caused; equal to one-twelfth of the entire deaths of the whole community, and about one-half the deaths of children under ten years of age. Read of the disfigurement and the blindness caused by small-pox; to such an extent that almost all the population were marked with small-pox, while more than half the total number of cases of blindness were caused by it. And then you will agree with me that it was the most fearful epidemic that ever appeared amongst mankind; and you will see that, by showing us how to prevent its ravages, Jenner conferred the greatest possible boon on the human race, although he, at the same time, deprived medical men of much practice and of many fees. But who have pointed out the advantages of vaccination? Who have proved by statistics that by it small-pox can be abolished? Who have shown that the longevity of the human race has increased since it has been practised? Who but those the hope of whose gains is gone by its practice? Had medical men only practised vaccination on themselves and their families, they would have been a charmed race among the plague-stricken population, and they would have been able to enrich themselves at the expense of the lives of their fellow-men. They have never done this; but have, in spite of much opposition and much obloquy; in spite of misrepresentation of the grossest kind, by which ignorant, prejudiced, or interested persons, mislead numbers of their fellow-men—done all in their power to stamp out this terrible disease. Compulsory legislation was found necessary on account of the apathy and ignorance of the people. Compulsory vaccination has been successful to a certain extent, as we do not have anything like the number of deaths from small-pox that we had before its introduction; but why has it not been more successful? Why is so fearful an epidemic as the last one in this country and in France possible? Why but because the dictates of Jenner have not been thoroughly carried out? The reason has been shown by medical men; and it is that revaccination has not been practised, except to a very slight extent. I believe very few medical men have an idea of the absolute necessity of revaccination for the prevention of small-pox. It has been clearly proved that those who have been vaccinated in their infancy, and again at about the age of puberty, are much less likely to take small-pox than those who have not been revaccinated, or than those who have had it before; and while the latter, if they do take it, frequently have it much worse than before, and often die of it, revaccinated people almost invariably have it very mildly if at all. Out of nearly fifteen thousand cases treated in the metropolitan hospitals during the last epidemic, only four presented evidences of revaccination. We know its effects; but we do not take advantage of it to a proper extent. We have compulsory vaccination laws; but I was sorry to see a letter from the Local Government Board which seems to show that they allow the guardians of the poor to exercise their discretion whether or not they shall prosecute a man more than once for neglecting to have his children vaccinated. This is certainly very lamentable. We either have compulsory vaccination here, or we have not. I should like to see a law passed that a child should be vaccinated whether his parents liked it or not. That is what we want; for an unvaccinated child should no more be allowed to go about among the community than a lion or a tiger. The knowledge which we possess has only been partially applied here. We have not had a sufficient amount of education on the matter. They have gone further in these matters in Germany than we have. It has been stated, over and over again, by the antivaccinators, that in Germany small-pox epidemics are generally very severe, especially in Prussia, although compulsory vaccination is enforced. I thought that very strange, it true; and I succeeded in obtaining information respecting the statement from official sources at Berlin. I find that small-pox epidemics have been very mild in those states, especially of South Germany, where vaccination was compulsory; but frequent and severe in the kingdom of

Prussia, with the exception of Hesse Cassel, which has belonged to Prussia since 1866, and where vaccination has been compulsory. In those parts where vaccination has been compulsory, the deaths from small-pox have been very few. In Bavaria, they were 4 in a thousand; in the Rhenish provinces, 3.7; and in Saxony, 8.38 in a thousand, as compared with 16 in a thousand in London, and a percentage of 66.5 in a thousand in Germany, before the vaccination law was passed. In certain of the German states, there had been compulsory vaccination laws; but there had never been such laws in Prussia. The prevalence of small-pox in Prussia, with the marked exception of Hesse Cassel, brought the attention of the legislature to the matter; and, in March of last year (1874), a law was passed making the vaccination of infants and the revaccination of children of riper years compulsory for the whole of the German Empire. Thus Germany has set an example in this respect which other countries would do well to follow; and I doubt not that they will when they see the spectacle of a great empire in the centre of Europe practically free from small-pox—which will assuredly be the case in a few years' time if the law be stringently enforced.

Do all you can, then, to encourage the practice of revaccination; do all you can to spread sound knowledge about it; do all you can to hasten the coming of the day when it will be made compulsory in the British Isles; and you will be benefiting your race, and following in the steps of the great and good man who left to the medical profession the means of abolishing small-pox, and who expected them to carry out those means. If the medical men of all ages had done nothing else, if they had saved no lives, if they had alleviated no pain, if they had prevented no anxiety; if from the time of Hippocrates to the day (still, alas, far distant!) when small-pox shall be as extinct as the dodo, the medical men of all countries had done nothing but fight against that disease, and had exterminated it, their existence would have been justified, their labour during all those years would not have been lost—it would have been amply rewarded.

But now let us look at some other diseases. Where are the black death, the sweating sickness, and the plague? Where is scurvy, that decimator of our armies and navies? They are where typhus fever will soon be, they are where enteric will be some day; they are where every disease which we conquer, the origin of whose existence we find out, the intricacies of whose paths we unravel, will be sooner or later; they are—practically speaking—abolished. Thanks to the labours of medical men of our own day, of Stewart, of our own Jenner, of Murchison, of Budd, and of many others in less degree, we know now not only the differences between typhus fever and typhoid or enteric fever, long confused, long entered under the same heading in the mortality tables; but we know the different conditions of their existence, the circumstances which favour each, and the ways in which they spread, and what to do to prevent their spread. This is why, I say, we may hope to abolish them. Until we know the special conditions under which a disease flourishes, we can only act on general indications; but when the special conditions are known, we can direct special attention to them.

And what about other infectious fevers, scarlet fever, measles, whooping-cough, and the like? Do we not know more about the ways in which they spread? Have we not come to see that isolation is the one great means to be used? Have we not come to see that special hospitals are necessary, to which patients with infectious fevers should be taken, to separate them from the healthy population? These diseases spread from family to family, chiefly by means of day-schools, and children belonging to an infected family, although apparently well themselves, should not be allowed to go to school, as they may carry infection in their clothes. I am sorry to see, from letters in the papers, that the visitors of the London School Board are obliging children who have had these infectious diseases to go to school directly they are considered well; and that they are also compelling children who live in houses where scarlet and other fevers are prevalent to attend school. It is to be hoped that they will soon be taught what they are really doing; they are spreading disease amongst the people. Another point of great importance, too, is that the clothes from people who have had a disease, or from infected houses, are sent to the wash and infect other clothes; and, in some cases, clothes infected with disease are sent to rag-shops, and the fever is sold with them to one or more customers. You can in these ways do much to prevent the spread of diseases. But you want to know more. You are liable at any time to be called upon to see a case of scarlet-fever or other infectious disease; and you are now expected to advise how to protect others and even how to disinfect premises and things. Your patients will not always allow a sanitary officer to be called in; but they may expect you to manage everything for them. It would be very desirable if a law were passed compelling all medical men to report every case of infectious disease

which comes under their cognisance to the medical officer of health of the locality; and then two ends would be attained: the medical attendant would not run the risk of losing his patients by reporting their houses, and the best means of preventing the spread of the disease would be taken promptly; for we can do much by isolation, by disinfection, by attention to general and special sanitary conditions, to prevent the spread of those diseases: though natural causes do far more than we can, luckily. I will give you an illustration. The fever case is the type of the epidemic; it has its different periods, its point of maximum intensity, and its decline. Suppose it were not so. Suppose that one man had scarlet-fever in the first week of the year, and gave it to two in the second, and these to two each in the third, and these four to eight others in the fourth, and so on—every person who took it giving it to two the week after, and to no more—a very moderate supposition—I say, if this went on from the first week in January to the end of July, the whole population of the world would have had it; and if it went on for fifty-two weeks, the people who would have had scarlet-fever during the year would people 4,500,000 worlds; and it would take, counting 90 per minute day and night, 100,000,000 of years to count the persons who would have had it. So you see it is very fortunate that there are causes at work in nature to put a limit to the spread of contagious diseases, and that epidemics come to a height before they go on very long. But all medical men are bound to study the methods for the prevention of disease, because the means for prevention are often the same as those for cure. Are not rickets, gout, rheumatism, and many chronic diseases, preventable? And are not the methods for preventing them the same as the means which must be used to prevent their becoming worse? Are not proper diet, pure air and exercise, more effective agents of cure than pharmaceutical preparations? And are you not, therefore, bound to make a special study of these and other hygienic agents? Remember always the maxim of Rollet of Lyons, "Medicine cures individuals; hygiene saves the masses"; and the dictum of the father of medicine, "Nature is the healer of diseases".

Up to quite recently, the public looked on medicine, as physicians did formerly, thinking that its first duty was to cure, to find a specific remedy for each disease, whether phthisis, cancer, or gout, scarlet fever, typhoid, or cholera. Now, the masses are more enlightened, and require medical men to prevent diseases—or, at least, to prevent them from spreading when they have arisen. A child has scarlet fever in a family—what does its father do? Does he expect the doctor to produce a phial containing a medicine which he will warrant to cure scarlet fever? Not at all. He hopes his child will get well under the doctor's care; but he expects the doctor to know how to prevent others of the family from catching the disease. And the more education is spread, the more will this be so.

But what can we do against our great endemic plagues, with phthisis at their head; that terrible scourge of our climate which takes from us so many in the prime of life whom we can ill afford to lose? Last year, in London, this one disease caused 8,255 deaths—one-ninth of the total deaths, and more than half as many as all the zymotic diseases. Many circumstances favourable to it have long been known, general unsanitary conditions, hereditary taint, bad food, bad air, certain employments—such as those in which the person is exposed to much dust; but it has been recently shown by Dr. George Buchanan (an old University College man) that the drainage of soil beneath towns reduces the death-rate from it in a most remarkable way—as much as fifty per cent. in one instance—and so knowledge is obtained which enables us to prevent a vast amount of suffering and death from it.

What shall we say of the great infant mortality, mostly from preventable causes? Let us hear again what Sir William Jenner says. "First among preventable diseases I will place one, the mortality from which, in London at least, is so great as beyond question to swell largely the death-rate of children under two years of age; and yet one that has no place in the Registrar-General's returns. I mean rickets, the English disease, as it was formerly called. Not one child ought to die from rickets itself, and death from its consequences ought to be extremely rare; and yet the mortality from rickets, from diseases which would not occur but for the pre-existing rickets, and from diseases which would be trifling but for the co-existence of rickets is enormous." And, again: "The causes of rickets are: poorness of the mother's blood, errors in diet, *i.e.*, feeding the child with food unsuited to its wants and to its digestive powers, and, as subsidiary causes, deficient light and impure air, produced especially by overcrowding of the sleeping-room. Poverty—inevitable poverty—plays a great part in the production of some of these causes." And Sir William Jenner continues: "Judging from my own experience, I should say that rickets so severe as to lead even indirectly to death, would be comparatively rare did the poor know how to feed a young child; were the poor aware of the

necessity of the infant being fed with food fitted to its age. Law can do something here; for it can make compulsory the teaching of the practical laws of health in all schools supported in any degree by the public money. Diffusion of practical knowledge is the great preventive remedy of rickets."

And now let us hear Dr. Ferguson on the *Degeneracy of the Factory Population*. In a letter, dated February 26th, 1874, he writes: "Within the last fortnight, six children have come to me, producing registers to prove thirteen, and in one case fourteen years of age. The heaviest of them weighed fifty-six pounds, and the tallest was half an inch over four feet. The average weight of the healthy factory child of thirteen years I find to be seventy pounds, and average height fifty-four inches." Thus, you see that the heaviest was fourteen pounds under average weight, or one-fifth too light; and the tallest five and a-half inches, or about one-tenth too short. He says, too: "I am meeting every week with cases like these, in which feeble children, overtaxed by working full time, either lose weight or grow at a very abnormally slow rate." And: "I am alarmed at the large and increasing number of physically feeble children coming to pass half-time. Many giving proof of nine years come before me, weighing not more than forty-one or forty-two pounds. I am constantly meeting with young persons, aged from fifteen to nineteen years, of not more than the average weight of a healthy factory child of thirteen, whom, when examined for half-time, I noted as physically feeble. For nine years I have closely observed, and am certain that each year the proportion of physically feeble children presented to me has gone on increasing, with the single exception of 1873."

Here is an alarming evil, and one which, if unchecked, will produce a permanent deterioration of the whole factory population. And what are the causes of it? The great cause is the same as the one pointed out by Sir William Jenner as the great cause of rickets—improper and insufficient nourishment. What is the natural nourishment of young children? What is the one perfect food which contains all the necessary substances in proper amount? Milk. Hear Dr. Ferguson again: "From long and careful trial, I find children in the mills to grow, on the average, between thirteen and sixteen years of age, nearly four times as fast on milk morning and night as on either tea or coffee. The exact figures are as four to fifteen. Drinking hot liquids is very destructive to the teeth. Not more than five per cent. of the children I examine have, at the age of thirteen years, sound teeth."

There are other causes, as drunkenness of the parents, and especially of the mothers, by which, of course, money is spent which would buy food; but the great cause is want of milk.

And how is milk to be got? Why is it so dear? Why is not milk more plentiful? To produce milk in large quantities, we want a great amount of luxuriant grass; and for this rich manure and plenty of water are required; and have we not got these? We have; but we do not use them. We deliberately throw them away. Impossible! It is only too true. The rich manure is the sewage of our towns. And now, I fancy, some of you have said to yourselves—"Oh! Corfield is going to lecture! It will be all about sewage!" Well, if an apology be necessary, it must be that the utilisation of sewage is the great question of the day, and must not be passed by. The only way to utilise it is to feed plants with it. It is now generally turned into rivers, to render them impure and unfit to drink. The sewage is generally turned into the rivers below the towns, so that the next town below drinks the water into which the sewage from the towns higher up the river has been emptied. In one town, the sewage is actually discharged about a mile above the place from which the town takes out its drinking-water; so that they pollute the water, and then filter and drink it—a most ridiculous circular system. And this is valuable manure that is thrown away. Why, the sewage of London has never been valued at less than one million sterling a-year, and yet that is thrown away, either entirely or almost so. Anything can be grown with it. Grass grows splendidly, especially Italian rye grass; this is the staple sewage crop, and is thoroughly good for cattle food. Cereals can also be produced in abundance with it, as well as vegetables, so that the sewage farmer can grow anything. I have seen oats grown with sewage manure, some ears of which were twenty-seven inches long—plenty of them were two feet long. And, to give you another example, strawberries of most excellent flavour have been grown with sewage, and one of them would not go into an ordinary tumbler. Italian rye grass is very suitable for cattle, and will produce ten cuttings, or eighty tons per acre *per annum*. Sewage-farms need not be swamps, as some people suppose, and they are not if the drainage be properly attended to. If sewage be passed through the soil, the effluent water is purified at all seasons of the year, even in winter when plant-growth is least. This is the way in which sewage may be made valuable manure, and it is the only way by which the refuse of towns can be turned into

food for cattle, and by them to milk, which is required to feed the starving, scrofulous, rickety infants in our great centres of population. The solution of the sewage question will afford the means of preventing the degeneracy not only of the factory population, but of the people in large towns generally.

Most of you, I dare say, have heard that several cases have arisen in which epidemics of typhoid fever, and in some instances of scarlet fever, have been traced to infected milk; and I think it is of extreme importance that there should be a Government enactment to have a sanitary inspection of all dairy farms. Remember, too, that we continue to waste our natural resources. A day may come when we shall not be able to get a sufficient supply from elsewhere. We have to rely on supplies from without, which may some day be stopped, and in the meantime we are turning into our rivers and into the sea an immense quantity of manure, and this in spite of the reports of Royal Commissions and Scientific Committees all recommending irrigation as the only remedy. The mention of irrigation leads me to speak of the works carried on now to insure a water-supply. We must hide our heads when we think of the works of the ancient Romans, though carried out by them more as a necessity. Who has not heard of the Roman aqueducts? Water had to be brought from a distance, because they could not raise it in Rome. Some of these aqueducts were forty miles long, and yet the Romans were supplied with three hundred gallons a head per day, while we in London think ourselves well off to get thirty gallons a day. Then the Romans gave us the pattern of our drains. Their great drain was not meant for a sewer, but to drain the ground around the forum, and it does so still. But works are now done more to insure the health of the community, and most of our gigantic works are carried out to this end. Look at the sewerage works in London by which the sewage of from 3 to 4 millions of people is removed continually; all the sewage is thrown away, but that is of less importance. We must first consider how to get rid of it, and, secondly, what to do with it in the way of utilisation. One of the reasons of the low death-rate of London, much lower than that of most large towns, and in parts as low as that of country parishes and small towns, is its excellent drainage. Then medical men are often expected to understand sanitary architecture, and it is the duty of every medical man to know all the important points connected with the supply of air, with the ventilation of rooms, heating and lighting, and even with the construction of drains and closets to a certain extent; for he is now liable to be asked questions relating to these matters. Every one is taking an interest in sanitary matters, both as regards houses and towns; and medical men, wherever they go, are supposed to be authorities on these things, and their opinion is frequently asked about them; and it is now necessary for medical men to study the broad principles of sanitary science, and, to some extent, the detailed facts, if only to keep up with, and ahead of, the knowledge of other people. If medical men are not to be authorities in matters which relate to the health of the community, who are? It is necessary for all medical men, but more especially for those likely to be charged with the care of the health of the community—to be medical officers of health—to study these matters. Some such appointments have long existed in certain towns, and especially in the metropolis. But by an Act of last session it was provided that all over the country sanitary authorities should be constituted and sanitary officers appointed. We are not to discuss here the constitution of these authorities or their fitness for performing the duties allotted to them by law; sufficient for us to know that such offices do exist, that there are men appointed all over the country to look after the public health, and that men must be ready to fill up such appointments as they are made or as they fall vacant. No doubt, in time, the appointments will be gradually increased, and the country will be divided into areas, with a superintendent medical officer of health over each, and local medical officers of health in smaller districts under him, and then there will be a much more complete system of supervision than can exist with the haphazard arrangement which we have at present. But be that as it may, the duties of such posts will be much the same as they are now; and such duties are very manifold, and men must be specially prepared for them. A medical officer of health has to give advice of very various kinds; he must be conversant with sanitary architecture, and must understand thoroughly all the pipes, traps, etc., which make up the sanitary arrangements of a house, and be prepared to advise, where improvements are necessary, what are the best suited to the case. He has, unfortunately, as yet no control over the building of new houses; and another desideratum is one pointed out by Mr. Liddle, and it is that a new Building Act should be passed which shall give the local authorities control in this matter, and make it compulsory that before a new house is allowed to be inhabited, the owner should obtain a certificate or license from the local sanitary authorities, only given after a satisfactory certificate from the

medical officer of health and the surveyor. It is true that the medical officer of health has long had power (by Torrens's Act) to report on houses which he considers unfit for human habitation, and that local authorities have had power to pull down or to close such houses, and that now by Mr. Cross's Act, passed last session, power is given to pull down whole areas of houses where they cannot be altered so as to be put in a proper sanitary condition. So far, so good. But we want, as I said, power over new houses. The medical officer of health must also be acquainted with all matters relating to air-supply and ventilation, especially of public buildings—theatres, churches, etc.—and with the sanitary arrangements of hospitals, workhouses, asylums, and prisons, which have long since been cleared of the jail fever; and someone has said that they are "the only places fit to live in". He must be prepared to advise in cases of overcrowding, and to give his opinion on all cases of complaints of nuisances of any kind, and to support that opinion by evidence if need be. He must be acquainted with all the methods for the removal of refuse matters, and know the advantage of each, and the conditions under which it may be applied. His advice is asked on all such important matters as the ventilation of sewers, the treatment of sewage, the cleansing of streets, etc., as well as on water-supply and purification. He must be acquainted with the injury to health which is caused by various trades and employments, and with the methods of preventing it, and also with the arrangements for keeping animals in a proper condition, slaughtering cattle and disposing of offal. He must be able to use his microscope, not to mention a number of other instruments of research. He must be acquainted with the ways in which epidemic diseases spread, and with the means to prevent them spreading. It frequently happens in practice that one man gets typhoid fever in a small town, and, because proper precautions have not been taken, the epidemic spreads all over the town. Another instance may be quoted. A boy comes home with the same disease to a village cottage, the medical man takes proper precautions, and there is not another case of the disease in the village; whereas, in the same village, before those precautions were taken, an epidemic had several times taken place. Thus there is now room for specialists. One versed in sanitary matters is often now-a-days consulted as to the sanitary condition of a house, especially where cases of fever have occurred. Then the medical officer of health must be a statistician, and, to a certain extent, know how to prepare statistical tables, and to draw correct results from them; and he must be an analytical chemist, too, to a certain extent, though he need not have such an extensive and accurate knowledge as that required by a public analyst; and he should also be acquainted with sanitary law and with the proceedings of law courts upon such matters.

All these various requirements make it necessary that he should study many branches of science. As Dr. Guy says, the science of hygiene "makes application of a knowledge remarkable for its amount and the great variety of sources whence it is derived".

And this is why hygiene has only so lately become a science. It is usually defined as the art of preserving the health; the art by which we contrive to lengthen our lives; but it is more than this; it is the science which studies the causes of diseases, and points out the means for the prevention of disease; for to prevent disease we must study its causes, we must find out the conditions which favour it, which tend to make it spread.

The earliest science is that of numbers, and it is the most perfect: mechanics and astronomy and the other physical sciences are all subject to the science of number, and are all wonderfully perfect because of it. Chemistry—the study of the composition of bodies—is making wonderful advances, but the Newton of chemistry has yet to come. Then biology—the science of life—of which the study of physiology is advancing so much in our day; pathology—the study of disease—all had to advance to a considerable degree of perfection before hygiene could be born; it links physiology—the study of healthy action—with pathology, and shows how we pass from health to disease.

The hygienist must be, in the first place, a good pathologist; he must be well acquainted with diseases, and especially with their origin. He must be a good physiologist and anatomist, for, unless he has made a study of what the normal condition of the human body is, how can he advise as to the methods for keeping it in that condition? He must be a chemist and physicist, and even a mathematician to a certain extent. The more he knows of geology and botany the better, and he must be familiar with meteorology. So a hygienist must be a physician; and this is why the universities require men to be B.M.'s before they attempt to take degrees or diplomas in State Medicine. Several of these are now created, and the University of London has established a diploma in this subject; provision has been made for the complete study of it in this College; and a laboratory is nearly fitted up, in which students will be able to perform for themselves analyses of sam-

ples of air, water, and various foods and drinks, and so learn to fulfil the duties required of them as medical officers of health and public analysts.

I hope I have especially impressed on all the importance of sanitary science to medical men, whether they undertake public duties or not, and that many of you will attend in the summer course on hygiene, if you do not enter for the practical work in the laboratories. Anyhow I wish you all success in your careers, and whatever branch of medicine you take up, remember that it is not only your duty but your privilege to prevent suffering, disease, and death, to the utmost of your power.

You have much to learn; do not put things off. Seize the opportunity. Do not waste your time; every day spent in idleness makes it more difficult to work the next day. On the other hand, beware of neglecting out-of-door exercise, so necessary for the health of the body and of the mind too. You cannot learn well and thoroughly unless you keep your bodies strong; the *corpus sanum* is essential to the *mens sana*. Do everything earnestly; be eager in your sports as well as in your work; mind that a few hours of real and genuine hard work are worth days of dawdling, and take as your motto the words of the immortal Hippocrates, words so especially applicable to medical studies, "Life is short, but art long; opportunity fleeting; experiment dangerous, and judgment difficult".

MEDICAL REFORMS:

Being part of an Address delivered to the Reading Branch of the British Medical Association.

By GEORGE MAY, F.R.C.S., President of the Branch.

The Practice of Midwifery by Women.—The Contagious Diseases Acts.—The Medico-Legal Relations of Insanity.

It is as President of the Reading Branch of the British Medical Association that I have the honour to address you to-day. It was my privilege to rock its cradle; I have earnestly watched its progress; and I ask you now to rejoice with me at its distinguished success. In spite of its earlier difficulties, it has become a great institution, an influential power. For the promotion of original researches, and for the investigation of subjects beyond individual enterprise, it extends its fostering aid; and for the expression of the opinions and wishes of our profession on questions which demand legislative enactment, it can now speak with an authority which cannot be disregarded. Among many subjects of professional and general interest, there are some which claim especial regard. The education of females to the practice of medicine is one of deep interest and importance. In the promulgation of all that relates to the laws of health, I believe we should find in co-operation with well-educated females a valuable and powerful help. I should hail the day when the entire department of midwifery were transferred to the charge of competent females. With opportunity to consult with male practitioners in cases of difficulty, I am of opinion that more satisfactory results would follow than by present arrangements. We know how anxious is the position of the practitioner when (detained by an obstetric engagement) he is unable to fulfil his other duties, be they ever so urgent; and we are all too painfully familiar with the difficulties and risks encountered by attendance on infectious cases while engaged in midwifery practice. It were well for the public interests if attendance on both classes of cases conjointly were held to be incompatible; and I do not see how disassociation could be made practicable, excepting by the substitution of female for male attendants in the entire department of midwifery. The subject is intensely important, and demands at our hands a serious and unselfish consideration.

The Contagious Diseases Act also demands attention from every member of our profession. The enthusiastic and well-meaning, but, I believe, misguided, efforts of numerous opponents of the Act (chiefly on asserted moral grounds) have given the subject more than ordinary interest. The condition of the unfortunate beings obnoxious to this Act is most deplorable. Very many of them are supplied from homes where both sexes and all ages are huddled together, where decency and self-restraint are unknown, and where prostitution would seem to be the natural, if not the inevitable, result. The wonder is not that many have fallen, but that so many have escaped the fall. When overtaken by disease, they are refused admission into many hospitals until evi-

dences of poisoned frame are too manifest. So long as they are physically capable of pursuing their vocation as their adopted means of livelihood, they are often compelled to be regardless of the existence of disease which is contagious, and so is multiplied *ad infinitum* the terrible scourge with which our profession is unhappily too familiar. The beneficent Act passed a few years ago by a wise and humane legislature is now sought to be repealed on moral pretexts. The outcast wanderer is encouraged to defy the law, to protect the *liberty* of her poor diseased body, and to reject the means of relief and cure, and a way opened to her of escape from her degraded and pitiable life. Certain members of the legislature have leagued themselves against the Act; and one distinguished member of the late administration has pledged his future life to its repeal. Even among our own profession there are some who are not satisfied with the Act. If the system of certificate be an inducement to immoral indulgence, surely this can be amended; and, in my judgment, opponents are bound in humanity to provide a satisfactory substitute before they inflict on the nation so terrible a calamity as the loss of the present Act. The British Medical Association, through its multiplied branches and its intelligent press, offers an excellent vehicle for collecting the medical opinion of the country on this most important subject.

In fulfilment of his foreshadowed intentions, our distinguished Premier has grappled with the Sanitary Acts. If within reasonable time he can bring them from chaos to order, and enact supplementary laws founded on our combined professional knowledge, and make them applicable to the entire kingdom, and compulsory instead of permissive, he will deserve a civic crown.

The medico-legal relations of insanity, the boundary lines of responsibility and non-responsibility for crimes committed under conditions of assumed mental disease, involve questions of grave import, and challenge the intelligence and soundness of our jurisprudence. A conference between distinguished members of the law, and of medicine (as suggested by Dr. Russell Reynolds), might lead to satisfactory results. We want a "forensic medical officer" whose professional training shall comprehend psychology, and all that may prepare him to analyse the ever-varying phases of mental aberration, to detect the crafty malingerer, and to assist the judge in determining the *degree of responsibility involved in the act of imputed criminality*. And who so fitted as he? For such knowledge is special, and comes by patient labour, and not by intuition, as some have presumptuously asserted. The illustrious Casper, by his genius, energy, and unrivalled experience, contributed largely to establish a criminal code in Prussia, a model of wisdom and humanity; and secured for his country an enviable distinction, and for himself undying fame. I have ventured to make a brief allusion to some among many subjects which have engaged professional interest, and which well deserve the serious consideration of our great Association. I heartily commend it now to your increased favour and support, and earnestly pray that its councils may be inspired with wisdom to guide and direct its united intelligence to the advancement of science, the honour of our profession, and the good of mankind.

THE CASE OF THE LATE PROFESSOR HUGHES BENNETT.

By W. CADGE, F.R.C.S., Surgeon to the Norfolk and Norwich Hospital.

PROFESSOR J. HUGHES BENNETT died at Norwich on September 25th, 1875, aged 63.

A narrative of his illness, so far as it is known to me, particularly of the last complication which led to his death, will have a sad interest for those who knew and loved him as a friend or teacher; and a deep professional, as well as a sad, interest for those, and they have been many,* who, from time to time, have used their best skill and thought to detect and unfold the hidden cause of his mysterious case. I know not exactly when or how Dr. Bennett's first failure of health commenced; but it was many years ago. The most prominent and persistent of his early symptoms were those of a bronchitic and laryngeal affection, which were sometimes urgently alarming, sometimes almost recovered from, were readily reproduced, and did frequently recur up to the very last.

By slow degrees, his general health failed, he grew thinner, looked pale, and lost strength. A few years ago, it was discovered that he had diabetes; but this disappeared without any great rigour of treatment, and has not been thought or known to have recurred, except

occasionally and very slightly. On this point, however, there may be room for doubt. Since the first discovery and the first disappearance of the sugar, I have reason to believe that examinations of the urine have not been frequently made. In conversations and in answers to questions on this subject, Dr. Bennett always spoke of the diabetes as a taint of the past, and as not bearing with importance, or as having much influence, on his steady deterioration of health; at no time had he thirst or diuresis; and, therefore, the malady did not impress itself on his thoughts by the usual general symptoms. Very recently, however (in August), sugar was again found; and I have before me a paper containing observations on the urine made three times daily during the first half of September 1875; from which it is shown that, while the specific gravity and the quantity of the urine were but little, if at all, above the natural standard, sugar appeared and disappeared in a quite irregular and intermitting way. Thus, the urine passed during the night gave a dense deposit, with Fehling's test, on five out of fourteen days; that passed at mid-day on six, and that passed in the evening on four out of fourteen days; while in all the other observations, no sugar was found. During this period, his diet was very similar from day to day; consisting of fish, a little meat, pudding or tart, fruit and sherry; very little bread, and no potatoes.

If, as I have said, in this long interval between the first and last clear recognition of diabetes, the urine was but seldom examined, and, when examined, chanced to be free from sugar, it seems probable that glycosuria, in one of its intermittent and milder forms, existed throughout, and was the true and chief cause of the emaciation and debility which, on any other hypothesis, it has been found so difficult to explain.

Be that as it may, his health continued to decline. The last three winters he passed in the south of France, with some benefit, possibly, to his bronchial and laryngeal affection, but apparently without any effect on his general state. For many years, Dr. Bennett had suffered from occasional attacks of gout; and he was liable, too, to lithic acid deposit in his urine; occasionally, for several years, he had experienced some slight impediment and irritation in making water, which he thought to be due either to slight stricture or to prostatic enlargement. From time to time, a simple catheter was passed, but no stricture was discovered. Last winter, at Nice, he had rather more vesical irritation than usual. On his way to England, in June, he stayed for a time on the borders of the Lake of Geneva; and a letter I received from him on July 1st will best describe his condition.

"I have long been intending to write to you in consequence of a malady which has been creeping upon me for some years, but which now is causing me no small anxiety. Frequent micturition; pain in the back, long thought to be lumbago, but which I now know to be renal; sediments of uric acid, and attacks of acute gout in the right foot, and one in the stomach, have indicated, during the last, say four years, pretty clearly the general diathesis and approaching local disorder. About three months ago, at Nice, I was suddenly seized with pain during micturition, extending to the extremity of the urethra, and passed about a tablespoonful of bloody urine, mixed with gravel. The bladder was irritable for about twelve hours. Lying in bed, poultices, and some alkaline water, got rid of it. Since coming here, four weeks ago, I have been sensible of dull pain in the perinæum; had two more attacks of irritable bladder, passage of blood, etc. Whether all this signifies irritable bladder, prostatic or renal disease, or stone, I cannot tell. Can you suggest what should be done? I have given up wine, beer, acids, fruit, and sugar; take a good deal of milk, little meat; indeed, the desire for animal food is small. I continue pale, weak, and emaciated; I apply poultices to relieve local pain, and take about twenty grains of bicarbonate of potash thrice daily, in the slightly alkaline waters of this place; I also take fifteen drops of vin. sem. colch. every other night or so. It may be only gout, but I dread stone. My urethra is very irritable; and, the last time a catheter was passed, I nearly fainted. This was two years ago; and I was then assured that there was no stricture or prostatic disease, merely a weak bladder."

In July, he came to Norwich, looking more emaciated, pale, and ill than I had ever seen him. On carefully sounding, a stone was readily felt, apparently of some size; the bladder was capacious and healthy, and could retain nearly half a pint of urine; the prostate was slightly enlarged; the urethra very sensitive and irritable; the urine was clear, acid, specific gravity 1.020, and contained no albumen. He was much depressed by the knowledge that he had stone, but his innate force of character came to his aid; he looked the difficulty in the face, and was prepared at once to undergo treatment. It was not without difficulty that I induced him to go to Edinburgh in the first week of August; there were many reasons which made a visit there desirable; travelling did not add much to his troubles; and I confess that I was not without the hope that, once there, he would be persuaded to ask, and would

* As I am unable to give, with accuracy, the views, so I have purposely avoided using the names of any of the physicians and surgeons who have at any time been consulted by Dr. Bennett.

see the wisdom of accepting, the aid of one of his distinguished colleagues and friends. While there, he received much comforting and valuable advice and encouragement, but his symptoms increased in severity. He wrote on August 18th: "There is now much more irritation than when I last saw you; stooping and turning cause sharp pangs, and the close of micturition is very torturing." He returned to Norwich; and the question of operation, lithotomy or lithotripsy, presented itself. Either must be attended with the greatest hazard in one so worn and unhealthy; but the thought of doing without operation was simply intolerable, and not to be considered. In favour of lithotripsy, were the fair quietude and healthy condition of the bladder and urine; but there were serious drawbacks. Dr. Bennett was a man of high spirit and courage; but his courage fitted him rather to encounter one great risk than to endure the wear and tear of repeated operations, frequent use of instruments, and the probability (made more probable by the presence of glycosuria) of troublesome cystitis. The size of the stone alone could decide the point; and, to ascertain this, Mr. Clover kindly came down and administered nitrous oxide, followed by ether; while, with the lithotrite, I found that the stone measured $1\frac{1}{2}$ inches by 1 inch. Such a stone as this was fairly within the compass of lithotripsy in an otherwise favourable patient; but, in this case, I had not a moment's doubt that lithotomy, if carefully and accurately done, notwithstanding its greater immediate risk, afforded the best chance of complete recovery. In this view, the patient readily acquiesced; and, on the following day, September 16th, I removed the stone by lateral lithotomy, assisted by Mr. Crosse, Dr. Beverley, and Mr. Hooker. The nitrous oxide and ether was again used by Mr. Clover, with admirable effect; there was never a movement of the patient, nor the least headache or sickness afterwards. The operation was easy and satisfactory. The transverse artery of the perineum was large, and spurted freely; it was easily tied when the stone was removed; the blood was so thin, and so little disposed to coagulate, that every little vessel continued to ooze; and I deemed it best to plug the wound round a silver tube, rather than allow any quantity of blood to be lost. The stone was composed of lithic acid; it measured $1\frac{1}{2}$ by 1 inch, and weighed 193 grains. No more blood was lost, and urine passed freely afterwards. He suffered considerable aching pain in the wound for some hours; but it was gradually checked by half a grain of morphia introduced into the rectum at the time of operation, and twenty drops of Battley by the mouth two hours after. At night, he turned cautiously on one side, took twenty grains of chloral, and had some hours' sleep. Pulse 90.

September 17th. Urine plentiful; he had pain only when he moved. Pulse 96; temperature 102 deg. Tongue dry but clean. He had taken egg and milk and a few teaspoonsful of brandy in soda-water; he had frequent cough and expectoration, which caused temporary pain in the wound.

September 18th. The tube and part of the plug was removed; after which the bladder was able to retain urine and empty itself by the wound every two hours. This caused considerable pain in the parts from smarting and spasm; but in a day or two, when all the lint was removed, it abated, but never wholly ceased. Pulse 92; temperature 101 deg.

I need not record minutely the daily progress of the case. Suffice it to say, that for four or five days there was a good prospect of speedy recovery; he took food plentifully, and was in good spirits; and everything went on well so far as concerned the pelvis and bladder; the urine was easily caught and was clear, but loaded with sugar, with a specific gravity of 1030 to 1035. By degrees, however, the cough and expectoration became more frequent; and this, with the frequent spasm and larger amount of urine secreted, distressed him and prevented sleep. Opiates by the mouth or bowel relieved for the time, but were apt to be followed by sickness; chloral did not act well, and signs of increasing debility showed themselves. The pulse continued from 90 to 96, but became weaker and weaker. Aphthous patches gathered on the tongue and throat, and made swallowing difficult, and thus the prostration went on; and death from sheer exhaustion took place on the 25th, the tenth day after the operation.

Post mortem examination, forty-eight hours after death. The body was emaciated; the surface pale and bloodless. The blood was thin, and transuded through the vessels and stained the tissues. Only one small clot in the right ventricle of the heart was met with.—The bladder was perfectly healthy; its muscular walls were rather thin and dilated; its mucous membrane was pale and smooth.—The prostate gland was enlarged to the size of a small apple; it projected somewhat like a cornice into the bladder, and on this projecting part there were traces of slight ecchymosis beneath the mucous membrane. The lithotomy wound was clean, and so slight that, looking from the bladder, none could be seen, and on closer scrutiny it was found that the knife had only divided the mucous membrane and had scarcely reached the left lobe—this, doubtless explains the power of

the bladder to retain urine the moment after the tube was removed.—The kidneys were slightly congested, but not unhealthy.—The liver weighed 4 lbs. 5 oz., and was healthy. The *pancreas* was greatly hypertrophied, and weighed 2 lbs. 12 oz.; texture firm, of natural colour and appearance. The *stomach* and *intestines* were healthy.—The *heart* was large and flabby, and weighed 1 lb. 1 oz.; its valves were healthy; the left ventricle was empty; the right contained a soft clot; the aorta was deeply stained by the colouring matter of the blood; its walls were atheromatous, and there were several calcareous scales.—The *lungs* were emphysematous and cedematous; there was some dilatation of the small bronchi; at the apices there were some small patches of collapsed lung-tissue; no tubercle; the right lung weighed $1\frac{3}{4}$ lbs.; the left, $1\frac{1}{2}$ lbs. There were some old pleural adhesions on the right side.—The *trachea* and *larynx* were pale and healthy.—*Head*. On raising the calvarium, a soft tumour was discovered situated on the right side of the head, about an inch above the ear, between the dura mater and the bone. It was about the size of a hen's egg, and projected towards the brain, so as to produce a deep pit or hollow into which it fitted. The convolutions were flattened and pressed down, but not otherwise altered; no softening; no congestion. The dura mater covering the tumour was somewhat thickened. The parietal bone was thickened and hypertrophied around the circumference of the tumour; over it, there was thinning by pressure and absorption, and at one point, about the size of a shilling, all trace of bone had disappeared, and it was replaced by fibrous membrane. The tumour had a cystoid character, with a distinct investing membrane, and its contents consisted of a blackish pulpy material resembling the interior of a recent aneurism, or more closely of a myeloid tumour. Under the microscope, there were seen cells of various descriptions, plates of cholesterine, fatty granules, and altered blood-corpuscles.—The *brain* itself was anæmic, but not, on the whole, unhealthy; it weighed 47 oz. The optic thalami, corpora striata, pons Varolii, and medulla oblongata had a somewhat shrunken atrophied appearance, and were, perhaps, harder and tougher than usual. The arteries were healthy, and, to the naked eye, the texture of the brain around them seemed natural. I will make no comment further than to say that, so far as I have been able to ascertain, Dr. Bennett never suffered from headache, giddiness, or any symptom directly indicative of such a lesion as that just described.

I may add, that Professor Sanders of Edinburgh, who happened to be staying in Norwich, visited Dr. Bennett a day or two before he died, and was present and kindly assisted at the *post mortem* examination.

TWO CASES OF MICROCEPHALIC IDIOCY.*

By G. E. SHUTTLEWORTH, M.D.,

Medical Superintendent of the Royal Albert Asylum, Lancaster.

A BRIEF description of two microcephalic idiots, whose head-measurements are extremely small in proportion to the amount of intelligence they evince, may possibly be of some interest to the members of the Psychological Section of this Association. Both are at present resident in the Royal Albert Asylum, Lancaster; and although a short notice of the first case, quoted from a description by Dr. Ireland, who casually saw it in 1871, appears in the last edition of Bucknill and Tuke, I may, perhaps, be allowed to give a few additional particulars, both for the sake of comparison with the second case, and also on account of certain alterations in the physical and mental characteristics of the patient, which have occurred during the last four years.

CASE I.—Frederick — is now eleven years of age, and has been under my observation in the Royal Albert Asylum during the last four years. He is a well-knit, straight-limbed boy, $46\frac{3}{4}$ inches high, weighing 47 lbs.; and, in spite of the peculiar conformation of his head, has a fairly intelligent expression, with large lustrous eye. The following are his head-measurements as given in Bucknill and Tuke, upon the authority of Dr. Ireland's observation in 1871, and, also, as recently taken by myself:

	1871.	1875.	Diff.
Circumference	14 $\frac{1}{2}$ in.	14 in.	$\frac{1}{2}$ in.
From root of nose to spine of occiput (tape) ...	7 $\frac{1}{2}$	8 $\frac{1}{2}$	$\frac{1}{2}$ in.
Ditto calliper measure	—	4 $\frac{1}{2}$	—
From ear to ear over vertex (tape)	9 $\frac{1}{2}$	10	$\frac{1}{2}$ in.
Ditto calliper measure	—	3 $\frac{1}{2}$	—
From ear to middle of forehead	4 $\frac{1}{2}$	4 $\frac{1}{2}$	—
From ear to middle of occiput	4	4 $\frac{1}{2}$	$\frac{1}{2}$ in.

The two measurements made, as I believe, by comparable methods,

* Read before the Section of Psychology at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

would seem to show that the increase in the size of the cranium during the last four years depends upon development in the occipital and parietal regions, rather than in the frontal. From the photographs which I exhibit, and also from the diagrams illustrating contours of the head in various directions, which I have made with the aid of flexible wire, it will be seen that there is nothing distinctively pitheoid in the aspect or conformation of this boy's face or skull. Though his forehead recedes, there is no great flattening of the arch of the cranium; the skull is simply on a small scale. The profile, indeed, has somewhat of a bird-like aspect, and, it is remarked, bears strong resemblance to that of the so-called Aztec children exhibited in this country some twenty years ago.

The etiology of this case is by no means clear. Frederick H. is the son of a Yorkshire coachman; and both father and mother appear to be healthy, intelligent, steady-living people, without (so far as is known) any hereditary or acquired constitutional dyscrasia. He is the third of a family of five, all except himself being intelligent and well-formed. He was born at full time, after a rapid labour, consisting of but three pains; and his mother cannot recall any circumstance attending her pregnancy with him differing, in any respect, from the circumstances of her other pregnancies. It is impossible now to obtain any trustworthy evidence on the subject of premature ossification of sutures in this case, a cause assigned by Virchow for the occurrence of microcephaly.

The case, however, is chiefly remarkable for its mental characteristics. In Bucknill and Tuke, the boy is described as "quarrelsome and unmanageable", and, though comparatively intelligent, of a disposition the reverse of amiable. This is by no means his condition now. As a result, no doubt, of discipline, he is now well conducted and fairly sociable. Though unable to articulate clearly more than a few monosyllabic words, such as "look", "come", "see", etc. (which he uses appropriately), he has evidently a fair degree of understanding. Nothing appears to escape his notice; and, on my morning round, he is in the habit of persistently directing my attention to any new thing (such as a fresh toy or some change of clothing) which has fallen under his observation since he last saw me. At school, he tries to imitate writing on a slate, to match colours, and to join in the drilling exercises of the children. That he is able to carry on a train of reasoning may, I think, be deduced from the following incident. A few Sundays ago, having been kicked by one of his companions when walking in the grounds of the asylum, two hundred yards from the house, he left the nurse and children, and ran as fast as he could to the room in which I am in the habit of seeing patients; and, ejaculating "Look, look!", would not rest till I had examined his leg, and accompanied him to investigate the circumstances of his injury.

CASE II.—Albert —, a boy aged 7, has been under observation only since November last. He is a rickety, knock-kneed child, 34½ inches high, 30 lbs. in weight; and, on account of the feebleness of his legs, at present not very active in his movements. His head-measurements are as follows:

Circumference	...	...	...	14½ inches.
From root of nose to spine of occiput (tape)	...	...	...	9½ "
Ditto ditto (callipers)	...	...	...	4½ "
" ear to ear over vertex (tape)	...	...	...	10 "
" ear to ear (callipers)	...	...	...	3½ "
" ear to middle of forehead	...	...	...	4 "
" ear to middle of occiput	...	...	...	4½ "

Though the circumference of the head of this case is not so large by three-eighths of an inch as that first described, the microcephaly is less striking at the first glance. The superciliary ridges are more prominent than in the first case; but the forehead, though low, recedes somewhat less rapidly. The cranium itself is well vaulted. Like Frederick, this boy has a large lustrous eye and well formed features; and his mental characteristics are not dissimilar. He speaks but rarely, but, according to his mother's statement, is not devoid of the power of articulation, having, under the influence of excitement, used even dissyllabic words, e.g., "Jesus Christ". I cannot personally vouch for his ability to make any but simple ejaculatory sounds; but he certainly makes efforts at school to imitate the words he hears. He is, like Frederick, very inquisitive and observant, and is able to point out when they are named most of the garments he wears. He is, as Frederick used to be, rather quarrelsome and masterful; and was stated, on admission, to be at times dangerously violent.

The history of this boy is as follows. He is the youngest child of a family of eight; the other seven children, five of whom now survive, having been free from bodily and mental defect. There is a history of consanguinity between the parents' families, the father having been the mother's second cousin, and there had been instances of mental weakness and of phthisis in previous generations. During her

pregnancy with this child (who was born after the full period of gestation), the mother was in delicate health, much depressed in mind, and in the middle of pregnancy much affected by the shock of seeing one of her children fall violently on his head. This shock has been suggested by her as the cause of Albert's idiocy; but amongst all the circumstances just detailed there is not much ground for surprise that the child should be an idiot. Why he should be a microcephale is another question. One would not suppose that the rickety diathesis, of which the boy presents in his long bones unquestionable symptoms, is one in which premature ossification of the cranial sutures would be met with. Is it possible that the maternal shock referred to may have been an element in determining the abnormal conformation of the skull? I am aware that mothers' statements on these matters are to be received with very considerable caution; but I think they are not to be indiscriminately rejected.

I will not attempt to enter upon any general disquisition upon microcephaly. Suffice it to remark that the two cases just described do not lend any support to Vogt's theory of the pitheoid characteristics of microcephales.

CASE OF PARALYSIS OF THE SERRATUS MAGNUS.*

By SAMUEL WOODMAN, F.R.C.S.,

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THE recorded cases of paralysis of the serratus magnus muscle are not numerous, and in very few is the paralysis clearly complete. I have, therefore, thought it worth while to publish the following well-marked case.

Francis E., aged 39, after fifteen years in the service of the Trinity Corporation as seaman, was in November 1873 promoted to be lamp-lighter in a temporary ship, the lamps of which (eighteen in number), with reflectors and apparatus, were placed so high above the platform on which he stood, that all the time he was obliged to look upwards. In six months after his appointment—i. e., about May 1874—he felt a weakness in his shoulder. At first, he says, "there was a dead sleepy feeling came down over the shoulder-blade"; and he had a difficulty in raising his arm. In the July following (about a year ago), in coming down the hollow mast of his light vessel, he missed his footing and fell twenty or more feet, bringing himself up by throwing out his elbows as breaks. He does not consider that he injured himself by this accident, nor that it had any effect in increasing the affection of the shoulder. The abnormal sensations soon disappeared, but the "weakness" increased, and it is now many months since he has been able to raise the arm above the shoulder. He did not seek medical advice, but continued to do his work, using the left arm instead of the right; but, on returning home early in May last, after being two months on board his vessel, his wife for the first time noticed that his shoulder was "out", and he came at once to me.

On examination, it was found that the usual signs of paralysis of the serratus magnus were present; but the points particularly noticeable were the bulging of the ribs and the raising of the whole of the affected side (the right). In a state of rest, the tip of the right shoulder was an inch and a half higher than the left; and, in the anterior inferior triangle of the neck, the sharp superior angle of the scapula could be seen and felt projecting only an inch and a quarter from the clavicle. The lower angle of the scapula on the affected side was two and a half inches above and an inch and three-quarters nearer to the spine than that of the sound side. It projected one inch from the surface; and, on raising the arm forwards, it started out an inch and seven-eighths from the side. He was able to raise the arm so that the elbow was within two inches of the level of the nipple, but could raise it no higher. On lifting the left arm to an equal height, the measurement at a point corresponding to the acromial process of the sound side was three inches and three-quarters higher on the right than on the left side. The outline of the neck was formed by the levator anguli scapulae, which was much hypertrophied. The spine was considerably curved towards the affected side, but still the girth of the chest was two inches more on that side than on the other. The serrations of the muscles were very plain on the left side, but were not visible on the right. With the exception of this muscle, there was no loss of power whatever in the arm or shoulder; and, when his arm was once raised, he could hold on or pull as strongly as ever.

The application of the induced current caused no contraction of the

* Read in the Medical Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

muscles, as it has done in cases where the paralysis has depended on neurosis of the long thoracic nerve only; but I believe that in this patient the nervous power derived from the branches of the intercostal nerves, as well as that from the long thoracic, has been exhausted by great overaction of the muscle; and that atrophy of the muscle has accompanied it.

The bulging and elevation of the side are, I think, caused by the efforts, repeated many times daily, to indirectly raise the arm a little higher by raising the side; and the muscles whose action causes it are the scaleni. The long thoracic nerve may be in this way subjected to unusual pressure, which must tend to aggravate the affection and to retard the recovery.

He has been treated by the daily application of faradisation and cold douches: his arm has been kept in a sling; and he has taken large doses of quinine and strychnia. Contrary to expectation, in two months very considerable improvement has taken place. How far this will extend remains to be seen.

ON TETANY.*

By JOHN HADDON, M.A., M.D., Eccles, Manchester.

THE history of the affection known by the name of "Tetany" is of very recent date as regards this country. In 1869, I met with a well marked case; but it was not until March 1870, when a second case came under my notice, that I found an excellent description of the symptoms in Trousseau's *Clinical Lectures*, and learned, for the first time, that the affection was already well known and named in France. It seems strange that our French neighbours should have seen so much of this affection, when in England it was unknown; and one is tempted to conclude that it had not been met with in this country. This conclusion, however, I fear would not be correct; and I am inclined to believe that, had Trousseau's lectures not been published, English medical literature might to this day have been silent on the subject of "tetany".

And here I cannot help remarking how necessary it is that each member of the profession when he meets with any disease or symptoms of which he cannot find any description in medical literature, should, as a duty, place his observations before the faculty in one of the many periodicals which we possess. Were this done, I feel confident that we would soon require new text-books; and perhaps our increased knowledge, instead of adding to the bulk of such books, would very considerably reduce the formidable dimensions which they threaten to assume.

However, probably the first notice of tetany in English medical literature was made by Dr. Moxon in *Guy's Hospital Reports* for 1870. The second notice of it is by Dr. Wilks in the *BRITISH MEDICAL JOURNAL*, June 10th, 1870. The next notice of tetany occurs in the *Edinburgh Medical Journal* for August 1870, where I recorded three cases which came under my observation. A fourth notice of this affection is published in the *BRITISH MEDICAL JOURNAL* of August 6th, 1870, by Dr. Broadbent; and the last which I have seen was by the late Dr. Currie Ritchie, in the same *JOURNAL*, on October 1st, 1870.

Thus, judging from the cases of "tetany" recorded in 1870, and remembering that Trousseau's lectures had been published but a short time before, I think the inference is warranted that the affection is not new in this country; and that we fail to find records of it earlier solely because it had not previously been described in our literature, and had no place in our nomenclature of disease. From March 1870, I saw no case until March 1875, when I met with two more, the particulars of which I shall now give with all possible brevity:

CASE I.—Mrs. T., aged 39, was married when twenty-five years of age, and had six children, the youngest being four years old. She had one abortion before the youngest was born, and two since, the last having occurred about six months ago. For the last two years, she had suffered from menorrhagia; and, during the past twelve months, she had had diarrhoea to the extent of five or six motions daily. About Christmas 1874, she was very sick, and had excessive diarrhoea, with great pain in the head; and at this time she states that her hands felt powerless. Menstruation, having continued for three weeks, ceased on March 5th, 1875. On March 8th, she had pain shooting from the back to the front of her head, and her thumbs felt stiff. In the afternoon of the same day, about three o'clock, she had an attack of tetany in the hands. On March 9th, at 1 A.M., she had another more violent attack, the feet being also affected. On March 9th, when I saw her about

10 A.M., I found her in bed. She was well nourished, and apparently a strong woman, but suffered from slight deafness. Her face was flushed, and she had an excited anxious aspect. The tongue was natural, she had no appetite, and was very thirsty. The bowels had been moved several times in the morning. The urine was abundant. She complained of great pain shooting from the back of the neck to the forehead, and some pain in the arms. She was perspiring freely. The muscles of the arms were rigid, and hard to the touch; and the thumbs were stiff and incurved. Her pulse was 80; and, with the exception of the pain in her head, she felt tolerably comfortable. I gave her one grain of opium, and prescribed half-drachm doses of bromide of potassium every hour. She remained very comfortable till 2.30 P.M., when she had the first dose of her medicine; and, in a very few minutes afterwards, she had another seizure. Having been sent for, I found her perspiring profusely, with a temperature of 97.4. Her arms and hands were alone affected. The arms were drawn out from the sides, the forearms flexed on the arms, the hand drawn towards the ulnar side of the forearm, the fingers flexed, and the pulp of the thumb rigidly fixed against the front of the forefinger. The head still ached, but her great trouble was pain in the arms. Her breathing appeared to be affected, as if she had a tightness across the chest. She had an aspect of great anxiety; and, looking first at one arm and then at the other, complaining of the pain, she trembled all over, and declared she could not live long unless she was relieved. The muscles of the arms felt hard and rigid, like ropes; and a marked fibrillary quivering could be distinctly seen in the ball of the little finger. Straightening the flexed parts, and rubbing them, gave her relief. In about half an hour, she began to improve, and soon was tolerably comfortable, although the hardness of the arms and incurving of the thumbs still remained. She had another slight attack at 6 P.M., and a still slighter one at 8 P.M., which was the last. At night, her temperature was 98.8 deg. Next day, March 10th, having passed a good night, she felt quite well, with the exception of some pain at the bottom of the back, and pain in the arms when they were touched. She was able to be up at night; and, next day, was about her usual household work.

I examined the urine of March 10th, and found it to be of specific gravity 1.017, with a copious deposit of urates. Acid caused much and long effervescence, and it contained one-fifth of albumen. On March 15th, it contained one-thirteenth of albumen; and since then I have not seen her.

CASE II.—Mrs. G., aged 45, was married when twenty-eight years of age, and had had seven children, the youngest being eleven years old. She had generally been a very healthy woman. Menstruation was always normal, and ceased twelve months ago. During the past two years, she had had diarrhoea more or less; sometimes having as many as twelve motions during the day, and as many in the night. The motions were very liquid, and small in quantity. There was no discharge *per vaginam*. She had pain in the abdomen, and in the small of the back. In the end of April 1875, she suffered from severe headache; at the same time, the bowels were excessively relaxed, and she had severe cramps in the hands and feet. On asking her to describe the cramps, she gave me a very good account of an attack of tetany. About the time of this attack, she noticed some spots on her skin, which is psoriasis. About the middle of March, when I saw her, she had a return of the tetany symptoms in the hands and arms. She took bromide of potassium, and was soon relieved. There was no albumen in the urine. She had spent much on medicine without any relief from the diarrhoea, which was caused by a constriction in the rectum; this having been dilated, the bowels acted regularly, and she considered herself well.

From the account I have given of these cases, some idea may be formed of the character of the affection, but no description can give you a correct idea of what you would observe by witnessing an attack. Trousseau gives a very full account of the symptoms in his *Clinical Lectures*. After following its history in France, he goes on to state that he at first thought the disease was special to nurses; and though he somewhat changed his opinion, still he says it must be admitted that nursing is its most frequent and active cause. It has also been supposed that menstruation, the puerperal state, pregnancy, and diarrhoea, are causes of tetany.

In one of the cases which I have related, menstruation had ceased; but diarrhoea, if we may call it such, existed, although, to speak correctly, it was really constipation.

In the other case, there were both diarrhoea and menorrhagia; and, in addition, albuminuria also.

Thus, in the one case, there was, as we may suppose, a retention in the system of what should have been excreted; while, in the other, there was a drain upon the system through the bowels, the kidneys, and the uterus. Upon what may be the real cause or true nature of tetany, we need not now speculate, since we have not a sufficient number of

* Read before the Medical Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

cases from which we might hope to arrive at a correct conclusion. Dr. Moxon has called attention to the resemblance between the symptoms of tetany and ergotism, which is certainly very striking. Still, whatever may be its real nature, it is an affection of great interest, considering the likeness it bears in some of its forms to tetanus. What Trousseau describes as the "grave form" will appear to most readers to differ very slightly at all from true tetanus; and yet we cannot suppose that Trousseau was mistaken in the diagnosis. This points to the necessity there is for further observation of tetany; and, therefore, I would urge all who have the opportunity to report any case they may meet with, seeing that by so doing they will add to our knowledge of this affection; and from it, as a stepping stone, we may be enabled to elucidate other allied and still obscure diseases, the real nature of which can at present, only be guessed at.

(Brit. med. Journal)

ABSTRACTS OF

INTRODUCTORY ADDRESSES

DELIVERED AT

THE METROPOLITAN AND PROVINCIAL SCHOOLS,

On OCTOBER 1st, 1875.

ST. MARY'S HOSPITAL.

THE Introductory Lecture was delivered by Dr. RANDALL, Lecturer on Medical Jurisprudence and Hygiene.

Dr. Randall began by stating that, as the advice given to those entering their profession had been well-nigh worn out, and addresses on medical education had been often published, he should begin by touching on a hygienic subject, as a part of State Medicine, before dealing with the ethics and mental discipline of student life. He did not intend to dwell upon the air we breathe, the water we drink, and the food we eat, but on the earth as a receptacle for the dead: perhaps not a pleasant subject, but one exciting much interest and attention at the present time. The productive earth is health-giving and health-destroying, also a purifier and preserver, or antiseptic. After mentioning the health-destroying effects of the earth, and referring to its various conditions under which good and efficient drainage was the only preventative of disease, he proceeded to refer to the purifying action of some kinds of soil which acted by facilitating decay and preventing emanations; and then reviewed in detail the preservative qualities of different kinds of earth, and the modes adopted by some nations for preserving and others for destroying the body. He illustrated the result which dry and sandy soil seemed to have in not permitting decomposition by examples of the dry and calcareous vaults at Toulouse and Dublin, and of bodies found in Peru in a state of preservation, buried in those sandy regions, where the rain never falls, and the sand is rendered so perfectly dry as to cause absorption so rapidly, that putrefaction does not take place. He alluded to the dryness of Upper Egypt, to the localities of the catacombs both in Egypt and Rome, and to the mode of embalming the bodies in Egypt. The BRITISH MEDICAL JOURNAL of September 18th had given an example of the antiseptic power of the earth on bodies found at Greenwich, which had been buried for thirty years. He then explained the result of some experiments in the use of charcoal as proposed by Mr. Haden, and its adaptation to the double wicker coffin when kept above ground. The result was, that three or four inches of charcoal, in the intervening space between the inner and outer baskets, were not sufficient, nor six inches; it was not until twelve inches had been reached that offensive emanations and the evidence of ammonia, carbonic acid, and water charged with organic matter, ceased to be given off. Without disapproving of bodies being placed in wicker baskets so as to come into contact with the earth, he did not advocate Mr. Haden's plan of burying the dead with the known object of their being consumed and exhumed at the end of a certain time, that others might be placed in their stead. Do not our notions run counter to such expedients? Are we not imbued with the principles of inviolability of our graves and cemeteries? Is not the burial ground "God's acre"?

"I like that ancient Saxon phrase, which calls

The burial-ground 'God's acre.' It is just;

It consecrates each grave within its walls,

And breathes a benison o'er the sleeping dust."

If a cemetery be filled, is it not preferable to have a new one rather than that the ground should be disturbed and turned up? Let us remain where we have been placed; let that mould with which we

mixed, and a part of which we form, remain quiescent, and not be made to form a fresh mould to imbibe the emanations and to purify the exhalations of that putrid body which will be put in our stead. In the words of the late Rev. Canon Dale: "For all must feel that an unbroken sod beneath the canopy of heaven is better, far better, than a pyramid which enterprise can penetrate, or a catacomb which curiosity can explore." And, further, to quote his words: "Grant that in less than a century even this wide space be fully occupied, yet the shady grove, the quiet walk, the graceful tree, the budding rose, the springing flower, yea, even the worn grey stone, will be profitable and pleasant to the living." The lecturer then referred to the proposal for burning our bodies called "cremation" as a heathen and pagan custom, which could not be approved of in a Christian country; the present proposal of burning the dead in reverberatory furnaces or near gas-works is something more than disagreeable; it appears revolting and almost brutalising. This dismal annihilation taught by the pagans has in it something so unsuited to the wants of a Christian world, that it takes us back to the ages when those barbarous customs were in vogue; as unsuitable to us as to have our bodies exposed on the summits of the "Towers of Silence", there to be devoured by the ravenous birds of the air, or to be thrown into the sacred Ganges a prey to the rapacious reptiles. The lecturer lastly referred to the great age of Egyptian mummies, one having been unrolled by Mr. Pettigrew, which he dates as being 1,430 years before Christ, or twenty-one years after the death of Moses; hence 3,305 years old: an historical wonder, which seems to make past things appear closer, and is one of the things that are like magnifying lenses, through which we can look at past times and bring them nearer.

Dr. Randall then addressed himself to those who were studying the profession, and more especially to those who were commencing. He exhorted them to consider well and reflect upon the exertions which would be required of them, and the amount of labour which was before them; they ought, with a determined mind, to fix their line of conduct, and repeat, "To be or not to be? that is the question!" Their answer should be a ready and quick one: "To be"—what those who have brought them up and nurtured them expect them to be; what their teachers desire them to be; what their school, for its honour and reputation, demands them to be; and what their conscience tells them to be—diligent, hard-working, attentive, and determined students. He reminded them that they had passed the school of their boyhood, and were now entering that of their manhood, and that the strict discipline of the school of their youth having ceased, they were now comparatively free agents, and their moral and mental discipline, regularity and orderly conduct, rested with themselves. Lecturers and tutors had been appointed to teach them, to assist, guide, advise, and encourage them; provision for studying and becoming acquainted with disease had been made for them. He said: The trench has been mapped out and dug; it is for you to lay the foundation, to lay a substantial and lasting one; to fill up this trench and raise it by degrees to a superstructure, a temple of knowledge, which, it is true, will take a period of four years to build, an apparently long time; therefore, the more likely to be well and firmly built, and well furnished. He pointed out to young beginners the necessity of making a good start with anatomy, histology, and chemistry, and the advantages of a thorough knowledge of each subject. He exhorted them in their moments of despondency and anxiety—for the most conscientious students were often the most anxious—to remember that determination and perseverance were more necessary for success than great talent or ability. After strongly recommending the study of anatomy, which he said required attention, observation, and memory, he reverted to chemistry and natural philosophy. He believed that chemistry had of late years been neglected, and he said: Chemistry has now become a most important element in your education, pray do not neglect it; without it you cannot study physiology advantageously, nor pathology, nor the principles upon which the treatment of many diseases is based. Under the present system of appointments, many or most of you may be coming sanitary officers, or have something to do with sanitation; without you assiduously go through a regular course of the elements and theories of that science, you will not comprehend its complications, or be able to cope with future difficulties. He advised the study of the laws of light, heat, and electricity, as this branch of physics had become a powerful factor in the treatment, diagnosis, and prognosis of disease. He illustrated this by different instruments now much used, including the microscope and clinical thermometer, which was an instrument as replete with safe diagnosis and prognosis as the stethoscope. Again, electricity and galvanism, as therapeutical agents, have made rapid strides in the last few years. The beneficial effects of these as remedies for the relief of pain, and the restoring of a paralysed limb to use and feeling, or as stimulants, tonics, and sedatives;

yes, even to the arresting of hemorrhage, and of saving life, are now fully recognised. In the study of chemistry and physics, he said, the reasoning and calculating faculties will be brought up, and thus, in combination with the faculties whose exercise is required in the study of anatomy, a training of the mind will be formed, a necessary training, and as good and efficacious as could be found in the mental training of the best of our educational bodies. Soon you will reach the wards of your hospital, there to learn and diligently watch the symptoms and signs of disease, the action of remedies, and the means adopted to relieve pain and to cure. You may rest assured that if you begin well, and learn slowly and gradually and effectually, and are well grounded, you will attain your end, and enter life as a honest, efficient, and faithful practitioner. He who sows ought to reap. But if you have been idle, and careless, and inattentive, you will deeply repent of your conduct, you will have no confidence in yourself, nor be trusted by those who employ you.

"He that trusts you,
Where he should find you lions, finds you hares ;
Where foxes, geese. You are no surer, no,
Than is the coal of fire upon the ice,
Or hailstone in the sun."

You will not have the boldness of the lion—that is, commendable assurance and reliance ; nor the cunning of the fox—that is, wisdom and aptness gained from knowledge. But, truly, you will be as timid as hares and feel as foolish as geese. Your reputation will be extinguished like the coal of fire upon the ice, or melt away like the hailstone in the sun. He believed that there was a want of perfection in learning, and reminded them that the secret of being successful and accurate as students, next to perseverance, is the constant habit of reviewing the same subjects, daily, weekly, and monthly. In reviewing, he advised them to try and write what they remembered, for the habit of writing, by which you attain a facility of describing accurately, is of paramount importance, not only for the sake of learning well, but also with the object of attaining that art for particular occasions, when your knowledge will have to be tested at the different examining boards, and for competitive appointments. Remember, that if Bacon said that "reading makes a full man", he also said that "writing makes an exact man". He then earnestly recommended them not to enter into sports or games which would interfere with their attendance at lectures, or more important instruction in the wards. After some further remarks upon the line of conduct which the students ought to pursue during their studies, the lecturer in conclusion said : Educate your minds to thoughtful and careful study. The training which you will thus acquire will render you more fit to gain that most important knowledge to be acquired at the bedside ; it will tend to make you expert clinical observers and practitioners—the object of all your learning. Do not let this opportunity of acquiring knowledge pass by ; do not let this vast field of information run to waste ; store and husband it as you would the best riches of your professional life, and be assured it will form the backbone of a successful career in after days ; and thus, session after session, if you feel that you have been a real worker ; that you have employed your time diligently and assiduously ; that you have used the abilities with which God has endowed you to the best advantage, to the satisfaction of your own conscience and to that of your teachers, you will possess such an inward feeling of comfort and of pleasant reflection, that you will be able to exclaim with the French poet Lamartine—

"Le jour s'est écoulé comme fond dans la bouche
Un fruit détreuvé sous la dent qui le touche,
Ne lassant après lui que parfum et savaur ;
Oh, mon Dieu ! que la terre est pleine de bonheur."

CHARING CROSS HOSPITAL.

THE Introductory Lecture was delivered by Mr. FAIRLIE CLARKE, Assistant-Surgeon to the Hospital.

The lecturer, after alluding to the recent death of Dr. Headland, to the improvements which had been made in the School premises, and the enlargement of the hospital, went on to address himself specially to the different classes of medical students. He said that he was particularly anxious to welcome those who were joining the School for the first time that day, and to give them some encouragement and counsel. He congratulated them on entering the medical profession at such an auspicious moment, when medical science was making rapid advances. He mentioned the subjects which would occupy their attention during the next six months, and gave them advice as to the best way of laying out their time. He said : "You are just taking the important step whereby you pass from boyhood to manhood, and it is not too much to say that everything depends on the use which you make of the time that is under your own control. Temptation rarely comes

during busy working hours ; it is in his leisure time that a man is either made or marred. Make up your mind firmly to your line of conduct, and follow your own course with decision and resolution. It is oftentimes more really manly to dare to say No than it is to fall in with the suggestions of those who may be older than yourself in years or in academical standing." He recommended a certain amount of reserve, in the first instance, in the choice of friends ; but assured them that they would find among their fellow-students not a few whom they might well be happy to gain as life-long friends. He pointed out that at Charing Cross a diligent student can always obtain one practical appointment after another as long as he remains *in statu pupillari*, whilst at the larger hospitals the students are often obliged to enter on the practice of their profession furnished with little more than the information that can be obtained from books and lectures. To the second year's students, who would now be expected to visit the wards regularly, Mr. Fairlie Clarke pointed out the great interest of in-patient practice, both on account of the severity of the cases treated and the more personal relations which are established between the doctor and his patients, and these personal relations cannot fail to draw out our sympathies. He said : "We seem to tread on sacred ground while we accompany the hopeless sufferer to the very verge of this world—to that bourne whence no traveller returns ; and this invests our profession with an interest and a solemnity entirely its own." He specially urged upon those students who held in-patient appointments the cultivation of a considerate way of going about their work, saying that this was quite compatible with a keen interest in the study of disease, and would be likely to win the confidence of the patients. To the senior students Mr. Fairlie Clarke said : "To you, more than to any group among us, is the welfare of this medical school confided. I do not underestimate the influence of your teachers ; but a great deal more than what we can do is what you can do. Our influence is exercised only occasionally ; yours is exercised constantly. We are placed here in authority, and we are all of us less disposed to accept the advice of those set over us than we are that of our equals. It is scarcely too much to say that what you are the younger students will be. Suffer me, therefore, to impress upon you one or two pieces of advice. Remember the weight that your example must of necessity have, and let no idle word, thoughtlessly spoken, sully the purity of the young minds that are joining us for the first time to-day. Let no word or act of yours cast ridicule upon the principles that have been learnt at a mother's knee and fostered under a father's roof. Let nothing induce you to suppose that idleness and dissipation are manly. There is no true manliness but in the diligent discharge of duty. If you, senior students, act in the spirit I have endeavoured to indicate, then hard work and good order will be general among the whole body of students. I often think, as I come within sight of Charing Cross, that the very situation of our hospital is a constant reminder to us to do our duty faithfully and in a high-minded way. We are here surrounded by monuments of national grandeur. To say nothing of Charing Cross as a great commercial centre, we are here near the Houses of Parliament, the chief offices of State, and the abodes of royalty. The improvements which are now in progress in our immediate neighbourhood are beautifying it, and making it more worthy to be, as it is, the great centre whence the influence of England goes forth over the whole world. Often, when I have been coming to my work here, I have bethought me of that bright morning in October 1805 when the English fleet bore down on the combined squadrons of France and Spain off Cape Trafalgar. It scarcely needs the inscription on the Nelson monument to remind us of the watchword, now become an English proverb, which was then signalled from the mast-head of the *Victory*, and which stimulated all to do their duty so gallantly. Or I have bethought me of Sir Charles Napier, the very soul of honour and rectitude, so independent in his bearing towards his equals ; so free from all time-serving and tuft-hunting ; so just and considerate to those under his command ; so kind and humane to those who were in trouble or distress. Or I have bethought me of Havelock, the very ideal of a soldier, an officer, and a Christian ; doing his work diligently and cheerfully, notwithstanding straitened circumstances and professional disappointments. It was not the stimulus of early success, nor the favour of princes, nor any lower motive, which carried him through the disappointing years that formed so large a portion of his military career. It was nothing short of a strong Christian principle which sustained him. The monuments of these great men have been erected in our immediate neighbourhood not merely to do honour to individuals, but also to keep alive in the breasts of each succeeding generation the virtues for which they were distinguished. And, if there be any class of the community who are likely to be influenced by the recollection of their noble deeds, it is surely the young men of England before whom life is just opening. Duty, honour, and the fear of God—these were the mainsprings in the

characters of the three heroes to whom I have alluded. If you, students of Charing Cross Hospital, are fired with the same principles, we need have no fears for the success of the session that opens to-day. It cannot fail to be a happy and a prosperous one; and we may leave in your hands the interests of this medical school, feeling confident that they are safe in your keeping."

LONDON HOSPITAL.

THE Introductory Lecture was delivered by Dr. BATHURST WOODMAN.

After some prefatory remarks on the mingled feelings with which such a meeting of old and new students must be regarded, the lecturer remarked that the history of eminent medical men refutes the common notion that the study of medicine has a tendency to create sceptics. Such is not the case. Celsus, the medical writer, and Celsus, who was answered by Origen, were separated by a whole century. Nor is it true that the medicine of antiquity was all a farrago of nonsense, or a collection of quaint conceits. A careful study of Hippocrates and other ancient writers disproves this, just as the medical and metrical precepts of the School of Salerno, or a view of the lavatory of Gloucester Cathedral, disproves the popular lecturer's notion that people never washed in the middle ages.

Vivisection was next alluded to; and, whilst its abuses, and the needless barbarities of Alfort, twenty years ago, were condemned *in toto*, the necessity for experiments on animals was insisted upon, and justified from the imperfections of our art, from the example of the wisest and best of its professors, and because human life and human happiness are infinitely more valuable than those of other animals. If those who oppose all such experiments could witness the scenes of horror often met with in our hospitals and in private practice, their opposition would be less keen. The late Sir Robert Peel's life had in all likelihood been saved, had chloroform only been more known when he met with his accident. But substances like chloroform must first be tested on animals. We must look to a healthy public opinion to regulate these experiments rather than to any sensational cries or legal enactments. Dr. Woodman next insisted upon the necessity of students earnestly resolving to train themselves for the practice of their profession. It is no longer possible to learn the medical art from any one manual, however excellent, or from any one teacher, however eminent. Every day increases our difficulties as to diagnosis of diseases. For example, a few years ago, only wall-papers of a peculiar grass-green colour contained arsenic in any quantity so as to be dangerous. Many people think that this is so now. But what is the fact? Since the general introduction of aniline colours and other new dyes, no paper, however sober its hue, can be trusted as free from arsenic till its purity has been tested by a careful analysis. Numerous examples were given of lead and other poisons in articles of food or clothing, and in cosmetics; and even medicines are often adulterated with dangerous ingredients; hence the necessity that a medical man should have at least some general acquaintance with chemistry and with arts and manufactures. A part of this at least should be gained before coming to a medical school. Parents and guardians were earnestly appealed to, to give their sons or wards, if about to enter the medical profession, a thorough grounding not only in English or modern languages, but in Greek, Latin, and elementary mathematics. From his experience as a teacher who had trained some hundreds of men to obtain the diplomas or degrees of almost every medical examining body in the three kingdoms, as well as from his experience as an examiner, he could confidently affirm that nine-tenths of the rejections and failures arise from imperfect preliminary education. When a student comes to the hospital and medical school, he ought not to be obliged to work at any lexicons or grammars save those of disease. The wards of the hospital should be his chief books. Let not the student be too proud to learn from any and everybody. All his teachers will not be equally eloquent or equally skilful; but much may be learnt from even the worst of teachers; much might be learnt from his fellows. Even a fisherman or ploughman may often be well read in the great book of Nature. Great men like Linneus or Agassiz know this, and act accordingly. If willing to be taught, the stores of knowledge in the London Hospital, now one of the largest in the metropolis, were shown to be almost inexhaustible. If the difficulties of the profession are increased, so are the facilities for learning. Here the student will meet with every possible aid from the staff. The lecturer showed that the London Hospital has never lagged behind in the march of medical progress. Its staff and its alumni have not only availed themselves of every scientific improvement, but have largely added to the general store. They were truly practical men, but their practicality was not that of ignorance, but of science. Students were encouraged to work for the prizes which

are offered at the London Hospital. This year, nine important prizes, whose money value alone exceeds £300, are to be given away. He defended the prize system. It had once been abolished at this medical school; but they were glad to resume it. He earnestly begged the students not to waste their first year, as too many have done. Let them remember, and never forget, that the great end and aim of their art is to cure, or at least to relieve. Lamartine has eloquently said:—"Le médecin guérit quelquefois, soulage souvent, console toujours." Let their aim be to multiply the cures. Depend upon it the public will never tolerate us, or pay us fees merely to stand by the bedsides of those they love as scientific observers, or as a sort of Greek chorus; for, although there are times when the highest wisdom is to hold our hand, lest we rudely put out the flickering flame of life, it far more often happens that we can do much to cure or relieve pain, if we only have the knowledge. But, to do so, we must learn all we can, and must be learning ever. Examples of successful treatment on scientific principles were given. Hopes were held out that even cancer and tubercle, those malevolent twins, might in time be conquered and disarmed by careful studies and proper experiments upon animals. The influence of fashion in medicine was deprecated; and the lecturer concluded by warning against the baneful influence of a dogmatic scepticism, which is often as injurious to the progress of the healing art as it is to the spiritual and eternal welfare of the man.

WESTMINSTER HOSPITAL.

THE Introductory Address was delivered by Mr. RICHARD DAVY, Surgeon to the Hospital.

Mr. Davy disapproved *in toto* of introductory addresses; but, at the request of the medical council of the hospital, conformed to custom. Both students and teacher preferred one day's pheasant-shooting to hearing or giving an introductory. As a surgeon, he should cut down his sermon from one hour to fifteen minutes, and his successor might still further reduce the volume of these fruitless harangues. After welcoming his audience, and referring to the changes in the hospital staff, the lecturer drew attention to reform in the practice of medicine and surgery. Far too much stress was laid on the necessity of elaborate teaching. Above all, a young man should be taught self-reliance. His own efforts would then pull him through, just as a vigorous constitution was the mainstay of recovery independently of elegant prescriptions and repeated visits. University discipline and residence were strongly insisted on. Healthy tone and lifelong friendships were acquired in this training, in lieu of an entire want of control now felt by hospital teachers over their pupils, and the acquaintance of these young men from the country with interestingly repulsive specimens of shark (*squalidæ*) known as London landladies. The payment and honours conferred on medical men were next criticised. Their salaries were simply miserable; hospital-physicians and surgeons were for the most part unpaid; Poor-law officers most piteously; surgeons in the services very badly; and young practitioners not at all. For seven years' hard work at the St. Marylebone Dispensary, he had received one guinea, and a very distinguished London assistant-physician had found that his salary equalled that earned by the man who put the skid on the 'bus wheels at Holborn Hill. The lecturer had been taught how dignified the profession was. In his opinion, the British public introduced far more largely the element of impudence than dignity into practice; to become a baronet was the Ultima Thule, and in the nineteenth century one could not maintain even this dignity without payment. He considered that gratuitous work, and its consequent dignity, were subjects worthy of woman's consideration, and that ladies desirous of occupying a congenial sphere in the medical profession might ease the men's shoulders from upholding the work and dignities of unpaid appointments. The lecturer next quoted the word "charity" as a synonym for professional imposition—a bargain between the public and the medical man for gratuitous work; and upheld that less jealousy amongst themselves, and a far higher estimation of their own services to the public, would bring about reform. It was strongly urged that the medical element should be directly represented on all hospital boards. Mr. Davy challenged the authorities to show reason why ancient coroners should call upon qualified house-surgeons and physicians to give their evidence without fee. He would remind them of the two clowns in Hamlet;

"Second clown: But is this law?"

"First clown: Ay, marry, is't, crowner's 'quest law."

Why should the Registrar-General or Commissioners in Lunacy expect their skilled services for nothing? The lecturer strenuously advocated sanitary reform, and eulogised preventive medicine. He warmly supported the extension of the Contagious Diseases

Act, and was pained at the nonsense that had been let off over vivisection. Practical experiments were as important to them as to the Royal Artillery on Dartmoor; but their experiments were made to ascertain how much mischief they would do the dead, while theirs discovered how much good they could do for the living; and not only was the dissection of the living requisite, but also the dead, in gaining their knowledge. For this end, it behoved every hospital to insist on the performance of a *post mortem* examination (in case of death) as a condition of admission. In conclusion, the lecturer assured the students that their early prospects in life were most disheartening. Their toil and ambition might be equally great, but their pay and dignity would be equally small. They had to deal with an ignorant and proud people, and he advised everyone to resign at once any and every thought of becoming a medical man unless he possessed three qualifications: first, independence; second, an aptitude for, and love of, the profession; third, the readiness to pay a heavy premium in this world for his prospect of reward in the next.

MIDDLESEX HOSPITAL.

THE Introductory Address was delivered by Mr. B. T. LOWNE, Lecturer on Physiology. After some introductory remarks, the Lecturer said:

I do not know any theme which could be made more instructive than a brief history of scientific medicine. The antiquity of the medical art, and especially of surgery, is such that it may be said to have originated with the human race; indeed, some instinctive knowledge of this kind is almost universally ascribed to the higher animals, and perhaps not without reason, for every animal strives to preserve its own body from pain and injury. Hence experience must have guided the human race from the earliest times to seek medicaments, so that the origin of our profession is lost in the mists of tradition, and the earliest records represent the mythic centaur, Chiron, and his pupil, the deified Æsculapius, as the medical teachers and benefactors of mankind. Experience, unaided by reason of a close and accurate kind, is, however, but a blind guide, so that for unknown centuries men contemplated, and indeed worshipped, Nature; yet the efforts of the human mind were feeble when they strove to understand what they saw; unguided imagination produced vast theories, and but little progress was made towards even the faintest dawn of true science in the study of the phenomena of the universe. It was Hippocrates who first taught men the right way to attain a mastery over nature. Do not suppose the same difficulties still exist, such as Hippocrates must have overcome, but bear in mind that from his time the medical science never came up to his standard of excellence again for 2,000 years. It is true that our profession may well be proud of many of her votaries during that long period. Of these Galen was the most notable. He was the first whom the prejudices of mankind permitted to examine the anatomy of the human body, and thus he laid the foundation of anatomical knowledge. His reasoning powers, however, were not of a character to place him on a level with Hippocrates, yet the views he taught ruled the medical world with absolute tyranny for at least 1,500 years. It was not until the middle of the seventeenth century that medicine again became a truly scientific art; and the modern science took its birth in the master mind of Sydenham, whom I would call the father of our science. Sydenham was truly a second Hippocrates; but great changes had occurred in the world during this lapse of time; men's minds had been freed by changes in their religious tenets, culminating in the work of Luther. The greatest, perhaps, of men's inventions—the printing press—was actively engaged in reproducing the writings of the ancients, and in rendering the workings of men's minds permanent, so that they should defy even the ravages of time. Vesalius, even against the powerful antagonism of Fallopius, had shaken the authority of Galen in anatomy, and Harvey had discovered the circulation of the blood. Chemistry was an infant science during the lifetime of Sydenham, and owed its existence to the minds of Boyle and Beecher. The time was propitious—the bright dawn of science had commenced, and it wanted only a master mind to make medicine a most noble study. Sydenham laid its foundation on the work of Hippocrates, and Boerhaave took up the work where Sydenham left it. From that day to this, great names and great workers have never been wanting in the medical world—men with free enlightened minds seeking laboriously for truth, and finding it. Even to enumerate the names of those who have worked successfully at science would occupy many hours. I therefore propose to occupy your attention with the effect of the kindred sciences upon our own rather than with the work of individual men, however great their eminence. Perhaps physics have had the most important effect indirectly upon the science of medicine. I think the minds of men were directed to the

study of physics by the great cosmic discoveries of Kepler and Galileo, and the oceanic voyages of Columbus and his followers. Certainly Gilbert had written and published one of the finest models of physical research, in his great book on magnetism, twenty years before Bacon published his *Novum Organum*, which has often had the credit of instigating men's minds to experimental research. When once the exact nature of scientific investigation became thoroughly understood, it must have had a marked effect upon all kinds of research, and thus it happens that every individual is benefited by having some knowledge of exact sciences. The invention of the microscope must be regarded as an epoch in our science; but it was perfected so gradually that, although it must be regarded as an invention of the seventeenth century, it was not until forty years ago that it became a powerful instrument of research. With regard to the direct benefits received from physical science, we have the most beautiful adaptation of the science of acoustics in auscultation and percussion. The merit of the discovery of the former is due to the brilliant Laennec, and of the latter to Avenbrugger and Corvisart, early in the present century. These are undoubtedly among the most satisfactory and useful methods of discovering disease known to the physician, and the benefit afforded by their discovery to mankind is simply incalculable. Again, we have the more brilliant discovery of Helmholtz—one of the greatest philosophers the world has ever boasted—in the ophthalmoscope, which enables us to examine the retina, one of the most delicate structures in the body, and to work out the most difficult cases of ophthalmic disease. This instrument was entirely the work of induction and thought, and not of experience, so that a century intervened between the more obvious adaptation of acoustic properties by Laennec and the optical work of Helmholtz. After speaking of the influence of chemistry and physiology, and the possible results of the doctrine of evolution taught by Darwin, Hæckel, and Huxley, the lecturer concluded by saying:—Since such has been the history of medicine, it is clearly the duty of every student to acquire all the knowledge he can, both of the practice and theory of his art, and of the kindred sciences.

"One rule our life was destined to fulfil,
That he who tends Truth's shrine and does the best
Of Science with a brave and faithful will,
The God of Truth and knowledge serveth best."

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE.

THE Introductory Lecture was delivered by Mr. HENRY E. ARMSTRONG, Lecturer on Botany.

The speaker, in his opening remarks, compared the giving of an introductory address for students who were afterwards to appear before medical licensing boards to certain eastern customs preliminary to the ceremony of marriage. He then cordially welcomed all students present. Each first year's man was urged to make his choice at once between the ordinary practice of the profession and that of the medical officer of health. The cause of the latter was warmly advocated. Practical advice was given to enable the student to spend to the best advantage the short term of his college curriculum. Among other matters, with reference to reading, the speaker said: "The food of the mind, like that for the body, to answer its purpose, should be carefully selected, slowly taken, in moderate quantities, and inwardly digested." Extensive note-taking was discouraged, as tending to defeat the object of the lecture. The acquisition of eye-knowledge was strongly recommended. Students engaged in attendance at hospital were cautioned against theorising on the abnormal conditions of the body, whilst their knowledge of facts was crude.

Addressing those who, before the giving of another introductory address, would have left college, the speaker drew attention to several of the duties to the public and to patients, which would devolve on them as medical practitioners; advising, among other things, that conditions likely to affect the health of their patients or others with which the medical officer of health could interfere, should be brought to the notice of that officer. As practitioners, they would have to consider how the complete isolation of sufferers from infectious disease could be accomplished whilst the patient was in the bosom of his family, and whilst the medical attendant went daily, perhaps in his close carriage, from house to house. The experience of several years' management of the Newcastle Dispensary and Fever Hospital had convinced the speaker that a large amount of zymotic sickness was due to neglect of precaution on this head. The responsibility of advising on the food for infants was shown by the fact that, of upwards of 1000 deaths of children under one year of age in Newcastle during 1874, 19 per cent. died from diseases of nutrition.

Respecting duty to patients, the speaker observed that the charge of the sick was a trust of which the medical man would hereafter be called

to give account. He was bound to benefit his patient in every professional way, despising none, however trivial. In allusion to the administration of alcohol, the young practitioner was warned that, unless he were careful in its use and discontinuance, he might perhaps be the means of inducing habits of intemperance in his patients. In respect of duty to the profession, it was held to be incumbent on every medical man to uphold the reputation of the profession by promoting every object which can give weight to its opinions or dignity to its actions. For want of unity of action and opinion among medical men, much talent had been misapplied and time spent to no purpose, or so as to bring discredit on the profession. "What is needed is a great medical union under the direction of an acknowledged head, which shall be the recognised authority on subjects affecting the relation of medical men to each other and to the laity; which shall direct research, confirm opinion, sanction theory, regulate ethics, and, as the voice of the profession, decide on medical matters in general. Of all subjects relating to the honour and dignity of the profession, that which lies at the foundation, and the importance of which, in connection with its status, is perhaps usually underrated, is the mode of remuneration. So priceless to the sick are the services of the medical attendant, so sacred his duties in his own eyes, that, in comparison, the question of pecuniary recompense should sink into an insignificant matter of detail; but cannot do so, since the majority of doctors live not to practise, but practise to live." The speaker went on to state that, though self-denying, devoted, charitable, brave in facing danger, and an unostentatious benefactor to his race, the medical man calculated the remuneration for his inestimable services in such a way as to lay himself open to undeserved charges of cruelty and inhumanity. "According to the principle at present prevailing, the value of a medical man's services is not measured by the good he does, the evil he averts, or the anxiety and responsibility he incurs, but by the length of his attendance and the amount of physic he supplies. Non-dispensing practitioners charge only for advice, estimating it by quantity; others are content to set a price on their physic, and give the advice into the bargain: a mode of proceeding almost equal to that of Chinese physicians stating beforehand the cost of each drug they propose to administer for the consideration of the patient's friends, who, after much haggling, often end by striking out the more costly items from the prescription." In place of the present system of remuneration, that by stipendiary payment was advocated, as practised by the ancients and, at the present time, in clubs and provident dispensaries. The change would benefit the public, raise the status of the profession, and would be no bar to private practice, but would relieve it of many of the annoyances associated with its now semicommercial character, and clear practitioners of the stigma that, whilst professing principles of humanity, they adopt for their motto:

"Quærenda pecunia primum,
Virtus post nummos."

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

We observe that Dr. Joseph Rogers of Dean Street, Soho, is a candidate for the post of Medical Officer of Health for St. Giles's and St. George's, Bloomsbury, vacant by the lamented decease of Dr. G. Ross. Dr. Rogers is well and widely known as having for a long series of years given his best energies to the promotion of sanitary reform. He has taken an active part in most of the great sanitary movements of the day, and in all he has shown untiring industry and courageous public spirit. It cannot be doubted that he would prove a most earnest and public-spirited medical officer of health, and in every way a worthy successor to the able man whose services St. Giles's parish has lost.

MILITARY AND NAVAL MEDICAL SERVICES.

THE ARMY HOSPITAL CORPS.

Now that the regimental has been supplanted by the general hospital system in the army, the functions and responsibilities of the members of the Army Hospital Corps have, as a matter of consequence, been materially augmented. A code of regulations relative to its organisation and duties has recently been issued by the War Office, and will, doubtless, afford information and assistance to all connected with the medical care of our soldiery. The Hospital Corps is, we are authoritatively told, "an integral part of the Army Medical Department", and is to be composed of non-commissioned officers and men obtained from

the general ranks of the service, as well as recruits who have satisfactorily undergone a course of probation at the Royal Victoria Hospital, Netley. We trust and believe that great care and judgment will be exercised in the selection and training of candidates for employment in a corps on the manning of which the comfort and welfare of the sick of our army must in a large degree depend. The privates or orderlies are chiefly concerned in all that relates to the immediate nursing of the sick, and the care, cleanliness, and discipline of the wards, etc., under the supervision of non-commissioned officers, styled ward-masters. Other non-commissioned officers, specially selected, are assigned to particular duties, such as those of cooks, stewards, and compounders of medicines; the mode of performance of their respective duties being clearly specified in the published regulations. The corps is at present officered by some of the late apothecaries of the army, and by a few of the individuals who, under the old *régime*, were regimental hospital sergeants; but, in future, all vacancies in the commissioned ranks, will, except under special circumstances, be filled by the promotion of selected non-commissioned officers of the corps. The commissioned grades consist of a staff officer, who will be stationed at the office of the Director-General of the Army Medical Department, under whose orders the arrangement and distribution of the corps will be carried out by the staff officer, and of captains and lieutenants of orderlies, who will be allotted to districts, and act therein "in the capacity of adjutant and quarter-master, under the principal medical officer", taking instructions from the latter "on every matter connected with the employment of the corps and the duties of the hospital".

Although not expressly stated, we presume it is implied that the power of control over the officers and men of the hospital corps thus vested in the principal medical officer of the district will be by him delegated to the medical officer in charge of the hospital to which these officers and men are, for the time being, attached. Unless this be done, almost incessant references to the principal medical officer would, we apprehend, be necessitated, causing needless delay, detriment to efficiency, and, possibly, a disposition on the part of a pretentious subordinate to dispute or question the authority of the senior medical officer of the hospital, who, it is almost needless to say, we are of opinion, should be absolutely paramount in every particular connected with the administration of his charge.

With regard to the discipline of the Army Hospital Corps, the regulations do not convey to us as explicitly as we could desire the precise authority to whom this important matter is entrusted. All that appears to be certain is that the medical department is not empowered by these regulations to deal with discipline, or, in other words, cannot mete out punishment when deserved to the men who these same regulations teach to look to the officers of the medical department for reward and advancement. This appears to us to be an anomalous, undesirable, and unnecessary condition of things, only too likely to lead to confusion and disorder, which will be fraught with evil consequences to the sick. Why should the medical officer be considered less capable of maintaining discipline among his subordinates than, for example, the officers of the engineer and control departments? Why pick him out and place him in a position which no other master that we know of occupies with regard to his servants? The only surmise we can form is that the traditional and unaccountable jealousy of "doctors" entertained by the "military authorities" still exists. If this be so, a judicious application of common-sense pressure from without would, we doubt not, soon set things right. This is not an age which will tolerate caprice and prejudice, no matter where they exist, if it can be shown, as in the present case we believe it can, that such caprice and prejudice are likely to interfere injuriously with the treatment of the sick of our army, and to cast an invidious slur upon the medical department, which has ever deserved well of its country.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

PROFESSOR HUMPHRY'S LECTURES.—Professor Humphry gives notice that the course of lectures on Practical Anatomy will commence on Monday, October 11th, at 9 A.M., and be continued daily till October 19th, after which they will be continued on Mondays, Wednesdays, and Fridays. The course on Anatomy and Physiology will commence on Thursday, October 21st, at 1 P.M., and will be continued on Tuesdays, Thursdays, and Saturdays. This course is intended for students of Natural Science as well as for medical students.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st, Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, OCTOBER 9TH, 1875.

PSYCHOLOGY AND THE NERVOUS SYSTEM.

III.

WE now assume the truth of the hypothesis, that the anatomical substrata of our visual ideas are not sensory but sensori-motor processes. We may call them retino-ocular processes. So far anatomy. Now for physiology. As we have already said, the study of the degrees and conditions of excitation or discharge of nervous centres is a physiological study. Physiology deals with the *function* or active states of nervous arrangements. We have to consider what occurs in health, when we have visual ideas, *i.e.*, when we either actually see objects, or when we remember them (see them ideally).

There seems to be a popular notion that the two processes, seeing actually and seeing ideally, are not only different, but altogether different. There even seems to be a notion in some people's minds that, when we actually see an object, there is a physical process only, and that, when we remember it, there is a mental process only. We wish to insist that there is both a physical and a mental process in each kind of seeing. When we see the object actually, there is engaged a sensori-motor process having the constitution we have described; but, as we are at the same time conscious of the object, there is a correlated mental process. In seeing it ideally, there is, as the word ideally implies, a mental process, but there is a physical process here too. In actual seeing, the physical process is thought of, and the mental is ignored; in the ideal seeing, the mental process is thought of, and the physical ignored.

There seems to be another popular notion on this matter, a sort of compromise. It is this: during actual seeing, subordinate centres are engaged in receiving the retinal impressions and with the associated ocular movements; then there is a connection of this with a superior centre—the seat of the “idea” of the object seen by the inferior centre. In recollecting, the superior centre is alone supposed to be active. The fault here is, that nothing is said of the constitution of this superior centre. It is spoken of as a centre for ideation, as if no further analysis were required. The word ideal is probably to blame; we now discard this word, and, instead of actual and ideal vision, we speak of Presentation and Representation of objects. Our next task is to declare what we believe to be the real nature, of the physical process in recollecting, being conscious, or, using the word once more, in ideal seeing. We hold that it is *fundamentally* like that of seeing the object actually. Before we point out this in detail, let us try to strengthen the position we take up by citation of authorities on such matters, Bain and Spencer. The following quotations, from Spencer's *Psychology*, refer to the physical processes occurring in recollection generally:

“In brief, those *vivid* states of consciousness which we know as sensations, accompany direct, and therefore *strong excitations* of nerve-centres; while the *faint* states of consciousness which we know as remembered sensations, or ideas of sensations, accompany indirect, and, therefore, *weak excitations*, of the *same* nerve-centres” [no italics in original].—*Principles of Psychology*, vol. i. p. 124.

Bain writes (*Mind and Body*): “Retention; Acquisition, or Memory, then, being the power of continuing in the mind impressions that are

no longer stimulated by the original agent, and of recalling them at after times by purely mental forces, I shall remark first on the cerebral seat of those renewed impressions. It must be considered as almost beyond a doubt that the *renewed feeling occupies the very same parts and in the same manner as the original feeling*, and no other parts nor in any other matter that can be assigned.”

Let us recapitulate. We have, in health, vivid ideas and faint ideas. That is to say, we have ideas in two degrees. For example, we see objects, and we can afterwards think of them when they are absent. There are presentation and representation. We can see them really, and can see them again ideally, for the word “ideal” will come in. First for the vivid ideas.

When we see and *recognise* external objects we have *vivid* visual ideas. There is then strong excitation of the retina, thence to the highest centres in the cerebrum, and back to the ocular muscles. There is complete and strong sensori-motor (as we have said, retino-ocular) action. This is what is fundamental, even if only diagrammatic, however many intermediate centres we may like to suppose betwixt the afferent nerves (optic nerves and retina) and efferent nerves to the ocular muscles. Next for faint ideas.

When we have faint visual ideas (think of objects when they are absent, “recollect” them, etc.) there occurs essentially the very same physiological process as in vivid ideation. There is a nervous discharge in each case. Moreover, the discharge occurs in the same anatomical series in each case. In faint ideation, there is slight or nascent excitation (discharge) of those highest centres to which, when we actually saw the object, the molecular impulses roused by the retinal impressions came, and from which the impulses to the ocular muscles departed. The reader will observe that there is a double difference. There is a difference both in *degree* and in *extent* of excitation. In thinking of objects (faint ideation) the central discharge is (1) slight and limited (2) to the centre. In actually seeing them (vivid ideation) it is (1) strong and (2) spreads from the periphery to the centre, and from the centre to the periphery. It may be said that this is stating in a slightly different way that there is a centre for an “idea” of an object which plays upon a subordinate centre for retinal impressions and ocular movements. Yet the important difference is that the higher centre we speak of is itself the lower centre “raised to a higher power”. It *re-represents* in greater complexity the very same impressions and movements which the lower centre represents. When we have the idea, the nascent excitation, however limited to the higher centre, is referred to the retina, and there is nascent ocular movement.

It is easy of proof that energising limited to centres, or, as we have just said, nascent movement, suffices in ideation. In cases of illusions, the patients have visions of objects which are necessarily owing in great part to central excitation. In hallucinations, the visions of objects are entirely owing to central excitations. In this case, the process is like, and also unlike, that occurring in actual presentation of objects. It is like it in that the energising of the centre is equally strong and possibly stronger. It is unlike it in that, no object being presented, there is no peripheral impression.

The direct proof that energising of nervous centres suffices in ideation is great. We must give it here for several reasons already indicated. *It is demonstrable that excitation limited to motor centres gives rise to effects referred by the mind to the muscles at the periphery of the body.* We could adduce striking facts from ophthalmic practice, but we prefer to state first a different kind of evidence. The facts of it are drawn from Weir Mitchell's masterly work on *Injuries of the Nerves*. There is no higher authority on the subject than this distinguished American physician.

It is well known that a patient “feels” his absent limb long after amputation; he has pains in his absent toes, or is disturbed by some less serious sensation. When a medical student, the writer took away for dissection a leg amputated below the knee. The patient was a man of somewhat feeble intelligence and very ignorant. He knew that the leg had been kept, and the day after, having ascertained that it was still

in existence, begged very earnestly, not at all in joke, that it might be scratched about the ankle, as it itched so much that it kept him awake at night. "Very many," says Dr. Weir Mitchell, "have a constant sense of the existence of the limb, a consciousness even more intense than exists for the remaining member. 'If,' says one, 'I should say I am more sure of the leg which ain't than the one which are, I guess I should be about correct.'" Dr. Mitchell writes also, "The sufferer who has lost a leg gets up in the night to walk, or he tries to rub or scratch it. One of my cases attempted, when riding, to pick up his bridle with the lost hand, while he struck his horse with the other, and was reminded of his mistake by being thrown. Another person, for nearly a year, tried at every meal to pick up his fork, and was so disturbed emotionally at the result as frequently to be nauseated, or even to vomit."

Sometimes the patient loses feeling of the existence of the limb, but that it is still represented in the nervous centres in all cases is probable. To quote Dr. Mitchell again, "Even in those who are least conscious of the missing part, I have amazed them by suddenly recalling it with the aid of a faradaic current applied to the nerves of the stump. It is not easy to forget the astonishment with which some of these persons re-awaken to a perception of the long-lost leg or arm." He continues, "I recently faradised a case of disarticulated shoulder without warning my patient of the possible result. For two years he had altogether ceased to feel the limb. As the current affected the brachial plexus of nerves, he suddenly cried aloud, 'Oh, the hand, the hand!' and attempted to seize the missing member." We will not, however, speak of this kind of feeling, as it might (erroneously, we think) be ascribed to representation of the lost limbs by the sensory nerves only, which used to come from, and still represent, the absent limb.* The patients feel as if they could *move* the fingers of the absent limb. Mitchell says, "A small number have entire and painless freedom of motion as regards all parts of the hand. 'My hand is now open, or it is shut', they say. 'I touch the thumb with the little finger', 'The hand is now in the writing position', etc. Between these cases and such as are conscious of an immobile member, every grade of difference as to motion is to be found. . . . In other words, the volition to move certain parts is accompanied by a mental condition which represents to the consciousness the amount of motion, its force and ideas of the change of place in the parts so willed to move."

But in these cases it might be said that the patient's account is not to be trusted. This criticism will not stand. Weir Mitchell says: "The influence of electrical currents on the nerves of the stump introduces into our calculations certain novel and puzzling considerations."

"If we faradise the track of the nerves in or above the stump, we may cause the lost fingers and thumb to seem to be flexed or extended; and, what is most remarkable, parts of which the man is conscious, but which he has not tried to stir for years, may thus be made to appear to move to his utter amazement. In one case, I thus acted on the nerves, so as to cause a thumb which for years was constantly and violently bent in on the palm to straighten out completely. On breaking the circuit without warning, the patient exclaimed that his thumb was cutting the palm again, and the same result was obtained by shifting the conductors so as to put the nerves out of the circuit." (*Op. cit.*, p. 359.)

But next it might be urged, that the patient's account of the results of faradisation is not to be trusted. But the patient is, fortunately for these experiments, not an anatomist, and thus he can be put surely to the test. Dr. Mitchell (*op. cit.*, p. 359) writes, "These impressions are correctly referred by the patient, so that faradisation of the musculospinal or the ulnar gives sensation of movement in related parts. It is,

* We will give one quotation from Dr. Mitchell's work as to the position of the absent limb. "E. C., aged 32, lost his left arm five inches below the shoulder, nine years ago. When shot, the thumb turned into the palm, and continued in this state of spasm, so that when, six hours later, the limb was removed, the nail of the thumb had cut into the palm. He several times lifted the thumb, but it always returned to the same place. For nine years the absent thumb still remains cutting into the palm. The coming of a storm makes the spasm more severe, and causes the fingers to close over it. The limb seems shortened six inches."

of course, impossible that the motor nerves stimulated should convey any impression centrally, and he must therefore conclude that irritation of sensory trunks may occasion impressions of muscular motion in the sensorium."

The above facts seem to us to bear strongly in favour of Bain's hypothesis, that what is commonly called the muscular sense is at least in great part a judgment from the "out-going" nervous current. Dr. Weir Mitchell seems to have arrived independently at the same or a similar conclusion.

DEATHS FROM CHLOROFORM.

ANOTHER death under chloroform is reported as having been the subject of an inquest held by Mr. Langham, the deputy coroner for Westminster. The patient was a man named Hawkins, aged 49, suffering with dislocation of the shoulder-joint. It appeared that he had his dislocation reduced, under chloroform, at St. Thomas's Hospital, at three in the afternoon, but after he reached home the bandage was disarranged, and the dislocation recurred, whereupon Mr. McHardy, resident medical officer at the Royal Pimlico Dispensary, was fetched at about 8 P.M., and he, together with Dr. Jones, proceeded, at the man's request, to administer an anæsthetic, and to reduce the dislocation. This was done under chloroform. Mr. McHardy stated in his evidence:

"Prior to the administration, I felt the pulse of deceased, and found it satisfactory. During the time of the operation, the deceased was certainly not in a state of anæsthesia, but at the moment of the reduction of the dislocation deceased gave a slight shudder, and a visible tremor passed over him. The chloroform was dropped from a proper drop-stopper bottle. When the tremor passed over deceased, Dr. Jones said, 'He is going', and I said, 'I fear he is gone'. Dr. Jones was just commencing to prepare for artificial respiration, when I took him by the heels, held him upside down, with an artery-forceps pulled his tongue forward, and tried other means for restoring vitality, but without success. The actual time of deceased's death was about 8.30. Witness did not believe that the previous administration of chloroform at St. Thomas's Hospital at all accelerated the death of the deceased. The death was due to the second administration of chloroform, which produced paralysis of the heart. A *post mortem* examination of the body showed that the heart was perfectly healthy. Two drachms of chloroform were used, and that quantity was exceedingly little considering the mode of administration. There was no way of telling what the result of the administration of chloroform might be. Witness was quite prepared to see a patient die under chloroform at any operation, and he had seen three persons die under it."—Dr. Webb said that he had made a *post mortem* examination, and found the heart and other organs healthy. Looking at the whole of the circumstances, he believed that chloroform caused death, but that such administration was properly conducted.—The jury returned a verdict of death from chloroform, and that the chloroform was properly administered.

The verdict of the jury was a correct one on the evidence. We must point out, however, that an increasing responsibility attaches to the administration of chloroform under such circumstances. It is difficult not to feel that this accident was probably due, not to the administration of an anæsthetic, but to the injudicious selection of an anæsthetic. Either ether or nitrous oxide might, it is more than probable, have been administered with perfect safety.

Dr. Helweg, public medical officer at Odense in Denmark, relates, in the *Ugeskrift for Læger* for August 14th, a death during chloroform narcosis which had occurred in his practice. He gives the following details.

"A coal-measurer, aged 52, had, for more than twenty years, an ulcer on his left leg; it had been healed several times, but had as often recurred, as his occupation involved hard labour. Otherwise he was in good health, and for twenty years had not been confined to bed for any other illness; he had never complained of any symptoms indicating disease of the lungs or heart. Once only, as far as is remembered, having a not very severe attack of bronchitis, he was examined with the stethoscope; nothing was found beyond the signs of the above named disease. He was strongly built, thin, with well developed muscles; he had no appearance of cachexia, and was not addicted to the excessive use of brandy. During the last three-fourths of a year, he had suffered from his ulcer, which was of the shape and size of a

large child's hand, and was steadily becoming worse in spite of several months' rest and continuous treatment. The edges became very thick and hard, with round and hard excrescences as large as walnuts; the base was indurated and foul, and there was an offensive ichorous secretion. In order to overcome this condition, I decided to use the knife and the actual cautery, and had him removed from his miserable home into the infirmary. The operation was to be performed on July 3rd; and, as he was much frightened at it, chloroform was used. He lay on a bed with his neck and chest exposed, near an open window, in a spacious and lofty room. The administration of chloroform was undertaken by Mr. Windinge, who had been my assistant during the last year in the rather frequent surgical operations in our two infirmaries. The apparatus was the same which we are always accustomed to use; viz., a piece of linen folded in the shape of a funnel, with a small piece of cotton-wool at the bottom, and large enough at the wide end to completely cover the patient's mouth and nose. At the commencement of chloroformisation, the pulse was felt to be strong and regular, between 70 and 80; the breathing was perfectly tranquil. After two minutes, the stage of excitement set in; he became much congested in the face, cried out, and threw his arms and legs about. This condition lasted about two or three minutes. He then suddenly became quiet, and made two stertorous inspirations; the chloroform was removed by Mr. Windinge, with the remark that he was now in a state of anaesthesia. But at the same moment his face became livid; the pulse was completely imperceptible, and the respiration was at a standstill. Several windows were immediately opened; and having ascertained that the tongue had not fallen backwards, we sprinkled him with water and applied forcible friction over the cardia; this was followed by two sighing inspirations, which immediately again ceased. He was several times taken from the bed and held with his head downwards; artificial respiration by regular raising and lowering of the arms was employed for an hour and a half; a hot iron which we had at hand was applied to the epigastrium and the soles of the feet (we had no induction apparatus); but all was in vain—he was dead. At the necropsy, the brain and meninges were found to be normal, neither remarkably congested nor anæmic. The lungs were healthy, very full of air and blood; there were many easily separable pleural adhesions, especially on the left side. The blood was dark and fluid. The pericardium was closely adherent to the heart, especially in front, so that it could not be opened without wounding the heart; but when an opening was made, the two layers could be easily enough separated by the finger or the handle of the scalpel. The heart itself was large, without fat, very lax and collapsed; its muscular substance was healthy, and the valves were normal. The abdomen was not opened. On examination, the chloroform was found to be pure, according to the pharmacopoeial directions. The bottle used had contained fifty grammes (about one and a half ounce) of which scarcely one-half remained; but, as much was lost by being absorbed by the linen, it was impossible to say how much was actually inhaled. The inhalation was not continued more than five or six minutes, and even in this short time had been interrupted by the restlessness of the patient."

In commenting on the case, Dr. Helweg is disposed to attribute the death to the pericardial adhesion. The death, he says, was from syncope, produced by sudden paralysis of the heart. He does not think that the adhesion could have been detected during life, so as to afford a contra-indication to the use of chloroform.

The case of Hawkins, who died under chloroform administered to facilitate a second reduction of dislocation of the shoulder, presented some other features of a rather unpleasantly suggestive character. The story told by Mary Hawkins, the widow of the deceased, was, that on Tuesday last deceased complained of pains in his arm, and said that a policeman had injured his arm on the previous Saturday. The deceased was in Coldbath Fields from Saturday afternoon until Tuesday morning at seven o'clock, and upon his return from the prison, he made the complaint, and went with his daughter to St. George's Hospital, where they gave him some liniment. He had complained in the prison of the state of his arm, but the warders took no notice of him. On Wednesday last, he was worse, and witness took him again to the hospital, where the porter said that he was too late, although it was only 9.30 A.M., and that he must come another day. A paper was given to him on the first occasion, which stated that he ought to be at the hospital by nine. Finding that he could not be attended to, he walked to St. Thomas's Hospital, arriving there at 10.50; and, after waiting for two hours, he came back and said that the surgeons had

found that the arm was dislocated, that they had been trying to get it right but could not do so, and they intended to give him chloroform. Witness waited with him until two o'clock, and then he went again to the hospital, when the dislocation was reduced under chloroform. Soon after he reached home, however, the bandage "fell off", and the arm again slipped out of joint.

We say nothing about the bandaging, which may or may not have been satisfactory, for the bandages of restless out-patients do often "fall off" in a very unaccountable manner. But, according to this statement—1. The man was for two days the inmate of a prison cell, where his injuries were disregarded,—a serious reflection on the gaol authorities; 2. He is stated to have attended twice at St. George's Hospital without the nature of his very simple ailment being recognised or relieved. There is here something also which requires investigation. The out-patient casualties of hospitals not unfrequently make the reputation of bone-setters, not always illegitimately. It is a department which requires very careful supervision in the interests of the public as well as of medical education.

THE REVERSE OF THE MEDAL.

MR. DAVY has managed to achieve a very difficult feat: that of infusing a decided dash of originality into an introductory address. We start entirely in accord with Mr. Davy; for he plainly intimates his opinion that the series of annual introductory addresses are a troublesome nuisance, which might with advantage be abolished everywhere, as they have been at St. Bartholomew's Hospital School. His address at Westminster Hospital had this primary feature of originality, that he reduced the evil to its smallest dimensions, by limiting his address to a bare quarter of an hour. Then, from beginning to end, it was pithy, and pointed to grumble. Generally, introductory lecturers paint their picture in rosy colours. Diligence, study, good conduct, are sure of reward; very few men who deserve to succeed ever fail; and the work of the profession is its own exceeding great reward. The approval of his fellows, general respect, the dignity of appreciated self-sacrifice, are added to the peace of a good conscience. This is the side of the medal which is naturally displayed every year to attentive and hopeful audiences. Mr. Davy showed the reverse. From his earliest days, the student is the victim of sharks (*squalide*)—the London landladies. The remuneration of the young medical man for professional services is either very small or nothing at all. Coroners and guardians, the Registrar-General and the Commissioners in Lunacy, combine to oppress him; his brethren are like Ishmaelites in their mutual intercourse. Medicine has three remedies to boast, it has been said: quinine for ague; iodide of potassium for secondary syphilis; sulphur for itch. Mr. Davy robs us of our last crumb of comfort in pointing out that these are all preventable diseases. Ague, no doubt, is being abolished; but so long as Mr. Stansfeld and his allies are so active as they now are, there is no reason to anticipate that free trade in syphilis will be limited; or that the propagation of the syphilitic poison among the civil population will be in any way limited, if even its ravages be not once more freed from all check among the soldiers and sailors of this country. There is, therefore, still likely to be a rag of credit left to the doctors in curing one preventable disease, which one section of the community are determined shall not be prevented if they can help it.

Mr. Davy's list of grievances is a very long one. He is particularly shocked by the state of subjection of certain of the medical officers of our hospitals. "Charity" is a synonym for professional imposition. He is particularly shocked at the position of the medical officers of the London Hospital.

"I must hold up the London Hospital to you as an example of miserable resignation of the medical to the lay element; these London Hospital officers (and excellent officers many of them are) must be very 'lions in love'; they have tamely submitted to have their teeth drawn and claws pared; and now submit to the dictates of a Committee on which the medical element is not directly seated. On hospital subjects, members of the staff are veterans; many of the lay Committee-men are

mere amateurs; there can be small doubt as to whom the well-being and progress of a hospital might be safely entrusted."

Mr. Davy's summing-up is couched in the vigorous language of despair.

"In conclusion, let me firmly assure you that your early prospects in life are most disheartening; your toil and ambition may be equally great, but your pay and dignity will be equally small; you have to deal with an ignorant and proud people; and I advise every one to resign at once any and every thought of becoming a medical man, unless he possess three qualifications: 1. Independence. 2. An aptitude for, and love of, the profession. 3. The readiness to pay a heavy premium in this world for his prospects of reward in the next."

This is a very dark picture indeed; but then Mr. Davy is evidently a Rembrandt in his art. His picture, however, making every allowance for the desire for picturesque effects, would have lost nothing if the lights were put in as well as these very dark shadows.

DR. ARTHUR FARRE, F.R.S., has been elected, we hear, Honorary President of the Obstetrical Society.

DR. STURGES will this week be promoted to the office of Physician to the Westminster Hospital, vacant by the resignation of Sir Duncan Gibb.

MR. THOMAS JESSOP, an ex-mayor of Sheffield, has offered the sum of £22,000 for the purpose of building a new hospital for women. The tenders for the building have been received and accepted.

M. WURTZ has definitively resigned his position as Dean of the Faculty of Medicine of Paris, a position which he has occupied during the last ten years.

THE Minister of Public Instruction of France has decreed the formation of a commission, whose duty it shall be to study the means of improving and completing the clinical teaching of the Paris Faculty of Medicine. The medical members of the commission are MM. Wurtz and Chauffard.

WE have received, through the courtesy of Dr. Goldie, an account of the rise and progress of the small-pox epidemic at Leeds. The origin of the epidemic appears to have arisen from a solitary imported case, of which no intimation had been given to the medical officer of health. The disease in consequence spread rapidly, and there are now about seventy cases in the town, and the total deaths on Wednesday amounted to eight.

MR. CARSTEN HOLTHOUSE has resigned the office of Senior Surgeon of Westminster Hospital. Mr. Holthouse, as our readers are aware, is now much occupied in the management of a Home for Inebriates, which has been recently founded under the auspices, and with the approval, of the most eminent members of the medical profession.

THE resignation of Mr. Holthouse leaves a vacancy in the staff of surgeons. Mr. Cooke, the Senior Assistant-Surgeon, is the next in order for this vacancy. Mr. Cooke is very favourably known to the profession by his works on Practical Anatomy, and is a promising and able surgeon. It is, however, probable that other candidates will be forthcoming. Among them we hear named Mr. Macnamara, lately Professor of Surgery in the University of Calcutta, well known for many valuable reports and writings, and for his investigations on cholera, but perhaps most generally known in this country as the author of an excellent Manual of Surgery.

THERE have been a great number of promotions and appointments at the Westminster Hospital and School during the last few years, so that the staff is mainly composed of comparatively young men. Mr. Cowell, who now becomes Senior Surgeon, is by a long way, we think, the youngest senior surgeon in London. Many of his seniors in practice are still only assistant-surgeons at metropolitan hospitals. Youth is, however, an excellent fault, if fault it be, in a surgeon, for with it should be allied vigour and self-devotion.

DR. ROBERT BARNES, the President of the Metropolitan Counties Branch of the British Medical Association, inaugurated the season by a *soirée* at Willis's Rooms on Wednesday evening. There were nearly eight hundred members of the profession present in the course of the evening. The rooms were decorated with works of art, and microscopes were shown by Mr. Pillischer and others. The String Band of the Royal Marines, Chatham, was in attendance. The hospitalities of the host were on a most generous scale. Among those present from a distance were Mr. Steele of Abergavenny, Dr. Parsons of Dover, Dr. Bowles of Folkestone, Mr. Hodgson of Brighton, and many others. The evening was singularly agreeable, and formed a most pleasing commencement of the season.

THE WORCESTER INFIRMARY.

THE executive committee of the Worcester Infirmary held another meeting on Monday, September 27th, but the difficulties in which the institution is involved seem as far as ever from being settled. In reply to their advertisement for a medical man to supply the place of Dr. Inglis, only two candidates offered themselves. One was immediately set aside; the other, Dr. Hunt of Birmingham, withdrew his application before the time of meeting. When requested to give his reason for so doing, he stated that his attention had been called to a paragraph in the BRITISH MEDICAL JOURNAL, in which the Editor expressed a hope that, until the reasonable requirements of the staff are satisfied, no medical man would come forward as a candidate for the vacant post. It was, he said, entirely in deference to this opinion that he had withdrawn his application. If all medical men were as ready to sacrifice their own personal interests to the good of the profession as Dr. Hunt has shown himself to be, such disputes as these would seldom arise, and when they did arise they would be settled satisfactorily. We trust that the difficulty which the executive committee find in filling up the vacancy in their staff will convince them that their first step ought to be so to alter their rules as to remove what we have from the first regarded as a real grievance; and which might at any future time press as hardly upon any other honorary medical officer as it has lately done upon Dr. Inglis.

THE INTERNATIONAL MEDICAL CONGRESS.

CONTINUING our *resumé* of the labours of the Brussels Congress, the next subject to which the members turned their attention was that of lying-in hospitals. M. Lefort demanded the suppression of large lying-in hospitals, and the dispersion of lying-in women in private domiciles. His ground for this requisition was, that one out of every twenty-seven women delivered in hospital dies, whilst in private practice the mortality is one in two hundred and two. He, therefore, proposed that women should be delivered in their own homes, and that the destitute should be lodged with midwives at the expense of the State. After a discussion, in which MM. Hiernam, Sigmund, Testelin, Hubert, Crocq, Gaillard, Forget, and Laussedat took part, the following conclusions were adopted: 1. The urgent necessity of radical reform in the system of child-bed relief. 2. Complete abandonment of large lying-in hospitals. 3. The replacing of large lying-in hospitals with schools for obstetrical instruction by small houses with separate rooms. 4. The establishment of a spare house placed in the neighbourhood, with complete separation in the medical direction, and the furnishing of the two establishments. 5. As wide an extension as possible of aid at the homes of the patients by affording every possible assistance to pregnant and lying-in women. In the section of Public Health, the first question discussed was the means of rendering healthy the workshops in which phosphorus was manipulated, in which MM. Magitot, Crocq, Gaillard, Verité, and Thibaut took part. The section unanimously expressed a wish that red or amorphous phosphorus should be substituted for common phosphorus, and cited terebinthene as an antidote to the effects of phosphorus, but without explaining its mode of action. They also recommended that the workshops should be thoroughly ventilated and very spacious. They point out that local affections induced by phosphorus may be removed by astringent gargles, and above all by the obligation imposed

on the manufacturers not to employ any workmen who have dental caries or any other affection likely to favour the noxious action of the phosphorised vapours. The members of the section likewise protested against the employment of children in workshops where phosphorus is used. In the section of biological science, a report was read by MM. Masins and Vanlair on the Vaso-motor Nerves and their Mode of Action, to which Professor Donders, though approving the totality of the conclusions, regretted that the authors, specially preoccupied with active dilatation, had somewhat lost sight of the vaso-constrictor nerves. M. Bouillaud, in reference to this paper, pointed out the analogy existing between the rhythmic movement of the arteries and the movements of the heart itself. He pointed out the consequences that every alteration of the arterial walls must, like the alterations of the cardiac walls, necessarily bring on in the mechanism of the circulatory functions. M. Bouchut set forth the results of the application of the ophthalmoscope to the diagnosis of cerebral affections. M. Leudet gave the result of his researches into the mental condition of alcohol drinkers in different classes of society. In the second section, a discussion arose as to which is the best anæsthetic agent, and the relative claims of chloroform, ether, and intravenous injection of chloral were discussed. Chloral found an eloquent advocate in Professor Oré; M. Deneffe also gave his adhesion to intravenous injections. Ether seemed to be in favour, particularly with the profession at Lyons; but this section did not come to any positive conclusions on this important subject. In the section of medicine, the subject of the use of alcohol in therapeutics was discussed by M. Dujardin-Beaumetz, M. Semmola, and others. The conclusions arrived at were, that the section was of opinion that the number of the indications for the use of alcohol, both in acute and chronic disease, are much more limited than has been asserted by the too enthusiastic partisans of this therapeutic method. They went even further, and asserted that in a certain number of circumstances in which the members had recognised the true therapeutic value of alcohol, the indication might be equally well fulfilled by other agents forming part of the *materia medica*, in which cases they did not hesitate to recommend the latter, and prohibit alcohol, from the fear that its too frequent introduction into medicine should constitute for the lay public an encouragement to consume it without any reference to the pathological state, an encouragement which would derive considerable value from the scientific authority by which it was supported. The only circumstance which could incontestably establish the necessity for the administration of alcohol, and in which it could not be replaced by any other agent, was the showing of previous habits of drinking. In these cases, alcohol became indispensable; it constituted the only means which subsequently allowed the application of the therapeutic methods adapted to each particular affection, and replaced the patient in conditions under which the functions might be performed with more or less regularity.

ANCIENT HOSPITALS.

MR. B. H. COWPER writes in the *Daily News* an interesting note on this subject. According to Mr. Cowper, the list of early hospitals among non-Christians is not yet complete, for it appears from at least two Latin writers of the first century that something of the kind existed among the Romans. According to Cooper's Latin *Thesaurus*, a *valetudinarium* is "a place where men lie being sick; a sick man's lodging"; and Ainsworth calls it "an infirmary or hospital for sick folks", adding these words from *Columella* xi, 1: "Si quis sauciatus in opere noxam cepit, in valetudinarium deducatur." If anyone who was injured was to be taken to the hospital, it is clear that such an institution existed at the time. Seneca, who died under Nero, refers to such places in at least three passages which I have traced in his works. They will be found in *De Ira* i, 16, in the prologue to Book I of "Natural Questions", and in Epistle 27; nor can there be the shadow of a doubt as to their meaning. This interesting fact seems to be but little known, as I can find no allusion to it in any work on Roman antiquities which I am able to consult. With reference to the statement of Messrs. Green and Davis, that Beth Hachophshith, in II Kings xv,

5, was a free hospital, I fear it cannot be maintained. The words literally mean "a house of freedom", it is true, but the freedom is not that of the gratuitous, and is that of liberty as opposed to bondage. The comparatively modern application of the phrase to an hospital is not evidence of the original sense. Neither the Targum, nor the ancient Syriac, Latin, and Arabic versions suggest such an idea; nor do any other texts of the Old Testament. The true character of the house to which Azariah the leper was consigned is to be gathered from Leviticus xiii, 46, where it is ordained that the leper "shall dwell alone; without the camp shall his habitation be". Hence, the Targum simply says that Azariah "dwelt out of Jerusalem". The place was, therefore, an asylum or leper-house, and to Judaism belongs the honour of so humane an institution. The Christian reader may find the germ of the modern hospital in the parable of the Good Samaritan (Luke x, 34, 35), or at any rate an authoritative recognition of the principle. Basil of Caesarea gives the first reference, I have found, to hospitals for the relief of the sick among Christians, Epistle 371. This belongs to the fourth century.

A NOBLE WORK IN INDIA.

A LARGE medical and surgical hospital has been recently built at Jeypore, called The Mayo Hospital, which will be publicly opened by the Prince of Wales during his visit to India. This hospital is one result of the work which has been carried on in Rajpootana during the last nine years by Dr. Colin Valentine, a medical missionary. His career well illustrates what a man in this position may effect. In 1866, he was the means of saving the life of one of the queens of the Maharajah of Jeypore, when she had been given up by the court physicians. He was in consequence appointed private physician to the Maharajah, a post which he accepted only on the distinct understanding that he should be allowed to continue his missionary work. His connection with the court naturally gave him great influence, and he set on foot many plans for the amelioration of the people. Amongst these, we may mention good works, by which about a thousand prisoners, who formerly did nothing but fight and eat opium, were taught reading and useful trades; a school of arts, where skilled workmen, brought from Madras, Delhi, and other parts of the country, taught young men of all castes without distinction; a library, consisting of seven thousand carefully selected volumes, both in the native languages and in English; a museum; a philosophical institute, in which Dr. Valentine himself gave popular lectures on natural science; a board of health; a medical store, where dispensers are trained; and sixteen or seventeen local dispensaries, which have been opened in various parts of the country, and which are served by native doctors trained at the Agra Medical College. This is, indeed, good work for a man to have accomplished in ten years. But Dr. Valentine has yet further plans. He is anxious to found a medical training institute for the Urdu and Hindi-speaking provinces of India. He proposes that the institution should be capable of affording accommodation to forty or fifty boarders; that it should be presided over by an European or American medical missionary; that it should receive pupils from all the different mission stations, who should be trained not merely as medical men, but also as missionaries. With this institution it is proposed to affiliate a school for the medical training of European and Eurasian ladies, resident in India. Both branches of the institution would be under the same superintendance; but the male students will attend and graduate at the Agra College, while the female will receive their medical education separately, and within their own premises. To carry out this scheme, Dr. Valentine estimates that £5,000 will be required. We hope that the money will be raised without difficulty, as there can scarcely be a difference of opinion with regard to the importance of the objects in view. The proposal to found a female medical college in particular has our cordial sympathy. The percentage of deaths among women and children in India is out of all proportion to the population; and this must continue to be the case as long as the inmates of the zenanas are left to the care of ignorant and degraded native nurses. Whatever view

may be held as to the admission of women to the profession in this country, there is no doubt that, so long as the social customs of India remain as they now are, it is a most useful work to provide for the wants of its female population in some such way.

RUSSIAN MIDWIVES.

AMONGST the women who this year follow the courses appropriated to their sex in the Medico-Chirurgical Academy of St. Petersburg, the *Nowaste* speaks of two peasant women (sisters), who were originally midwives at Tambow. When they made up their minds to enter the Academy, they set to work with the greatest zeal to acquire a knowledge of the subjects necessary for them to pass their examination. They worked for two years without any extraneous help whatever, so as to be able to pass this ordeal, and further testified to their strength of will by making the journey from Schazh to St. Petersburg on foot.

COTTON DISTRICTS CONVALESCENT FUND.

A CIRCULAR, signed by Lord Derby, Sir J. P. Kay-Shuttleworth, and Mr. J. W. Maclure, has been sent to all the hospitals in the cotton manufacturing districts anent the distribution of the surplus Cotton Districts Convalescent Famine Fund. The circular sets forth the scheme issued under the order of Vice-Chancellor Bacon for the management of the surplus of the moneys raised for the relief of the sufferers by the cotton famine, which is to be applied to the establishment and maintenance of convalescent homes, and is to be administered by a body of governors, some of whom are appointed in the scheme and called co-optative governors. Ten others are to be elected by the governing bodies or boards of management of hospitals or infirmaries containing at least forty beds, and situate within the districts comprised in the schedule to the scheme. The co-optative governors are vested with the power of making arrangements for the collection of the votes of the several governing boards, and having met for that purpose, the circular referred to has been sent out requesting the boards to meet on some day during the present month for the purpose of electing representative members of the governing body of the fund. Each governing body or board of management possesses one vote for every twenty beds.

THE CAMBUSLANG MURDER.

IT is announced that the sentence of death passed upon John Middleby or Tiernay at the last assizes in Glasgow has been commuted to penal servitude for life, after a special medical inquiry instituted by direction of the Secretary of State. The decision arrived at in this case seems to us unfortunate, and, indeed, indefensible. Tiernay was either mad, or not mad. If the former, he ought to be sent, not to penal servitude, but to an asylum, where he might have the benefit of suitable treatment; if the latter, he ought to suffer the penalty of his crime. The law of this country recognises no intermediate states of partial mental impairment between insanity and soundness of mind; and grave difficulties cannot fail to arise, and to complicate still further the already entangled and knotty question of criminal responsibility, if the principle be once admitted that there are graduations in the power of will, and, therefore, in culpability for offences. Obvious objections also present themselves to special medical inquiries instituted by the Secretary of State for his own edification. Such inquiries ought clearly to take place previous to the trial of any accused person in whom there is reason to suspect mental aberration; so that those undertaking them may be able to state their opinions, and the grounds on which they are founded, in open court, and may be subjected to cross-examination. No private inquiry resulting in the reversal of the finding of a jury and sentence of a judge can be satisfactory to the public. As matters at present stand, the defence of insanity bids fair to defeat the ends of justice, and to afford ready shelter to any one from the consequences of violation of the law. Thomas Johnson, who, during last summer, was committed for trial, charged with the murder of his father and mother, at Fordham, near Colchester, has never been brought to trial at all; because, subsequently to his commitment, and prior to the assizes,

he was certified as a lunatic, and removed to an asylum. No doubt this man was insane; but surely his sanity or insanity was a question for a jury. It is in the highest degree inexpedient that two medical certificates should be permitted to intervene between a prisoner and his trial, and indefinitely postpone or practically dispense with the latter. There can be no necessity to point out what terrible abuses might grow out of such a practice.

MEDICAL STUDENTS IN THE OLDEN TIME.

M. GERMAIN, Professor in the University of Montpellier, lately read before the Academy of Inscriptions a very curious notice on the *Liber Procuratoris Studiorum*, of which the manuscript is preserved in the Faculty of Medicine. This *Liber* is a register of one hundred and sixty-five sheets, containing the accounts of the administration of twenty-six deans of the medical school, who exercised their functions from the 26th May, 1526, to the 1st November, 1537. These deans or proctors, whose official title is in the statute of 1534, *Procurator Baccalauorum et Studentum*, were charged to protect the interests of the students, and elected in general assembly before St. Luke's day, when the schools were opened. They exercised a sort of jurisdiction which could only be escaped by special permission, and had the management of all the revenues of student-bodies—revenues which consisted specially of multiplied fees, proceeding from every examination passed. The *Liber Procuratoris* affords very curious information on the constitution of the University, and the life of the students, who came not only from all the provinces of France, but from other countries also. Some of the deans were of Swiss and Italian nationality. The *Liber* mentions the matriculation of Rabelais in 1530. After having taken his diploma of Master of Arts in Paris, the future author of *Pantagruel* returned to obtain his licentiate and his doctor's degree at Montpellier in 1537. He even filled a professor's chair at the University, lectured on the *Prognostics* of Hippocrates, and presided over the anatomical school. The examinations extended to sixteen, without reckoning that for the Master of Arts degree, without which no grade could be obtained. There were four examinations for the Licentiate only, each consisting of four theses. The highest grade was the Doctor's degree, which was signalled by a kind of ovation. The recipient went to the Church of St. Firmin, conducted by the whole medical school, preceded by a band of musicians, to receive the insignia, amongst which were the works of Hippocrates. After having received the embrace of fraternity from the dean, the newly created Doctor distributed sweetmeats and preserved fruits to the bystanders. The organisation of the University was entirely religious. The students were obliged to hear mass every Sunday, under penalty of a fine for absence. The Dean and the Chancellor of the University were placed under the high authority of the Bishop of Maguelonne. All these regulations, however, did not prevent the students from leading very merry lives: every time a student obtained a degree, he made it a pretext for a feast with his comrades. M. Germain explained the etymology of the word "baccalaureat" to mean bay berries; but M. Thurst declares the true origin of the word bachelor to be *baccalarius*, which means "a young unmarried man". The University of Paris always writes "baccalariatus". In English, also, bachelor means an unmarried man. Baccalaureatus is a more recent orthographical form, originating in a false etymology.

ARSENICAL CASKS.

SOME remarkable evidence was given at a recent inquiry into a case of poisoning by eating sheep's-head broth at Rotherham. A boy died, and half a dozen people were made seriously ill. This circumstance was fully accounted for when it was stated that the food was cooked in a saucepan in which clothes saturated with arsenic had previously been boiled; these had caught up the arsenic by being washed in a tub made from a cask which had contained that poison. The jury returned a verdict that the deceased Thomas Robert Jenkinson died from being poisoned by arsenic inadvertently administered in broth. They appended to the verdict an expression of opinion that the indiscriminate

-selling of casks which have contained arsenic, which appears to be practised by some firms, is dangerous, and ought to be discontinued. The analyst's evidence showed that there was in the soup enough poison to kill twenty persons. The subject is sufficiently suggestive of general carelessness on the part of manufacturers of deadly poisons to be worth the attention of medical officers of health and inspectors of nuisances.

BRITISH MEDICAL DEFENCE ASSOCIATION.

UNDER this title, an Association for the prosecution of quacks recently came into existence, mainly through a correspondence in our columns, which has already done good work. It is now preparing for extension, and has issued the following preliminary circular.

"I am desired by the Provisional Committee to inform you that an Association of Registered Medical Practitioners has been formed for the purpose of suppressing, as far as possible, the practice of medicine and surgery by persons not legally qualified, and of maintaining the status and general interests of the profession. The efforts of the Association will be principally directed to enforcing the provisions of the Medical and other Acts, against those who, assuming to be duly qualified, impose upon the community at large, and practise to the detriment of the public health, and to the discredit and injury of the profession. Past experience teaches that the profession and the public have little to expect in the way of help in this matter from the General Medical Council, or the various corporations and licensing bodies, with, perhaps, one or two exceptions. It is, therefore, hoped that the objects of the Association will at once commend themselves to every registered practitioner. A general meeting of members of the profession interested in this movement will shortly be summoned for the purpose of electing a President, Council, and Committees, together with the necessary officers. Branch Associations are being formed in various parts of London and the United Kingdom. The East London Branch is already in active working order, being engaged in three prosecutions under the Apothecaries' Act. It is suggested that the annual subscription shall not exceed half a guinea; but donations to meet the preliminary expenses will be received with thanks. Should you wish to become a member of the Association, an early reply, with any suggestions you may have to make on the subject, will oblige."

The letter is signed by the Honorary Secretary (*pro tem.*) Mr. George Brown, 12, Colebrooke Row, Islington, London, N. Among the members of the provisional committee are given the names of thirty or forty general practitioners in different parts of the country.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

THE annual meeting of this Society was held in the Library of the Newcastle-on-Tyne Infirmary on September 30th. The report of the Committee showed that the Society was in a flourishing condition. The number of members was 141. The work done during the session 1874-75, both in amount and quality, compared favourably with that of previous years. The following is a list of officers for the year 1875-76:—*President*: S. W. Broadbent, Esq. *Vice-Presidents*: W. C. Arison, M.D.; J. S. Denham, M.D.; F. Page, M.D.; G. H. Philipson, M.D. *Secretary*: Byrom Bramwell, M.D. *Committee*: H. E. Armstrong, Esq.; L. Armstrong, M.D.; G. T. Beatson, M.B.; M. Burnup, M.D.; C. Carr, Esq.; J. Frain, M.D.; G. B. Morgan, Esq.; J. Hawthorn, Esq.; J. Russell, Esq.

RECENT URBAN MORTALITY.

DURING last week, 5,459 births and 3,660 deaths were registered in London and twenty other large towns of the United Kingdom. The average annual rate of mortality was 25 deaths in every 1,000 persons living. The rate in Nottingham was 20; in London and Glasgow, 21; Norwich and Newcastle-upon-Tyne, 22; Edinburgh and Portsmouth, 23; Oldham, 24; Leicester, 27; Dublin, Wolverhampton, and Sheffield, 28; Liverpool, Bristol, and Bradford, 29; Birmingham and Manchester, 30; Sunderland, 31; Leeds, 32; and Hull and Salford, 35. The annual zymotic rate was 11.5 and 12.5 in Leeds and Hull respectively. The death-rate from diarrhoea in the eighteen English towns considerably exceeded the average for the week; it was as high as 7.5 and 9.0 in Leeds and Hull. Scarlet fever is still prevalent in Bristol, and fever still prevails somewhat at Portsmouth. In London, 2,368 births and 1,401 deaths were registered. The deaths exceeded

the average of the week by 28, and the death-rate was 21.2. There were 11 deaths from measles, 113 from scarlet fever, 12 from diphtheria, 44 from whooping-cough, 25 from different forms of fever, and 145 from diarrhoea; in all, 350 deaths from these diseases, equal to an annual zymotic rate of 5.3 per 1,000. The deaths referred to scarlet fever, diphtheria, whooping-cough, and diarrhoea were in excess, whereas those from the other zymotic diseases were below the average. The deaths of two boys, aged respectively 11 and 14 years, were referred to hydrophobia in St. Thomas's and Guy's Hospitals. In outer London, the general and the zymotic death-rates were 18.1 and 4.9 per 1,000 respectively, against 21.2 and 5.3 in inner London. At Greenwich, the mean temperature of the air was 55.1 deg., or 0.7 deg. above the average of the week. Rain fell on four days to the amount of 0.84 of an inch, of which 0.74 of an inch was measured during Saturday.

THE MEDICAL EDUCATION OF WOMEN.

THE professors of Queen's College, Birmingham, by a majority of nine to three, have passed a resolution to the effect that they cannot undertake the medical instruction of women students. This resolution, it is stated, was based on the objection that the admission of women would endanger the College as a school for male students, many of the latter having intimated their intention to withdraw if women were admitted. The resolution of the professors was communicated to the College Council, who have since unanimously resolved to decline to admit women students to the institution. The resolution of the Council, with their reasons for it, will be transmitted to the mayor, as representing the deputation which recently had an interview with the College Council.

SCOTLAND.

IN connection with the Chair of Natural History in St. Andrew's, Dr. Alleyne Nicholson announces his intention to deliver two courses of lectures during the approaching session; namely, one on zoology three days a week, and one on geology and palæontology twice a week.

PROFESSOR HUGHES BENNETT.

THE funeral of the late Professor Hughes Bennett took place on Thursday, September 30th. The funeral was a very quiet one, but a number of old friends among his professional brethren and others were present at the ceremony. His grave is close to those of his two old friends Professors Goodsir and Forbes.

VACANT CURATORSHIP IN EDINBURGH.

THE appointment of Dr. Bell Pettigrew to the Chair of Medicine at St. Andrew's has caused a vacancy in the post of Curator of the Museum of the Royal College of Surgeons of Edinburgh, and also in that of Pathologist to the Royal Infirmary. For the former appointment there are two candidates in the field, namely, Dr. Blair Cunynghame, assistant to the Professor of Pathology, and Mr. Andrew Wilson, Lecturer on Natural History in the Extra-Academical Medical School. Dr. Cunynghame is a Fellow of the College. The appointment is an annual one, and the emolument attached to it is £100 yearly.

UNIVERSITY OF EDINBURGH.

THE Winter Session in the University of Edinburgh opens on Monday, November 1st, with an address from the Principal, Sir A. Grant; the general work of the various classes commencing the following day. The Extra-Academical School opens the same day, when an address to the students will be delivered by one of the lecturers.

UNIVERSITY OF ABERDEEN.

AT the last meeting of the Aberdeen University Court, Professor Huxley, Lord Rector, presiding, Dr. McKendrick of Edinburgh, and Drs. Alexander Ogston and Rodger of Aberdeen, were elected Examiners in Medicine for one year. The appointments of assistants of

the professors were approved of. The Lord Rector agreed to draw up a reply to be sent to the Privy Council to meet the objections lodged against his scheme for the alterations of the medical curriculum lodged by the Edinburgh University Court. A motion was adopted, ordaining the Senatus Academicus to inform the Court of any projected lawsuit or permanent expenditure prior to entering upon it; Dr. Pirrie dissenting. At the close of the meeting, Dr. Pirrie expressed the thanks of the Court to Professor Huxley for the uniform courtesy and kindness he had shown members during his tenure of the office of Lord Rector. Professor Huxley replied. The election of a new Lord Rector is fixed for November 13th.

THE GOUROCK GRAVEYARD CASE.

THIS case came up again on appeal, but the sheriff adhered to the decision of his subordinate that the graveyard must be closed. In his remarks he says, "The population of Gourrock is 4,000; 141 houses have been built since the last census was taken, and nearly the whole of these are let out in flats and half flats. It is absurd to suppose that a graveyard not amounting to half an acre is sufficient to meet the requirements of such a population."

FACTORY LABOUR.

THE Factory Acts' Commission sat in Edinburgh on Friday and Saturday, October 2nd, and heard a good deal of evidence, but none of it was of a very striking character. It appeared that the half-time system in connection with schools was not working at all satisfactorily, particularly in Dundee and Glasgow; partly because the "half-timers" were generally dirty and unruly, and partly because many of the certificates given were false. The evidence given by some of the leading papermakers went to show that it was absolutely necessary to employ boys to do nightwork, and that the nightwork had not been found prejudicial to the health of the boys. Several complaints were made by large printers, india-rubber factors, and others, that the present restriction put upon the number of hours in which girls and women were allowed to work, acted in a way very detrimental to their business, in which occasionally it was necessary to work overtime, and fresh hands had to be employed. A deputation from the Edinburgh Trades Council presented themselves for examination, and complained of the unhealthiness of many of the workshops, and of the practice of carrying work home, which was shown to prevail to a certain extent among the tailors, shoemakers, and others of Edinburgh. They desired, also, the appointment of more inspectors, and that all offences under the Act should be tried before the sheriff, and not before the unpaid magistrates. The Commissioners sat in London on Monday, October 4th.

IRELAND.

THE Ennis Town Commissioners have elected Dr. Dillon the sanitary officer of their township, at a salary of £15 *per annum*.

QUEEN'S COLLEGE, CORK.

DR. CHARLES BELL, late Demonstrator of Anatomy at Queen's College, Belfast, has been appointed to the Professorship of Anatomy and Physiology in Queen's College, Cork; whilst the vacant Chair of *Materia Medica* in the same institution has been filled up by the selection of Dr. Mathias O'Keefe, M.A., a graduate of the University.

IRISH SANITATION.

A CASE of some interest in a sanitary point of view has just occurred in the north of Ireland, but some of its features can hardly fail to raise a smile. The circumstances were briefly these. A young gentleman, a visitor at the favourite watering place of Portrush, had an attack of scarlet fever. The attack was slight, and, as the patient soon felt himself quite well, he went to a "Spelling Bee Entertainment", which was very numerously attended. His appearance on the platform was the

cause of some alarm to those who knew of his illness. A magistrate, who was present with his family, called the attention of the sanitary officer of the district to the fact. He wrote to the young gentleman remonstrating with him for his indiscretion, and pointing out that he had been guilty of a violation of the law. At the same time he requested him to avoid places of public resort. The patient, however, did not attend to these injunctions; and, in consequence, he received a summons from the Coleraine Board of Guardians to attend the petty sessions. This he might have done through a solicitor; but to the dismay of a crowded court he appeared in person. To make matters worse, his own medical attendant affirmed that if his presence at the "Spelling Bee" was dangerous, he was now in a condition to convey the infection yet more easily. A fine of £2, including costs, was imposed, and the offender immediately took out from his pocket two one-pound notes, and handed them to the clerk. The sanitary officer and the Board of Guardians are to be commended for taking cognisance of this case. It is most important that the public should understand that by failing to use due precautions against communicating infection they bring themselves within the action of the law. But in this instance the measures adopted were certainly somewhat ludicrous. The offender was summoned to a public court in order that he might be censured for appearing at a place of public entertainment. Justice certainly defeated its own ends, and the right thing was done in the wrong way.

DEATH OF DR. JAMES TUCKER OF SLIGO.

THIS much respected and esteemed member of our profession died on the 1st inst. at Sligo. Dr. Tucker held many appointments, including those of medical officer of health for Sligo, dispensary medical officer, medical attendant to the constabulary, medical inspector for the port of Sligo, and surgeon to the Sligo Rifles. He was the author of several essays on cholera, fever, and various sanitary subjects, and contributed reports on rinderpest to the Government, and a paper on the Roman thermo-electrical bath.

DUBLIN HOSPITAL SUNDAY FUND.

AT a late meeting of the Executive Council of this Hospital Fund, it was stated that the Governors of the Meath Hospital, and of the Convalescent Home, Stillorgan, desired to participate in the movement, and wished to be enrolled in the list of institutions which obtain grants from the sums collected. We regret to find that the Committee of the Adelaide Hospital still refuse to co-operate, and stand aloof, for some mysterious reason, from an undertaking in every way so desirable.

THE LATE DR. MAUNSELL.

WE are glad to learn that Sir Michael Hicks Beach has forwarded a contribution of £5 to the fund for the family of the late Dr. D. Toler Maunsell, of which Dr. Speedy is the Dublin treasurer, and Dr. Joseph Rogers, Dean Street, Soho, the London treasurer. Dr. Maunsell was an indefatigable and successful labourer in ameliorating the medical dispensary system in Ireland, and the public not less than the profession owe much to his labours.

TESTIMONIAL.—The students, officers, and inmates of the Bristol General Hospital recently presented Dr. Thomas Elliott, the house-surgeon, with a testimonial on the occasion of his resigning this appointment. The testimonial was in the form of a handsome walnut Davenport and silver plate, bearing the following inscription:—"Presented to Dr. Thomas Elliott, by the officers, students, nurses, and patients of the Bristol General Hospital, on his resignation of the house-surgeoncy. September 1875;" also a pocket instrument-case. The presentation was made by the chaplain, who bore testimony to the universal esteem in which Dr. Elliott was held by the patients under his charge, and to the high Christian principle which had actuated him in all his work during the three years he had been connected with the institution as its house-surgeon.

THE MEDICAL SCHOOLS.

THE following notes respecting the Metropolitan Medical Schools are in continuation of those published last week.

ST. BARTHOLOMEW'S HOSPITAL.

AT St. Bartholomew's Hospital, ten subjects for dissection have been at present received; eight of them having been preserved by Gorstin's fluid during August and September. They are in an admirable state of preservation, and we are told that the demonstrators of anatomy continue to believe this method of preservation to be the best hitherto adopted. Gorstin's fluid has been in use at St. Bartholomew's Hospital for about five years. During the past year, the collection of dissected specimens of human anatomy in the museum has been increased. The entry of new students is a large one, more than one hundred having already registered.

CHARING CROSS HOSPITAL.

THE winter session opened at this hospital with an introductory address by Mr. Fairlie Clarke, which was largely attended. The entry of new students has been very good, nearly 31 new students being already enrolled (October 6th); of this number, one being a free scholar. This number is exclusive of six gentlemen who have entered as occasional students. The practical teaching of anatomy is now entrusted to Mr. Rickman J. Godlee, M.B., M.S. The hospital is undergoing most extensive alterations and additions. New wards of the most recent construction are being built, and the entire hospital raised a storey. About £16,000, it is understood, will be laid out: thus the field for clinical teaching will be greatly widened. The library of the hospital has been entirely renovated, and has recently had a most valuable donation from the library of Mr. Hancock, the Consulting-Surgeon. In every department, the practical teaching of the hospital is thoroughly accommodated, the Governors having liberally assisted the school authorities in rendering the institution as complete in all details as possible. We are not aware when the office of Assistant-Physician, consequent on the resignation of Dr. Poore, is to be filled up.

ST. GEORGE'S HOSPITAL.

THERE have been no changes in the buildings at St. George's Hospital lately. During last year, there was added a new microscopic-room, which seems to answer its purpose very well, and where many of the students, under the able tuition of Mr. Watney, the demonstrator of histology, have done much good work; some of them having prepared large numbers of specimens, both anatomical and pathological. The lectures commenced on Monday, and the number of entries are about the average. In the dissecting-room, there were four subjects ready for dissection. Two of these have been preserved since July last, and it is difficult to say from the appearance which are the fresh ones and which those that have been preserved.

KING'S COLLEGE.

SEVERAL additions have been made to the College buildings. Amongst them, the chief is a complete physiological laboratory, comprising rooms for teaching (a) practical histology, and (b) physiological chemistry; each capable of accommodating about forty students; the former is lighted at the side from the embankment, and from the roof by a large skylight; the latter is fitted up on the plan of modern chemical laboratories; also an instrument-room supplied with all the instruments for modern researches; galvanometer, myograph, etc.; a supplementary large room for general purposes of teaching; and a private room for the professor of physiology, Dr. Gerald Yeo. The building of the laboratory has necessarily altered the dissecting-room, which is now much larger than formerly, and is one of the best lighted and ventilated in London. Dr. Curnow started with three bodies ready for dissection, and has already more than twenty students at work. More rooms for students have been also built, and additions made to the other departments of the College. The chemical laboratory is now larger and better than before, and is removed to the new part of the building.

ST. THOMAS'S HOSPITAL.

SOME change has been made in the method of preserving subjects, and Mr. Howse's plan is now being tried. The dissecting-room has been almost entirely refurnished with tables and stools. Cases for fresh dissections have been arranged in the museum, and a new series is to be taken in hand. The number of subjects with which dissection begins is six. Mr. Rainey will give microscopical and special anatomical demonstrations daily during the winter session.

THE LONDON HOSPITAL.

THERE was a large attendance at Dr. Woodman's introductory lecture. The school buildings have undergone general repairs and alterations. The specimens in the museum have received many additions in the shape of new models, dissections, etc. There will be shortly a large addition to the library. The new wing will be opened early in January next; and as the nominal number of beds will be 850, of which 800 will be occupied, an increase in the resident medical staff will be needed. The election for the office of assistant obstetric physician is postponed, in order, it is said, to allow men to qualify for the post; but if it be intended to elect any one man, surely the other candidates should in justice be informed; otherwise they may put themselves to needless trouble. The lectures and demonstrations are going on as usual, but it is probable that certain fresh practical courses will shortly be added. One subject is now being dissected; others are in preparation. There is an average entry of new students.

ARMY MEDICAL SCHOOL, NETLEY.

THE winter session of the Army Medical School was opened on the 1st instant, the introductory lecture being delivered by Professor Longmore, C.B. The following is the number of candidates for commissions who have arrived to go through the courses of instruction: British Army, 15; Royal Navy, 7; Indian Army, 10; altogether, 32. Several surgeons of the Army and Naval Medical Services have also joined for the session. We noticed that Professor Parkes was not present at the opening address, and were sorry to learn that he was prevented from attending by a severe attack of sciatica.

THE OCTOBER DINNERS.

St. Bartholomew's Hospital.—There was as usual no special introductory address, but the annual dinner took place in the Great Hall and attracted a large number of old students and friends. Professor Humphry of Cambridge was in the chair, and amongst the visitors were the Treasurer, Sir Sidney Waterlow, the President of the Medical Council, Dr. Acland, Dr. Carpenter, Professor Abel, Mr. Thomas Stone, and many others.

Charing Cross Hospital.—The members of the hospital and school staff dined together privately at the Freemasons' Tavern, on the evening of the 1st inst. Dr. Julius Pollock occupied the chair.

St. George's Hospital.—On the 1st inst., the old and present students of St. George's Hospital dined together at Willis's Rooms, under the presidency of Dr. Paget of Cambridge. Between eighty and ninety past and present students assembled on the occasion. Amongst the speakers were the chairman, Drs. Barclay, Dickinson, and Barnes, and Messrs. Pre-cott Hewett, Timothy Holmes, Frank Buckland, J. A. Shaw-Stewart, and C. Dent, the present house-surgeon.

The London Hospital.—About seventy gentlemen attended the dinner, which took place at the "Albion". Dr. Andrew Clark occupied the chair, and was supported by Dr. Langdon Down, Dr. Letheby, Dr. Little, Mr. Curling, Mr. Jonathan Hutchinson, and others.

St. Mary's Hospital.—A *conversazione* was held after the Introductory Address, and was attended by a very large number of local medical men and others. The museum and theatres of the school were lighted up, and the usual refreshments were served, but the great centre of attraction was the dissecting room. This was brilliantly lighted, and in it was set out a very interesting collection of objects of artistic interest: Wedgwoods, bronzes, and pictures, with a display of microscopes, and surgical instruments. Dr. Randall had discoursed of modern methods of burial, and one of Mr. Seymour Haden's wicker coffins was shown.

The Middlesex Hospital.—The annual dinner of past and present Middlesex students took place on the 1st instant, at St. James's Hall, under the presidency of Mr. Campbell De Morgan. Nearly a hundred gentlemen were present; and the meeting was considered highly successful. Music was voluntarily rendered by Signor Garcia, Herr Ganz (who presided at the pianoforte), Dr. Roberts, and Dr. Semple. The toast of the evening was proposed by the chairman. Professor Flower, of the College of Surgeons, was present and spoke. Mr. Nunn humorously proposed the past and present students; and Mr. Oscar Clayton, in a pointed speech, returned thanks on behalf of the former, and Mr. Arthur Lucas spoke for the students of to-day.

St. Thomas's Hospital.—The annual dinner of old students took place on October 1st, at the Pall Mall Restaurant, Regent Street, and Dr. Peacock occupied the chair. About a hundred old students met together and revived old times. Among the most noticeable speeches were those of the Dean, Mr. T. Heckstall Smith, Dr. Alfred Carpen-

ter, and Dr. Bristowe; but the speech of the evening was made by Mr. Le Gros Clark, with his usual felicity of expression.

Westminster Hospital.—The triennial dinner of the old students and friends of the Westminster Hospital was held at St. James's Hall Restaurant, October 4th, 1875, at 7 P.M.; Carsten Holthouse, Esq., in the chair. Forty-five sat down to dinner, and amongst them we noticed Mr. Barnard Holt, Mr. Christopher Heath, Mr. Henry Power, and many of the present hospital staff. Mr. Holt returned thanks for the consulting staff, and Mr. Power and Mr. Heath for the present and past friends of the hospital. The dinner arrangements were well managed by Drs. Allchin and Grigg, honorary secretaries; to them and to the agreeable bearing of the chairman must be attributed the success of this pleasant reunion.

MEDICAL SCHOOLS AND HOSPITALS IN IRELAND.

CATHOLIC UNIVERSITY SCHOOL OF MEDICINE.—The Winter Session will commence on October 1st, with Practical Anatomy. The Lectures will commence on November 3rd. Anatomy and Physiology (Human and Comparative), Dr. T. Hayden, and Dr. R. Cryan, daily, except Saturday, 12; Anatomical Demonstrations, Dr. Hayden and Dr. Cryan, daily, except Saturday, 1; Chemistry, Dr. John Campbell, Mondays, Wednesdays, Fridays, 2; Surgery, Mr. Tyrrell, Mondays, Wednesdays, Fridays, 3; Medicine, Dr. R. D. Lyons, Tuesdays, Thursdays, Saturdays, 3; Midwifery, Dr. J. A. Byrne, Tuesdays, Thursdays, Saturdays, 2; Demonstrations in Dissecting Room, Mr. P. J. Hayes, Dr. C. J. Nixon, Mr. C. Coppinger, Dr. M. Kilgarriff, Dr. C. Gunn, Mr. J. Dillon. **Summer Session.**—Practical Chemistry, Dr. Campbell; *Materia Medica*, Dr. Quinlan; Medical Jurisprudence, Dr. MacSwiney; Pathology, Dr. Lyons; Botany, Dr. Sigerson; Natural Philosophy, Dr. Molloy; Logic, Dr. D. B. Dunne. **Prizes.**—At the end of the Winter Session. Prizes in each class: the Conolly Medical Exhibition, of the Catholic University, value £20, tenable for one year, and open to the competition of all students, after examination in Physiology, Physiological Anatomy, Chemistry, and Botany; the University Exhibition, value £20, after examination in practice of Medicine, Surgery, and Midwifery; at the end of the Summer Session, the University Gold Medal, value £7, for the best answering in Practical Chemistry, *Materia Medica*, and Medical Jurisprudence; Prizes in each class. **Fees.**—Each course, £3 3s.; except Dissections, £5 5s. A reduction of one-sixth is made to perpetual pupils paying the entire fees in advance, or in two instalments at the commencement of the first and of the second years. The School is in a central situation, and within a few minutes' walk of the principal hospitals of the city. It includes a Reading Room well supplied with medical books and periodicals, also an extensive and most complete Laboratory, in which students can pursue the study of Practical Chemistry, *Materia Medica*, and Toxicology. Further particulars may be learned from the Dean of the Faculty of Medicine, Dr. MacSwiney, 1, Hume Street, Dublin; from Dr. Quinlan, 29, Lower Fitzwilliam Street; from any of the other Professors; from the Medical Registrar, Dr. Hayes, 29, Westland Row; or on application at the School.

LEDWICH SCHOOL OF SURGERY AND MEDICINE.—The Lectures will be delivered by the following teachers. Anatomy, Surgical and Descriptive: Mr. Edward Ledwich, Mr. T. P. Mason, Mr. A. R. Glanville, and Mr. J. E. Kelly, five days, weekly, 1 P.M. Anatomy, Physiological and Pathological: Mr. T. P. Mason, Mr. Edward Ledwich, and Mr. J. E. Kelly, five days, weekly, 12 noon. A brief Course of Comparative Anatomy will be delivered during the Winter Session. Surgery: Mr. J. H. Wharton and Dr. J. K. Barton, M., W., F., 11. Medicine: Dr. Arthur W. Foot, Tu., Th., S., 11. Midwifery: Dr. J. Ringland, Tu., Th., S., 2. Chemistry and Natural Philosophy: Dr. C. A. Cameron and Mr. E. Lapper, F.C.S., M., W., F., 2. Practical Chemistry: Dr. Cameron. *Materia Medica*: Dr. B. F. MacDowell, M., W., F., 11. Botany: Dr. D. Toler T. Maunsell, M., W., F., 12. Forensic Medicine and Hygiene: Dr. R. Travers, M., Tu., Th., S., 12. Anatomical Demonstrations: Mr. T. P. Mason, Mr. E. Ledwich, Mr. A. R. Glanville, Mr. C. H. Robinson, Mr. M. A. Ward, Mr. J. E. Kelly, Mr. S. R. Mason, Mr. A. H. Ringland, Mr. R. D. Purefoy, Mr. R. Rainsford, Mr. F. T. Porter, Mr. H. J. K. Gogarty, Mr. Nixon, daily, in the Anatomical Dissecting Rooms. A Course of Operations to be performed by the Student, under the superintendence of the Lecturer (subjects, etc., included), £5 3s. Fee for each Course, £3 3s. The Dissecting Rooms open on October 1st, 1875. During the Summer Session, to commence in April 1876, the usual Courses will be delivered on Midwifery, Chemistry, *Materia Medica*, Botany, and Forensic Medicine. There are Endowments in favour of Students,

subject to the conditions prescribed by the Founder, in the following departments: Two in Anatomy and Physiology; Two in Minute Anatomy; Two in Practical Anatomy; One in Surgery. The usual Prizes in the other departments will be awarded at the termination of each Session.

This School, which has recently been rebuilt, is in a central situation, and is replete with every convenience. By its teachers, it is connected with six hospitals, five of which are medical and surgical hospitals, and one for midwifery and diseases of women and children.

Apply to Dr. Foot, Pembroke Street; Drs. Ringland, Ledwich, and Mason, Harcourt Street; Mr. Wharton, Upper Merrion Street; or at the School.

JERVIS STREET HOSPITAL.—Physicians, Dr. Stephen M. MacSwiney, M.R.I.A., Dr. William Martin. Surgeons, Mr. M. Harry Stapleton, Dr. J. Stannus Hughes, Dr. J. K. Forrest, Dr. Austin Meldon, Mr. James E. Kelly, Mr. M. J. Kilgarriff, Dr. E. W. Collins. The winter session will commence on November 1st. This hospital is in the immediate vicinity of the Catholic University and Carmichael Medical Schools. The surgeons and physicians attend daily from 9 to 11 o'clock. Medical and surgical lectures are delivered in each week, and clinical instruction is given daily by the physicians and surgeons. Operations are performed on Saturday mornings at 10. Practical Pharmacy is taught under the superintendence of the apothecary to the hospital. Resident pupils and dressers are selected from among the most attentive of the pupils, without payment of any additional fee. Two interns are appointed each half year, and are provided with apartments, fuel, etc., free of expense. Special certificates are given to the resident pupils and dressers who have performed their respective duties to the satisfaction of the physicians and surgeons. **Fees.**—For the winter and summer sessions (nine months), £8 8s.; for the winter six months, £6 6s.; for the summer three months, £3 3s.; perpetual pupils, £21, paid on entrance. For further particulars apply to Dr. E. W. Collins, 33, Lower Baggott Street, or to any of the Physicians or Surgeons.

RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS.—These Hospitals contain 312 beds; 110 for surgical cases, 82 for medical cases, and 120 for fever and other epidemic diseases. A Dispensary for out-door patients is attached to the Medical and Surgical Hospitals. There is an extensive Pathological Museum, containing above 4,000 drawings, casts, and preparations, and a Medical and Surgical Lending Library. Two Clinical Lectures are delivered in each week, in addition to Bedside Instruction given daily by the Physicians and Surgeons. There will be a distinct Course of Lectures and Clinical Instruction in Fevers. A course of Practical Instruction in Ophthalmic Surgery will be given. The Hospitals are visited at 9 A.M. by the Physicians and Surgeons. Operations are performed on Wednesday mornings. Eight resident Clinical Clerks are appointed each half-year, and provided with furnished apartments, etc. The Dressers are selected from among the best qualified of the pupils, without additional fee. At the termination of the Session, premiums will be awarded in Clinical Medicine and Surgery. The Richmond Institution for the Insane, containing over 1,000 patients, adjoins these Hospitals. The Carmichael School of Medicine is also in the immediate vicinity of these Hospitals. Consulting-Physician, Sir D. J. Corrigan, Bart., M.D.; Physicians, Dr. J. T. Banks, Dr. B. G. M'Dowel, Dr. S. Gordon, Dr. R. D. Lyons; Assistant-Physician, Dr. R. J. Harvey; Consulting-Surgeon, Mr. J. Hamilton; Consulting Obstetric Surgeon, Dr. G. H. Kidd; Surgeons, Mr. W. Stokes, Dr. W. Thomson, Dr. W. T. Stoker, Dr. A. H. Correy; Ophthalmic Surgeon, Mr. C. E. Fitzgerald. **Fees.**—Winter and summer session (nine months), £9 9s.; six winter months, £7 7s.; three summer months; £3 3s.; Perpetual Pupils, £25 (paid on entrance). Resident Clinical Clerks, winter session, £21; summer session, £12 12s., including certificate of attendance.

ST. VINCENT'S HOSPITAL AND DISPENSARY.—The hospital is visited daily at 9 A.M. It is connected (by its medical officers) with three leading medical schools in its immediate vicinity. Medical and Surgical Clinical Lectures will be given three times weekly; operations on Fridays, at 10.30 A.M. At the beginning of each winter and summer session, two resident pupils will be selected by competitive examination. At the end of the winter session, an examination will be held in Clinical Medicine and Surgery, at which a senior and a junior prize will be awarded. A portion of all these examinations will be conducted at the bedside. Physicians, Dr. Francis J. B. Quinlan, Dr. Robert Cryan, Surgeons, Dr. Edward D. Mapother, Dr. William H. O'Leary, M.P. Surgeon Dentist, W. J. Doherty, L.D.S. Apothecary, C. T. Boland. **Terms of Attendance.**—Winter and summer sessions, £8 8s.; winter

session, £6 6s.; summer session, £3 3s.; Perpetual pupils, £21. Practical instruction in compounding medicines will be given. Further particulars may be learned on application to Dr. Quinlan, 29, Lower Fitzwilliam Street; Dr. Mapother, 18, Merion Square North; Dr. O'Leary, M.P., 38, York Street; Dr. Cyan, 54, Rutland Square West; or at the hospital.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Office of the Association, 36, Great Queen Street, London, on Tuesday, the 12th day of October next, at Three o'clock in the afternoon.

FRANCIS FOWKE,
General Secretary.

36, Great Queen Street, London, W.C., September 23rd, 1875.

YORKSHIRE, AND EAST YORK AND NORTH LINCOLN BRANCHES.

It having been decided by the respective Councils of the above Branches that the autumnal meeting shall be held conjointly at the York Museum on October 13th, 1875, members of these Branches intending to read papers or cases are requested to forward the title to either of the Secretaries on or before the 27th instant, so that a notice thereof may be included in the circular convening the meeting.

Dinner at the Station Hotel at 5 o'clock. Tickets (exclusive of wine) 7s. 6d. each.

W. PROCTER, M.D., York, } *Hon.*
R. H. B. NICHOLSON, Hull, } *Secs.*

York, September 18th, 1875.

SOUTHERN BRANCH: SOUTH-EAST HANTS DISTRICT.

THE next ordinary meeting of the above Branch will be held at the India Arms Hotel, Gosport, on Wednesday, October 13th, at 4.30 P.M.

Notice has been received of the following communications:—

1. Dr. W. Hoare: Venesection.
2. Surgeon-General J. Mouat, V.C., C.B.: Pyæmia.
3. Dr. Ward Cousins: Case of large Cystic Tumour of Lower Jaw.

Dinner will be provided at 6.15 P.M.; charge 6s., exclusive of wine. Members intending to be present are requested to communicate with Dr. Kealy, Gosport, on or before October 10th.

J. WARD COUSINS, *Honorary Secretary.*

Southsea, September 23rd, 1875.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

THE next meeting of the above Branch will be held at the White Hart Hotel, Reigate, on Thursday, October 14th, at 4 P.M.; J. WALTERS, M.B., in the Chair.

Dr. Daldy will read a paper on Tetanoid Affections associated with Imperfect Development of the Cranium.

Mr. Gandy: Notes on some Cases of Puerperal Fever.

Mr. Hallowes: Cases of Cerebral and Spinal Hemorrhage.

Dr. Walters: On the Treatment of Colles' Fracture, and will exhibit pathological specimens.

Dr. Holman will move a resolution with reference to advertisement of medical works.

Dinner at the White Hart Hotel at 6 P.M. Tickets 6s., exclusive of wine.

JOHN H. GALTON, M.D., *Honorary Secretary.*
Woodside, Anerley Road, S.E., September 27th, 1875.

WEST SOMERSET BRANCH.

THE autumnal meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, October 14th, at 5 o'clock.

The following question has been settled by the Council as the one on which members should be invited to express their opinion at the said meeting after dinner:—"Is the disuse of Bloodletting in the Treatment of Disease in accordance with the principles of Pathology?"

Dr. Cordwint proposes to read a paper "On Tissue-Change in Fevers".

Dinner (on the table at 5 o'clock), 4s. a head, exclusive of wine.

W. M. KELLY, M.D., *Honorary Secretary.*
Taunton, September 16th, 1875.

BATH AND BRISTOL BRANCH.

THE first ordinary meeting of the Session will be held at the York House, Bath, on Thursday, October 28th, at 7.15 P.M.: W. M. CLARKE, Esq., President.

R. S. FOWLER, Bath. } *Honorary Secretaries.*
E. C. BOARD, Clifton. }

Bath, September 24th, 1875.

STAFFORDSHIRE BRANCH.

THE second annual meeting of this Branch will be held at the London and North Western Railway Hotel, Stafford, on Thursday, October 28th, at 2.30 P.M. precisely. President, R. GARNER, Esq., F.L.S. The President-elect (H. DAY, M.D., F.R.C.P.) will deliver an address. Dinner at 5 P.M. precisely. Tickets 10s. 6d. each, exclusive of wine.

VINCENT JACKSON, } *Honorary Secretaries.*
RALPH GOODALL, }

Wolverhampton, September 27th, 1875.

BORDER COUNTIES BRANCH.

THE autumnal meeting of the above Branch will be held at the County Hotel, Carlisle, on Friday, October 29th, at 1 P.M.

Gentlemen intending to read papers, or to be present at the dinner, are requested to give notice to the Secretaries.

STEWART LOCKIE, } *Honorary Secretaries.*
JOHN SMITH, }

Carlisle, October 2nd, 1875.

SOUTH MIDLAND BRANCH: AUTUMNAL MEETING.

THE nineteenth autumnal meeting of this Branch was held in the Council Chamber of the Guildhall, Northampton, on Wednesday, September 22nd, at 2 P.M.; HENRY TERRY, Esq., President, in the Chair. The following members were also present: Dr. Buszard; Dr. Bryan, honorary secretary and treasurer; W. Moxon, Esq., honorary secretary; H. Spurgin, Esq.; C. J. Evans, Esq., and Dr. James, of Northampton; Dr. Prior, and H. W. Sharpin, Esq., of Bedford; Dr. Newman, of Stamford; Robert De'Ath, Esq., of Buckingham; R. W. Watkins, Esq., of Towcester; Alfred Haviland, Esq., of Rothwell; George Hadday, Esq., West Haddon; G. H. Grindon, Esq., Olney; Dr. More, Rothwell; etc. Previously to the meeting, the members were entertained at luncheon by the President.

New Member.—Mr. Alfred Partridge Kingcombe, of Towcester, was elected.

Annual Meeting in 1876.—A letter was read from Dr. Bradbury, stating that the Cambridge and Huntingdon Branch was willing to hold a conjoint meeting at Bedford next year. It was proposed by Mr. Watkins, and carried:

"That the annual meeting of the South Midland Branch in 1876 be held at Bedford, under the presidency of H. W. Sharpin, Esq.; and that the Branch will be happy to combine with the Cambridge and Huntingdon Branch."

It was also proposed that the two above-named Branches, together with the East Anglian, should hold a combined meeting at Peterborough in 1877.

Papers.—The following papers were read and discussed.

1. On the Difference between the Geographical Distribution of Scarlet Fever and Typhoid Fever (illustrated by maps). By Alfred Haviland, Esq.

2. Suppression of Urine lasting five days: terminating fatally. By W. Newman, M.D.

3. Symmetrical Necrosis of both Femora. By W. Newman, M.D.

4. Notes of Nine Cases of Pyæmia occurring in Private Practice. By F. Buszard, M.D.

Votes of Thanks.—It was proposed and carried unanimously, "That votes of thanks be given to the authors of papers, to the president and ex-president, to the honorary secretaries; also to the mayor and authorities for the use of the Council Chamber."

The members separated at 4.30 P.M., after a very agreeable and instructive meeting.

VACCINATION.—Mr. Robert Manners Mann has been awarded by the Local Government Board the sum of £109 2s., as extra-payment for efficient vaccination. Mr. Mann is the officer for No. 3 District in the township of Manchester.—The Local Government Board have awarded the grant of £13 4s. to Dr. E. W. Orton of Bedworth, Warwickshire, for efficient vaccination in that district.

OBITUARY.

JOHN HUGHES BENNETT, M.D., F.R.S.E.

JOHN HUGHES BENNETT was born in London on August 31st, 1812, and died at Norwich on September 25th, 1875, in the sixty-fourth year of his age. He was educated at the Grammar and Mount Radford Schools at Exeter. His mother was a lady of brilliant intellectual powers, independence of spirit, and high culture, and from her he inherited many of those intellectual gifts and traits of character by which he was afterwards distinguished. It was she who cultivated his literary and artistic tastes, and trained him in the art of correct reading and elocution. From an early age, she was in the habit of causing him to read aloud in her presence the plays of Shakespeare, while she taught him the art of emphasis and gesture. To this must, no doubt, be attributed his well known histrionic power, which years afterwards gave an elegance and finish to his lectures and public speeches rarely to be met with. During part of his education, he resided along with his mother in various parts of the continent, more especially in France. Here he acquired a sympathy with the character and deeds of the gallant nation, which he retained throughout life. He commenced the study of medicine, 1829, as an articulated pupil to the late Mr. Sedgwick, surgeon at Maidstone, intending in due time to obtain the diploma of the Royal College of Surgeons and the license of the Apothecaries' Company. It is said that for a short time he was a student at St. Bartholomew's Hospital. As Mr. Sedgwick's pupil, he became an adept in the art of dispensing, and engaged in the routine work of a general practice. Even at this early period of his professional career, he appears to have developed an interest in pathological inquiry. He frequently assisted in *post mortem* examinations, and there is now before us a volume of notes made at that time which are characterised by much of the method and accuracy of description which may be observed in his matured writings. On one occasion, it appears, that he and another pupil made a *post mortem* examination without the knowledge or consent of his master. In this instance, zeal outran discretion. Mr. Sedgwick was angry; and, the consequence was, an abrupt termination to the apprenticeship. This incident, in one sense, was the turning point of his career. Had he continued with Mr. Sedgwick to the end of his apprenticeship, one can easily imagine how different his after life might have been.

After much anxious consultation with his friends, he resolved to pursue his medical education in Edinburgh. Accordingly, he enrolled himself as a student of the University in 1833. When he came to Edinburgh, it is said that he was unacquainted with any one, and it is a striking proof of his great talent, perseverance, and industry that, in the course of a very few years, he became well known, not only in Edinburgh, but throughout Europe. During his career as a student, he studied with zeal and assiduity; devoting his attention, however, more especially to anatomy, physiology, and pathology. He frequently alluded to two of his teachers as being men who exercised a great influence over him. The one was Robert Knox the anatomist, and the other John Fletcher the physiologist. The first he considered a model teacher who possessed the power of fascinating his pupils; the second he often spoke of as a man of profound learning and originality of mind, whose writings had fallen into unmerited neglect. Whilst a student, Dr. Bennett soon found a place among the foremost spirits of the day. He was one of the famous Brotherhood or "Order", founded chiefly by Edward Forbes, which had for its watchword ΟΙΝΟΣ, ΕΡΟΣ, ΜΑΘΗΣΙΣ (wine, love, learning), and which was "an union of the searchers after truth, for the glory of God, the good of all, and the honour of the Order, to the end that mind may hold its rightful sway in the world". He had as associates such men as the two Goodsirs, Edward Forbes, John Hutton Balfour, John Reid, Martin Barry, and Henry Lonsdale, all of whom afterwards became distinguished leaders in science. With them and others he took an active part in the affairs of the Royal Medical Society, of which in due time he became a President. In this arena, he cultivated the art of debate, and no doubt acquired by practice that fluency of speech and readiness in reply which were so serviceable to him in after life. He regarded the Royal Medical Society as one of the most valuable adjuncts to medical education and culture in Edinburgh, and a session rarely passed without the Society having the benefit of his powerful advocacy from the professorial chair. Whilst a student, he published two papers: the first, On the Anatomy and Physiology of the Otic Ganglion, in the *London Medical Gazette* of July 30th, 1836; and the second, being an Address to the Members of the Royal Medical Society, appeared in pamphlet form in December of the same year.

In 1837, he received the degree of M.D. with the highest honours, obtaining, on the recommendation of the late Professor Syme, a gold medal for the best surgical report; whilst Sir Charles Bell recommended his thesis as worthy of another. The title of his thesis was, *Inaugural Dissertation on the Physiology and Pathology of the Brain: being an attempt to ascertain what portions of that organ are more immediately connected with motion, sensation, and intelligence.* He was afterwards informed by Mr. Syme that he would have received a second medal, had there not been a rule that two medals could not be awarded to the same competitor.

After graduating, Dr. Bennett proceeded to Paris, where he studied for two years, and became President of the Parisian Medical Society; he also went to Germany, and spent other two years in the principal University cities. In Paris, he devoted his attention chiefly to the study of the use of the microscope in practical medicine, and also to clinical instruction in the hospital. The clear, precise, methodical style pursued by the French physicians harmonised with his own qualities of mind, and there is little doubt the system of clinical instruction which he afterwards successfully introduced into Edinburgh, was carefully elaborated by him while in Paris. Whilst on the continent, he wrote the following articles in Tweedie's *Library of Medicine*, vol. ii: (1) On the Physiology of the Nervous System, (2) Hydrocephalus, (3) Apoplexy, (4) Delirium Tremens, (5) Cephalalgia, (6) Epilepsy, (7) Catalepsy, (8) Spinal Irritation, (9) Spinal Meningitis, (10) Myelitis, (11) Hydrorachis, (12) Spinal Apoplexy, (13) Tetanus, (14) Hydrophobia, (15) Paralysis, (16) Barbiers, (17) Otitis. In 1841, he also wrote in the *Bulletin de la Société Anatomique de Paris*, a paper entitled, Note sur le Développement de Nerfs particulières à la surface du Cervelet, in which he described the remarkable appearance of a number of nerves ramifying on the surface of the cerebellum of a man thirty-eight years of age, who died of acute pneumonia in the lunatic asylum of Heidelberg.

In 1841, he returned to Edinburgh, and in November he commenced a course of lectures on histology. One of the handbills announcing the second or summer course of lectures is now before us, and, as the matter is one of historical interest, it is as well to copy it *verbatim*. "Histology. Dr. Bennett, during the summer session, will give a public course of lectures on the Minute Structure of Organised Tissues, with reference to Anatomy, Physiology, Pathology, and the Diagnosis of Disease. These lectures will be illustrated by numerous preparations, diagrams, and demonstrations under the microscope; the latter by means of twelve achromatic instruments of great power, manufactured by Chevalier of Paris expressly for this course. An introductory lecture will be delivered on Friday, May 13th, at 11 A.M., in the class room, Surgeons' Square, and the course will be continued every Monday, Wednesday, and Friday, at the same hour, throughout the session; fee, £2 2s. Dr. Bennett will also give private courses on the Practical Manipulation of the Microscope. Each class is limited to six, and the time of lecture regulated by the wishes of the majority. The lectures embrace the optical and mechanical arrangements of microscopes, illumination, mensuration, optical illusions, mode of displaying objects, and every information necessary for the medical inquirer, in his examination of the animal textures in a state of health and disease; fee, £3 3s. 16, Pitt Street, May 2nd, 1842."

Prior to this date, histology was taught in a general way, and demonstrations of microscopical preparations were given by other teachers, notably by Dr. Allen Thomson, who held the Chair of Institutes of Medicine in Edinburgh, and who is now the distinguished professor of anatomy in the University of Glasgow. But it appears that Dr. Bennett was the first to teach the use of the microscope systematically, and it was he who first clearly recognised its great importance in the clinical investigation of disease. This course of instruction given by Dr. Bennett must also be regarded as the first attempt at the practical teaching of physiology and pathology made in this country. Even at this early period of his career, he appears to have held the opinion that every medical man should be skilful in the manipulation of the microscope, and more especially that the microscope should be always employed in the examination of diseased organs. At the time when Dr. Bennett commenced this course of lectures, the value of the microscope in pathological research was not sufficiently known in this country. So long as an organ showed no change in its material substance when examined by the naked eye, physicians called its affections functional, and the fact of microscopical changes of structure was overlooked. By instructing many of the rising members of the profession in the manipulation of the microscope, Dr. Bennett not only advanced the interests of the Edinburgh medical school by bringing its teachings to a level with those of continental institutions, but he stimulated many ardent minds to enter upon a new path of inquiry which led to fruitful results.

On October 1st, 1841, Dr. Bennett published his *Treatise on the*

Oilum Jecoris Aselli, or Cod-Liver Oil, as a Therapeutic Agent in certain forms of Gout, Rheumatism, and Scrofula, with Cases. This work is dedicated to Dr., now Sir Robert, Christison, and is an early evidence of the long friendship which existed between the distinguished President of the Association and Dr. Bennett. Whilst Dr. Bennett resided in Germany, cod-liver oil was extensively used in the treatment of chronic gout, rheumatism, and of scrofula, and he lost no opportunity of watching its therapeutic effects. So impressed was he with its value, that almost immediately on his return home, he published the *Treatise*, which at the time excited great interest in the profession. To him no doubt belongs the credit of having more especially urged its use in the treatment of many cases of phthisis pulmonalis. Cod-liver oil had been long known as a popular remedy in Scotland, more especially among the fishing populations of the north and north-east coasts. It had a reputation in Lancashire for the cure of rheumatism; and, according to Dr. Bennett, Dr. Kay, one of the physicians to the Manchester Infirmary in 1789, was the first medical man who prescribed it for the cure of disease. Still the general use of this valuable therapeutic agent will always be associated with the name of John Hughes Bennett.

In 1842, he was an unsuccessful candidate for the chair of General Pathology in the University of Edinburgh, when the late Professor Henderson was appointed. About this time, he became a Fellow of the Royal Society of Edinburgh, a Fellow of the Royal College of Physicians of Edinburgh, Physician to the Royal Dispensary, and Pathologist to the Royal Infirmary. As one of the physicians to the Royal Dispensary, he gave six winter courses, each of six months' duration, and seven summer courses, each of three months' duration, on polyclinical medicine. These classes were formed on the model of the German polyclinic, in which students are taught practically, under the eye of their teacher, to examine and prescribe for patients. The first course was delivered by Dr. Bennett in the winter of 1841; although it must be recorded that the same method, as applied to surgery, had been previously introduced into the Surgical Hospital, Minto House, by the late Professor Syme. The peculiarity of the course was that opportunities were afforded the pupil of himself interrogating the patient; examining the diseased organs or their products by means of the pleximeter, stethoscope, chemical reagents, microscope, etc.; and of thus forming his own diagnosis. The opening lecture, given in November 1845, was on the Methods of Studying Practical Medicine in different Countries, and the advantages of Polyclinical Instruction.

Whilst acting as pathologist to the Royal Infirmary, he worked with great diligence, and formed a private museum of morbid anatomy, containing about eight hundred wet, and three hundred dry, preparations. He also delivered six winter courses of lectures on pathology and practice of physic, in which the special feature was the demonstration under the microscope of all accessible morbid tissues and fluids, with arrangements permitting each student to see and examine them himself.

From 1842 to 1848, when he was appointed to the chair of Institutes of Medicine, rendered vacant by the transference of Dr. Allen Thomson to the chair of Anatomy in Glasgow, Dr. Bennett appears to have lived a life of incessant mental activity. For several years, he was proprietor and editor of the *Edinburgh Monthly Journal of Medical Science*, to which, in addition to ordinary editorial duties, he contributed numerous papers.

In this short story of his life for his professional brethren, could he read it now, nothing, we feel sure, would please him better than to find a simple record of what he did, without laudatory note or comment. With this feeling, we have looked over the journals and volumes of that period, and collated the titles of all the papers written by him. The following papers testify to his extraordinary power of labour.

1. On the Employment of the Microscope in Medical Studies; a Lecture Introductory to a Course of Histology.
2. On the Art of Percussion as applied to the Diagnosis of Thoracic and Abdominal Diseases (*Monthly Journal of Medical Science*, February 1842).
3. On the Parasitic Fungi found growing on Living Animals, with two plates (in the *Transactions of the Royal Society of Edinburgh*). In this important memoir, he confirmed and extended the observations and experiments of Gruby concerning the mycodermatous vegetations found in the crusts of the disease called *Tinea favosa*, or *Porrigo lupinosa* of Bateman; he announced the occasional existence of, and described, a plant found growing on the lining membrane or cheesy matter of tubercular cavities in the lungs of man; and he described and figured a plant found growing in the skin of the gold fish.
4. On the Vegetable Nature of *Tinea Favosa*; its Symptoms, Causes, Pathology, and Treatment; coloured plate (*Monthly Journal of Medical Science*, 1842).
5. Pathological and Histological Researches on Inflammation of the

Nervous Centres (*Edinburgh Medical and Surgical Journal*, October 1842, and October 1843).

6. On Anormal Nutrition, as observed in Softening, Suppuration, Granulation, Reorganisation of Tissue, Morbid Growths, etc. (*Monthly Journal of Medical Science*).—This paper was communicated to the Medico-Chirurgical Society of Edinburgh, November 9th, 1842.

7. Note on the Structural Changes of the Blood in the Haemorrhagic Diathesis (*Monthly Journal of Medical Science*, 1842).

8. On Crackling of the Thumb caused by Dryness of the Sheath of the Tendons (Medico-Chirurgical Society, December 7th, 1842).

9. Pathological and Histological Researches on Inflammation of the Nervous Centres; two plates.—This important work may be regarded as the first positive addition to our knowledge of nervous diseases which has been made in this country by means of the microscope. He clearly established that the great characteristic of inflammatory softening is the presence of exudation-corpuscles about the minute vessels, and among the elements of the softened cerebral tissues.

10. Treatise on Inflammation as a Process of Anormal Nutrition; coloured plate. Edinburgh, 8vo, 1854.—In the summer of 1843, Dr. Bennett gave a course of lectures to the Fellows of the Royal College of Physicians and the leading members of the profession in Edinburgh on inflammation. They were illustrated by numerous demonstrations under a series of achromatic microscopes, and were calculated to show the importance of microscopical and chemical researches as a means of advancing pathology and the diagnosis of disease. These lectures were first published in the *Edinburgh Medical and Surgical Journal* for January and July 1844, and afterwards they formed the volume just mentioned.

11. On the Frequent Spontaneous Cure of Pulmonary Consumption, and the indications furnished by Pathology for its Rational Treatment (*Edinburgh Medical and Surgical Journal*, April 1845).

12. Case of Poisoning with Hemlock (*Conium maculatum*) (*Edinburgh Medical and Surgical Journal*, July 1845).—Read before the Medico-Chirurgical Society of Edinburgh on May 7th, 1845.—In this remarkable paper, he clearly proved, from a comparison between the symptoms of the case and those recorded as having followed the drinking of the *Kóκκων* by Socrates, that the poison used at the State execution of criminals in ancient Athens was the same drug as our present hemlock.

13. Case of Hypertrophy of the Spleen and Liver, in which Death took place from Suppuration of the Blood (*Edinburgh Medical and Surgical Journal*, October 1845).—This celebrated paper contained the first recorded case of the disease now known as leucocythæmia. It formed part of a conjoined paper by the late Dr. Craigie and himself, entitled Two Cases of Disease and Enlargement of the Spleen, in which Death took place from the presence of Purulent Matter in the Blood. The first case was recorded by Dr. Craigie, and the second by Dr. Bennett.

14. A Lecture introductory to a Course on Histology and the Use of the Microscope (*Lancet*, May 10th, 1845).

15. Note on the Inoculability of *Tinea Favosa*—*Porrigo lupinosa* of Bateman (*Northern Journal of Medicine*, vol. iii, p. 202).—After inoculating his own scalp with favus matter, and performing similar experiments on many others, he did not succeed in proving that the disease might be communicated from one individual to another.

16. Pathological and Clinical Researches into the Nature and Treatment of Scrofulous and Tubercular Diseases (*Northern Journal of Medicine*, vol. iv, p. 210, et p. 273. 1846).

17. Case of Ovarian Dropsy in which both Ovaries were excised, terminating fatally on the seventeenth day from Strangulation of the Intestine.—This was a conjoint paper with Dr. Handyside, the present venerable lecturer on anatomy at Surgeons' Hall, Edinburgh. Previously to this case, the operation of ovariectomy had been performed 101 times with such doubtful success that the great surgical authorities of the day hesitated to recommend it. The record of this case was communicated by the authors to the Medico-Chirurgical Society of Edinburgh; and it led to a memorable debate, which probably had the effect of directing the minds of surgeons to the operation, with the view of collecting data for an accurate diagnosis of the disease, and of improving the method of performing the operation.

18. Pathological and Clinical Observations on Encysted Tumours of the Ovary (*Edinburgh Medical and Surgical Journal*, April 1846).—In this paper, Dr. Bennett advocated the use of the microscope in the examination of the fluid obtained by paracentesis, and pointed out certain microscopical differences between the fluid of an ovarian tumour and that obtained from the abdominal cavity in ascites.

19. On the Minute Structure and Chemical Composition of Tubercular Deposits (*Northern Journal of Medicine*, 1846).

20. How should Medicine be advanced? with a few words in reply

to the suggestions of Dr. Forbes (*Monthly Journal of Medical Science*, July 1846).—This paper formed the first of a valuable series of communications to this journal, entitled "Contributions to Pathology and Rational Medicine". Here he offered the following suggestions, as indicating how clearly he recognised what was required to advance medical science. He writes: "In conclusion, we have also a few suggestions to offer, which, if adopted, we think might be useful in furthering the cause we advocate. They are: 1. To encourage the idea among the profession which considers him to be the truly practical man who exercises a sound reason and judgment in the practice of medicine and surgery, based rather upon a knowledge of anatomy and physiology—morbidity anatomy and pathology—than upon mere experience. 2. To encourage the habitual use of specula, stethoscopes, pleximeters, sounds, microscopes, and every instrument capable of bringing the products of disease under the immediate cognisance of the senses, and thus rendering diagnosis exact. 3. To encourage the study of pathological anatomy on rational grounds; that is, by examining all the organs in every case, investigating into the minute structure of every morbid product, and by obtaining a chemical analysis of these, and of the blood, whenever this is practicable. 4. To place in all hospitals connected with medical schools an officer well acquainted with morbid anatomy, and the modern means of cultivating it, whose duty it shall be to conduct the *post mortem* examinations, keep a minute record of each, teach morbid anatomy to the students, and publish a yearly report. 5. That in our public institutions, the history of disease should not be recorded by young men, inexperienced in observation, but should in all cases be dictated by the physician or surgeon. 6. To extend and give greater importance to clinical instruction, by introducing the system of bedside tuition, so advantageously practised in continental universities; and by taking care that those who teach are enabled to communicate to their pupils the manual dexterity and knowledge in the use of all those instruments essential to an exact diagnosis. 7, and lastly. To impress upon the legislature the necessity of introducing some system which will insure the appointment to our public hospitals of well educated physicians and surgeons, intimately acquainted with pathology and the principles of rational medicine: otherwise it cannot be reasonably anticipated that the extensive opportunities for observation which these institutions afford will ever be made available in advancing the healing art for the good of the community at large."

20. On the Elementary Forms of Disease (*Monthly Journal of Medical Science*, August 1846).

21. On the Presence of Conservæ in some Exudative Masses passed by the Bowels (*Monthly Journal of Medical Science*, September 1846).

22. Biographical Sketch of Dr. John Thomson, late Professor of General Pathology in the University of Edinburgh (*Monthly Journal of Medical Science*, October 1846).

23. On Anormal Nutrition and Diseases of the Blood (*Monthly Journal of Medical Science*, November 1846).

24. On the Causes and Development of Exudation (*Monthly Journal of Medical Science*, January, February, March, June, August, November, and December, 1847, and January and April 1848).

25. On Hypertrophies and Tumours (*Monthly Journal of Medical Science*, March 1847).

26. On the Fallacies of the Statistical Method (Medico-Chirurgical Society, July 7th, 1847). A speech in the debate on a paper by Professor Simpson on Etherisation.

27. On a New Form of Serous Inflammation, in which there was apparently no Affection of the Membrane (Medico-Chirurgical Society, June 13th, 1847).

28. Pathological and Clinical Observations on Cancer (*Monthly Journal of Medical Science*, October 1847).

29. On Encysted Growths (*Monthly Journal of Medical Science*, December 1847).

30. On the Structural Relation of Oil and Albumen in the Animal Economy, and on certain Physical Laws connected with the Origin and Development of Cells.—This paper was read to the Royal Society of Edinburgh, April 19th, 1847; it appeared in the *Proceedings* of that learned body of 1846-47, and condensed in the *Monthly Journal of Medical Science* for September 1847.

31. On a New Structure observed in a Tumour of the Tentorium. (Communicated to the Pathological Society of London; appeared in the Society's Reports, in the *Lancet*, and in the *Medical Times and Gazette* of April 1847.)

32. On Vascular, Cartilaginous, and Osseous Growths (*Monthly Journal of Medical Science*, October 1847).

33. On the Morbid Anatomy and Pathology of the Fever which has been prevalent in Edinburgh during the session 1846-47. (Communicated to the Medico-Chirurgical Society July 7th, 1847; *Monthly Journal of Medical Science*, October 1847.)

34. Report on the Physiological Action of Chloroform.—This report was made by a famous committee, of which Dr. Bennett was the reporter. It consisted of Drs. Alison, Christison, Douglas Maclagan, Taylor, Duncan, Roberts, Allen Thomson, and Gairdner. It was read to the Medico-Chirurgical Society on December 15th, 1847, and detailed numerous experiments made both on man and on the lower animals.

On the 13th July, 1848, Dr. Bennett was unanimously elected to the Chair of Institutes of Medicine. His chief opponent was Dr. Martin Barry, who had already acquired an European reputation by his celebrated researches on the ovary. As Barry could not sign the "tests" then in force, he withdrew from the contest.

Professor Bennett was elected to the Chair not merely on his merits as a physiologist, but because he was versed in pathology and therapeutics. It had always been the aim of former occupants of the chair—as, indeed, of all the medical chairs in the University—to give a practical bearing to their courses of instruction. At that time it was not considered to be the duty of the holder of the chair to teach physiology pure and simple as a branch of scientific inquiry, but to teach it by constant reference to the sciences of pathology and therapeutics. A candidate, therefore, required not merely to be an accomplished physiologist in the ordinary acceptation of the term, but likewise a physician; and not merely a physician, but also a pathologist. This view of his duty Dr. Bennett firmly held during his occupancy of the chair. He taught the Institutes of Medicine; and his class, to the ordinary student who expected to earn his bread by practice in the medical art, was one of the most popular and practically useful in his curriculum. In his later years, he viewed with dismay the tendency to divorce physiology from its practical relations to the wants of the profession.

From this time, Professor Bennett's energies were directed into two channels, and, to form a true estimate of what the man was and did, we must remember both. As professor, he now became one of the clinical teachers of medicine in connection with the University, and he also taught physiology from the professorial chair. Whilst his duties in the first position, and the demands made on his time as a consulting physician, prevented him from engaging in the special physiological researches which he probably would have done if he had had no clinical work, still the loss was more than compensated for by the great excellence he attained as a teacher of clinical medicine. In this department, he was unsurpassed. His system of instruction has served as a model to many who are now performing that duty in our various teaching institutions. The leading idea which prevailed in his mind was to teach the student method. Thus he was a teacher of the highest order. He was not content with merely communicating certain facts to the student, but he showed him how to observe and record facts for himself. Irsome at first, his system was always appreciated by the better class of students. He taught them so that they soon became as great adepts as the master. Nothing annoyed him more than loosely recording facts. Precision was what he inculcated. All ambiguous phrases were struck out of the record of the case, and also all allusions to what was irrelevant matter. He had no faith in the encyclopaedic method of case-taking. If there were no direct relation between an attack of measles at 8 years of age and an attack of pneumonia at 50, the reference to the former was at once repressed. He showed the student how to examine the organs and physiological systems consecutively and in the proper order. It was also his object to encourage the student to think. Often he disputed not only the accuracy of the facts the student gave him, but also the inductions he made from these. Sometimes, it must be confessed, he did so to test the student's mental power. Nothing pleased him more than to meet with a man who could hold his own in argument, and who gave evidence of intelligence and perspicuity. He regarded his course of clinical medicine as the sequence and complement to his lectures on the Institutes. As an examiner, Dr. Bennett was by most held in great dread. A good student had no cause to fear; but men who had no practical acquaintance with the subject were soon found out. He was one of the first to advocate the system of practical examinations. He was not severe upon students as to the number of facts they retained in memory, but as to their intelligent apprehension of the facts. If, by varying the question, so as to expose another side of the subject, the student were confounded, he was apt to think, sometimes too quickly, that the student knew nothing at all about it. As an examiner, too, he had a keen sense of the fact that he was performing a very responsible public duty.

In the class-room, Professor Bennett delivered lectures which were characterised by elegance of style and appropriate emphasis. Few were equal to him in this respect. His lectures were all fully written out, not because he would have had any difficulty in speaking from notes, but because he wished to avoid becoming diffuse. He never failed in interesting the crowd of students before him. His spe

talent of *extempore* speaking appeared to greatest advantage when, laying aside the manuscript, he proceeded to attack the positions of an adversary; and, as he was a man of strongly pronounced opinions of his own, this was by no means an uncommon occurrence. He was remarkably skilful in marshalling his arguments, and in presenting facts and views in support of his own position in the most attractive light possible. His advocacy was often somewhat one-sided, and had more of the character of that of a special pleader than the judicial summing up of a judge; but the practical effect on the mind of the student was either entirely to agree with the professor, or, if sharp enough to detect the fallacy, to adopt the opposite view more strongly than he would otherwise have done. Professor Bennett was the first in this country to recognise the necessity of teaching physiology in a practical way. Such a method of teaching physiology was what one would expect from his objective style of teaching any subject. He continued his course of histology from year to year, and to these were afterwards added courses on physiological chemistry and on physiological methods of research with the aid of those instruments of precision now employed by physiologists. This complete course of instruction was begun under his supervision by Dr. Argyll Robertson, and was further developed and improved by Professor Rutherford, the present occupant of the chair, and by Dr. McKendrick, who were successively his assistants.

In 1855, he became a candidate for the chair of the Practice of Physic in the University of Edinburgh. The other candidates were Dr. Alexander Wood and Dr. Laycock. After an exciting contest, the chair was won by its present distinguished occupant, Professor Laycock.

Whilst engaged in teaching in the University and in the Infirmary, Professor Bennett found time for much literary work. He took advantage of his position in the infirmary to obtain records of the cases which came under his care. These he published, with commentaries, from time to time, and ultimately they were collected to form his well known work *Clinical Lectures on the Principles and Practice of Medicine*, which has passed through five editions in this country, six in the United States, and has been translated into French, Russian, and Hindoo.

Continuing the record of his writings from this time to the end of his life, we find the following.

35. Case of Spontaneous Cure of Ovarian Dropsy by means of an Ulcerative Opening of the Cyst into the Bladder. Read before the Medico-Chirurgical Society, January 3rd, 1849.

36. On the Local Treatment of Chronic Eczema and Impetigo (*Monthly Journal of Medical Science*, August 1849).

37. On Tubercle in the Cerebellum (*Monthly Journal of Medical Science*, December 1849).

38. On the Treatment of Phthisis Pulmonalis (*Monthly Journal of Medical Science*, March 1850 and May 1850).

39. Introductory Lecture to Clinical Medicine (*Monthly Journal of Medical Science*, November 1849).

40. On the Classification and Diagnosis of Cutaneous Diseases (*Monthly Journal of Medical Science*, April 1850).

41. Case of White Blood. Medico-Chirurgical Society, March 20th, 1850.

42. Clinical Lecture on Favus, Pompholyx, Eczema, and Psoriasis (*Monthly Journal of Medical Science*, July 1850).

43. Report of Cases of Cardiac Disease in the Clinical Wards of the Royal Infirmary during the Second Half of the Summer Session, 1850 (*Monthly Journal of Medical Science*, September 1850).

44. Clinical Lecture on Examination of Patients (*Monthly Journal of Medical Science*, October 1850).

45. Clinical Lecture on Auscultation (*Monthly Journal of Medical Science*, November 1850).

46. Note of Microscopical Appearances in Dr. Sidey's Case of Hydrophobia (*Monthly Journal of Medical Science*, December 1850).

47. The Microscope as a Means of Diagnosis (*Monthly Journal of Medical Science*, December 1850).

48. On Leucocythæmia, or Blood containing an unusual number of Colourless Corpuscles (*Monthly Journal of Medical Science*, January and April 1851).

49. Report of Cases of Nervous Disease in the Clinical Wards of the Royal Infirmary during the Winter Session of 1850-51 (*Monthly Journal of Medical Science*, March 1851).

50. On Leucocythæmia (*Monthly Journal of Medical Science*, August and October 1851).

51. Colchicum in the Delirium and Coma of Scarlet Fever (*Monthly Journal of Medical Science*, August 1851).

52. Occasional Difficulties in the Diagnosis of Pneumonia (*Monthly Journal of Medical Science*, August 1851).

53. On the Treatment of Phthisis Pulmonalis, in which he advocated the use of the Crystal Palace as a great Sanatorium for the use of

Phthisical Invalids during the Winter Months (*Monthly Journal of Medical Science*, August 1851).

54. On Carbonaceous Lungs (*Monthly Journal of Medical Science*, September 1851).

55. Treatment of Laryngitis by Topical Applications (*Monthly Journal of Medical Science*, November 1851).

56. Report of the Cases of Pulmonary Disease treated in the Clinical Wards of the Royal Infirmary during the latter half of Summer, 1851 (*Monthly Journal of Medical Science*, January 1852).

57. On the Function of the Spleen and other Lymphatic Glands as Secretors of Blood (*Monthly Journal of Medical Science*, January 1852).

58. On Leucocythæmia, or White Cell-Blood (*Monthly Journal of Medical Science*, April 1852).

59. Cases of Pulmonary Disease (*Monthly Journal of Medical Science*, January 1852).

60. Special Treatment of Phthisis Pulmonalis (*Monthly Journal of Medical Science*, February 1852).

61. Report of Cases treated in the Clinical Wards of the Royal Infirmary during the Winter Session, 1851-52 (*Monthly Journal of Medical Science*, March, April, and June, 1852).

62. On Aneurism of the Superior Mesenteric Artery and Aorta, Diagnosis of Aneurisms, Poisoning by Aconite, and the Treatment of Aneurisms by Valsalva's Method (*Monthly Journal of Medical Science*, July 1852).

63. Diseases of the Liver (*Monthly Journal of Medical Science*, August 1852).

64. On the Eruptive Fevers (*Monthly Journal of Medical Science*, October 1852).

65. Illustrations of Laryngeal and Pharyngeal Diseases which are frequently mistaken for, or associated with, Phthisis (*Monthly Journal of Medical Science*, December 1852).

66. On Functional and Organic Diseases of the Stomach (*Monthly Journal of Medical Science*, February and April 1853).

67. On the Pathology and Treatment of Pulmonary Tuberculosis, being reply to a letter from Dr. Markham (*Monthly Journal of Medical Science*, December 1853).

68. Notes on Hospital Practice (*Monthly Journal of Medical Science*, December 1854).

69. Letter from Professor Bennett to Editor of *Monthly Journal of Medical Science*, in reply to one from Professor Kölliker regarding Discovery of Leucocythæmia. October 1855.

70. Speech on the Contagious Nature of Cholera (*Monthly Journal of Medical Science*, January 1854).

71. Structure of the Torbanehill Mineral as compared with that of Coal (*Transactions of the Royal Society of Edinburgh*, 1854).

72. On the Ectrotic Treatment of Small-Pox by Zinc Plaster; on the Treatment of Favus by Sulphurous Acid Lotion; on Transient Grinding Pain shown to be coincident with Passage of Biliary Calculi; on the Diagnostic Value of the Absence of Chlorides from the Urine; on a Case of Ovarian Dropsy (*Monthly Journal of Medical Science*, April 1854).

73. On the Treatment of the more Common Forms of Skin-Disease met with in Edinburgh (*Monthly Journal of Medical Science*, January 1855).

74. Clinical Notes (*Monthly Journal of Medical Science*, February 1855).

75. Practical Remarks on the Physical Diagnosis of Phthisis (*Monthly Journal of Medical Science*, January 1856).

76. A Clinical Investigation into the Diagnostic Value of the Cracked-Pot Sound (*Edinburgh Medical Journal*, March 1856).

77. Observations on the Results of an advanced Diagnosis and pathology applied to the Management of Internal Inflammations, compared with the effects of a former Antiphlogistic Treatment, and especially of Blood-letting. This paper was read before the Medico-Chirurgical Society on January 21st, 1857, and excited a great discussion, in which all the leading physicians and surgeons took part. Controversial papers appeared on the subject from the pens of Professor Alison, Professor Gairdner (now of Glasgow), and Sir Thomas Watson. To all of these, Dr. Bennett replied.

78. On Injections of the Bronchi in Pulmonary Diseases (*Edinburgh Medical Journal*, November 1857).

79. On the Classification, Pathology, and General Treatment of Morbid Growths (*Edinburgh Medical Journal*, December 1857).

80. Description of M. Groux, the subject of Congenital Fissure of the Sternum (*Edinburgh Medical Journal*, February 1858).

81. On the Molecular Theory of Organisation (*Transactions of the Royal Society of Edinburgh*, 1860; also in *Lancet*, May 5th, 1861).

82. On the Treatment of Pneumonia, with the Results of 105 Care-

fully Recorded Cases (*Lancet*, August 16th, 1862).—Paper read at the meeting of the British Medical Association, August 1862.

83. Twelve Lectures in the *Lancet* of 1863 on Molecular Physiology, Pathology, and Therapeutics, and their Application to the Treatment of Disease.

84. Therapeutical Inquiry on Acute Pneumonia (*BRITISH MEDICAL JOURNAL*, October 25th, 1862).

85. Facts and Arguments opposed to Dr. Bennett's Theory of Molecular Organisation, by Dr. Beale of London, with Dr. Bennett's rejoinder (*BRITISH MEDICAL JOURNAL*, February 7th and March 28th, 1863).

86. Letter on Medical Education (*BRITISH MEDICAL JOURNAL*, June 11th, 1864).

87. Physiological Aspect of the Sewage Question (*British Association Reports*, Bath meeting, September 1864).

88. On Cell-Pathology (*British Association Reports*, Birmingham meeting, September 1865).

89. Treatment of Pneumonia by Restoratives (*Lancet*, February 25th, 1865).

90. Further Observations on the Same (*Lancet*, December 23rd, 1865).

91. Observations on the Restorative Treatment of Pneumonia, being a reply to a *critique* in *BRITISH MEDICAL JOURNAL*, 18th November, 1865—16th June, 1866.

92. Treatment of Cancer by injections of Nitric Acid (*BRITISH MEDICAL JOURNAL*, November 24th, 1866).

93. Address in Medicine to the Thirty-fourth Annual Meeting of British Medical Association, at Chester, in August 1866, on the Present State of the Science and Art of Medicine.

94. On the Effects of Mercury on the Secretion of Bile, read at the meeting of the British Medical Association at Dublin, August 6th, 1867; and at the meeting of the British Association at Dundee, in the same year.

95. Letter on Education in Practical Physiology (*BRITISH MEDICAL JOURNAL*, September 21st, 1867).

96. Correspondence regarding the Teaching of Clinical Surgery in Edinburgh (*BRITISH MEDICAL JOURNAL*, May 9th, May 23rd, June 6th, 1868, and January 30th, 1869).

97. Report on the Action of Mercury on the Liver, published in the *BRITISH MEDICAL JOURNAL*; in pamphlet form in *Medicine in Modern Times*, edited by Dr. Acland of Oxford, in 1869; in the Report of the British Association, and lastly as a separate volume, published in Chicago in 1873.

98. On the Atmospheric Germ-Theory, a Lecture delivered before the Royal College of Surgeons of Edinburgh, on January 17th, 1868.

99. On the Pathology and Treatment of Uræmia, and the Use of Blood Letting (*Edinburgh Medical Journal*, June 1868).

100. Address in Physiology to the British Medical Association, at the Leeds Meeting, July 1869.

101. Interim Report on the Antagonism of Medicines, made at the Newcastle Meeting of the British Medical Association, 1870.

102. Report of further Experiments, demonstrating that Mercury has no Special Action on the Liver (*BRITISH MEDICAL JOURNAL*, January, 7th, 1871).

103. On the Therapeutical Effects of Chloral, Medico-Chirurgical Society, Edinburgh, April 6th, 1870.

104. Graduation Address, August 1871.

105. Researches into the Antagonism of Medicines: Report given at Norwich Meeting of the British Medical Association in 1874 (*BRITISH MEDICAL JOURNAL*), and afterwards separately published.

He also published another Graduation Address, and a paper on Physiology as a branch of general education; but the dates of these we have not been able to obtain.

His larger works are as follows:

1. *Clinical Lectures on the Principles and Practice of Medicine.*
2. *Pulmonary Consumption.*
3. *On Cancerous and Cancroid Growths.*
4. *An Introduction to Clinical Medicine.*
5. *Outlines of Physiology*, being a reprint of the article Physiology, in the last volume of the *Encyclopædia Britannica.*
6. *Text-Book of Physiology—General, Special, and Practical.* First editions of this work, published simultaneously in this country and in America, are nearly exhausted, and a French translation is in the press.

The above is as complete a record of his writings as we have been able to make. In all probability, important papers in other volumes may have escaped notice, but enough has been given to indicate a life of rare industry. Few men are capable of doing one-half of the amount of work.

Dr. Bennett received numerous honours both at home and abroad.

He was President for two years of the Medico-Chirurgical Society of Edinburgh, honorary member and *emeritus* President of the Royal Medical Society of Edinburgh; fellow or member of various scientific societies in London, Dublin, St. Andrew's, New York, Philadelphia, Boston, Paris, Brussels, Vienna, Berlin, St. Petersburg, Jena, Stockholm, Athens, Buda-Pesth, Copenhagen, Amsterdam, etc. He was also a Member of the Academy of Medicine of France, and about twelve months ago he received a special recognition from the French Government, entitling him to practise medicine in France.

No later than August, at the graduation ceremony of the Edinburgh University, he was honoured by receiving the degree of LL.D.; and on the same day a marble bust by Mr. William Brodie, subscribed for by his numerous pupils throughout the country, was presented in eloquent language to the University by Dr. Andrew Clark of London, to be placed in the library hall.

In middle life, Dr. Bennett was a strong, able-bodied man, capable of undergoing a great amount of physical and mental exertion. About ten years ago, however, his health began to give way, and he suffered from an affection of the throat. This trouble obliged him during one session to spend the winter in the south of France, and during his absence his duties were performed by Dr. Argyll Robertson. This period of repose appeared to have to a certain extent restored his vigour, but in 1869 he again fell into delicate health. At the Christmas recess of the session 1871-2 he was again obliged to obtain leave of absence for the remainder of the winter and spring. He proceeded to Mentone, in France, and in the summer time he returned to Edinburgh, and delivered a few clinical lectures. The winters of 1872-3 and 1873-4 he again spent on the Continent, and during his absence these three years the duties of the chair were discharged by his assistant, Dr. M'Kendrick. Repose, however, brought him no permanent gain of strength, and he resigned the Chair of the Institutes of Medicine in July last year. Last winter he spent in Nice; and although there seemed to be no distinct improvement in his health, he was able to engage in a considerable amount of consulting practice as a physician. He was present in Edinburgh at the late meeting of the British Medical Association, when his pale and emaciated appearance filled his friends with great alarm. It was interesting to observe at that gathering of medical men how desirous his numerous pupils, now scattered over the country, were to exchange a few words with, and grasp the hand of, their old master. We believe no honour of his previous life was more highly appreciated by him than that of his *alma mater* conferring upon him its highest scientific distinction, and he was also proud that his bust obtained a place among the many worthies whose statues now adorn the library hall of the University. Professor Bennett leaves a widow and a family of five. His only son, Dr. Alexander Hughes Bennett, is now practising as a physician in London.

To sum up the results of Dr. Bennett's arduous life, we may enumerate the following as being his chief contributions to the science and practice of his profession.

1. He was the principal agent in advocating the use of cod-liver oil in this country in the treatment of tubercular diseases.
2. He was the first systematically and practically to teach histology and the use of the microscope.
3. He was the first to introduce the systematic teaching of clinical medicine, with the aid of all the modern appliances now in use.
4. He was the first to show the great importance of the microscopic examination of diseased organs, and more especially of the great nervous centres.
5. He pointed out the errors in the prevalent method of treating acute inflammations of internal organs, and more especially of the lungs; and was highly instrumental in leading to the almost entire abolition of bleeding in these affections.
6. He condemned the indiscriminate drugging of patients much in vogue, and especially the too free use of mercury in syphilis and in diseases of the liver.
7. He was the first to record a case of leucocythæmia, and, while he did not at the time discern its true character, he contributed largely to its diagnosis and pathology, and also to the application of the discovery to an explanation of the functions of the lymphatic and blood glands.
8. He was one of the first to advocate combined labour in the prosecution of scientific inquiries, and to the principle of grants of money being given by public bodies for that purpose.
9. He contributed to physiology his well-known molecular theory of organisation which, if not adopted generally, has at all events led to a reconsideration of the question by the upholders of the cell-theory, and to considerable modifications in their views.

Professor Bennett was a man of a remarkably clear and vigorous intellect. His mind was severely logical. What he wanted in breadth

of view he gained in penetrative power. Few could grasp more quickly the essentials of a subject, or perceive the real point at issue. His quick mind soon detected fallacies in argument. The prevailing quality of his mind was *method*. He was methodical in all he did. It was this quality which made him so great a teacher: he not only taught facts, but methods; and thus he has done more for the University of Edinburgh as a teacher, than perhaps any other man in the century. His power of method was observable in all the relations of life. An accurate business man, there was nothing he sooner lost patience with than a slovenly manner of dealing with matters of business. He was a hater of pretensions and shams of all kinds, and was most unsparing in his ridicule of all such.

His power of sarcasm and his tendency to indulge freely in severe critical remarks upon the works of others, did not make him a general favourite with many of his professional brethren. He cannot be said to have ever attained the high position as a consulting physician which was his due. He was too much of a reformer, too pronounced and outspoken in his opinions; he had too little of the *suaviter in modo* to be a successful consultant. The same characteristics were displayed by him in his intercourse with his colleagues as a member of the Senatus Academicus of the University. Nevertheless, so great was their respect for and confidence in him, that, at a critical period in the progress of the Universities (Scotland) Bill in 1858, he was entrusted with the interests of the Senatus as their envoy to Parliament. In this position, he rendered most essential service by his ability and indomitable energy.

By those who knew him best, Dr. Bennett was much beloved. He shone in the social circle, or in his beautiful retreat on the shores of Loch Lomond. Some men command affection almost at first sight. Bennett was not one of these. Those who knew him longest had the greatest affection for him; they knew that beneath an austere and critical manner he had a kindly heart, and they were willing to overlook and forget his severe words, often too thoughtlessly spoken, and what might be regarded as his narrowness and intolerance, for the sake of his friendship. When his words injured the feelings of any one, he was ready, if this were pointed out to him, to express his regret, and usually in these circumstances he was apparently much surprised that his remarks had hurt the feelings of his friend. The severest criticism of his own doings never caused any feelings of resentment. After a hearty laugh at the attack, he immediately arranged his artillery for answering his opponent effectively. He was remarkable for fearlessness in expressing his opinions—indeed one of his chief characteristics was great personal courage. This was exemplified even to the end of his life.

When we saw him last, we were struck by his quiet subdued manner. Suffering, and time for quiet and sober reflection, evidently had produced a mellowing effect on his mind. The asperities of his character had disappeared, and he was calm and gentle. Probably things of time and sense were appearing before him in their true light, and he was preparing for the end.

Altogether he was a man of rare talent, high spirit, and fine taste. When all the controversies with which his name is associated will have been forgotten, the important services which he rendered to practical medicine will be even more highly appreciated than they are at present; meantime, the lesson of his life to us all is: "*Whatsoever thy hand findeth to do, do it with all thy might.*"

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, September 30th, 1875.

Harvey, Thomas Prickard, Pryland Road, Newington Green Road, N.
Kellard, James Thomas William Stenteford, Trafalgar Place, Stoke, Devonport

The following gentlemen also on the same day passed their primary professional examination.

Anderson, Alexander, St. Bartholomew's Hospital
Betty, Samuel George, University College
Brown, Francis Wheeler, London Hospital
Harvey, Henry Frederick, University College
Hopkins, John University College
McGachen, Frederick William Dobson, London Hospital

MEDICAL VACANCIES.

The following vacancies are announced:—

BELLINGHAM UNION—Medical Officer for the Second District.
BIRKENHEAD BOROUGH HOSPITAL—Junior House Surgeon. Salary, £60 per annum, with board and lodging. Applications on or before the 11th inst.
BROOKWOOD ASYLUM, near Woking—Second Assistant Medical Officer.

CHARING CROSS HOSPITAL—Dispenser. Salary, £100 per annum, and Luncheon. Applications on or before the 20th instant.
COUNTY TIPPERARY INFIRMARY—Surgeon. Salary, £100 per annum. Applications on or before the 11th instant.
DENEIGH-SHIRE INFIRMARY—House Surgeon. Salary, £75 per annum, with board, lodging, and washing. Applications on or before the 11th instant.
DONCASTER INFIRMARY—House Surgeon. Salary, £100 per annum, with board and lodging. Applications on or before the 11th instant.
DORSET COUNTY HOSPITAL—House Surgeon. Salary, £75 per annum, with £10 additional as Secretary. Applications on or before the 20th instant.
EAST RETFORD UNION—Medical Officer and Public Vaccinator for the Leverton District. Salary, £50 per annum, and fees.
GLOUCESTER COUNTY ASYLUM—Junior Assistant Medical Officer. Salary, £60 per annum, with board, lodging, and washing. Applications on or before the 18th instant.
HASLINGDEN UNION—Medical Officer for the Accrington District. Salary, £60 per annum.
HOSPITAL FOR SICK CHILDREN, Manchester—Assistant Physician. Applications on or before the 11th instant.
INVERNESS DISTRICT ASYLUM—Assistant Medical Officer. Salary, £70 per annum, with board, and washing. Applications on or before the 11th instant.
LONDON HOSPITAL—Assistant Obstetric Physician.
NEWCASTLE-UPON-TYNE UNION—Medical Officer for the First District. Salary, £50 per annum.
NORTH WALES COUNTIES LUNATIC ASYLUM, Denbigh—Assistant Medical Officer. Salary, £100 per annum, with board, lodging, and washing. A knowledge of Welsh indispensable. Applications to be made on or before the 11th instant.
NORWICH DISPENSARY—House Surgeon. Salary, £120 per annum, with unfurnished residence and apartments.
PENBROKE UNION—Medical Officer for the First District.
RICHMOND INFIRMARY—House-Surgeon. Salary, £80 per annum, with board and lodging. Applications on or before the 25th instant.
ROYAL ISLE OF WIGHT INFIRMARY, Ryde—House-Surgeon and Secretary. Salary, £40 per annum, with board, lodging, and washing. Applications on or before the 25th instant.
SETTLE UNION—Medical Officer and Public Vaccinator for the Bentham District. Salary, £50 per annum, and fees. Applications on or before the 11th inst.
STROUD GENERAL HOSPITAL—House Surgeon.
SURREY DISPENSARY—Dispenser. Salary, £80 per annum, with furnished apartments and coals. Applications on the 12th instant.
SUSSEX COUNTY HOSPITAL—Physician and Assistant-Physician. Applications on or before the 13th instant.
TIVERTON INFIRMARY AND DISPENSARY—House-Surgeon and Dispenser. Salary, £100 per annum, with furnished apartments, coals, gas, and attendance.
TORRINGTON UNION—Medical Officer for the Peters Marland District. Salary, £45 per annum.
UNIVERSITY COLLEGE HOSPITAL, London—Surgical Registrar. Applications on or before the 19th instant.
WESTMINSTER HOSPITAL—House-Physician. Applications on or before the 20th instant.
WEST SUSSEX, EAST HANTS, AND CHICHESTER GENERAL INFIRMARY AND DISPENSARY—House-Surgeon. Salary, £75 per annum, and £20 per annum as Secretary, with board, lodging, and washing. Applications to be made on or before the 23rd inst.—Assistant House-Surgeon to dispense. Salary, £50 per annum, with board, lodging, and washing. Applications to be made immediately.
WORCESTER GENERAL INFIRMARY—Physician. Applications on or before the 23rd instant.
WORKSOP DISPENSARY—Resident Surgeon. Salary, £120 per annum, with furnished apartments, coal, gas, and attendance.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*JOSEPH, J. Raphael, Esq., late Surgeon Belgian Royal Mail Company, appointed a Surgeon Superintendent in the Queensland Government Service.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTHS.

HARRIS—At the Borough Asylum, Norwich, recently, the wife of William Harris, L.R.C.P. Ed., Medical Superintendent, of a daughter.
MILLER—At 15, Shandwick Place, Edinburgh, on October 1st, the wife of A. G. Miller, M.D., of a son.

DEATHS.

HARRIS, Michael, M.B. Lond., Assistant Physician to the Children's Hospital, Pendlebury, near Manchester, younger son of Michael Harris, of 1, Pembury Road, Lower Clapton, at Manchester, on September 28th.
*MURRAY, Charles, M.R.C.S., in the 41st year of his age, at Waterloo Bank, Oldham, on September 29th.

PIGMENTARY DEPOSITS IN THE BRAIN AS THE RESULT OF MALARIAL POISONING.—Dr. Hammond of New York has presented a paper (Neurological Society) upon the above subject, in which he gave the results of clinical observation and experiments upon animals. He regarded the pigment in these cases as being of splenic origin. He was of the opinion that, especially in malarious districts, many nervous disorders were induced by the deposit of this pigment in the brain.

OPERATION DAYS AT THE HOSPITALS.

MONDAY Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

TUESDAY Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY .. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.

THURSDAY ... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.

SATURDAY ... St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Dickinson, "On the Pathology of Chorea"; Dr. Greenhalgh, "On the Use of the Actual Caustery in the Enucleation of Fibroid Tumours of the Uterus".

WEDNESDAY—Hunterian Society. Council Meeting at 7.30 P.M.; General Meeting at 8 P.M., when Dr. Daldy will read a paper on the "Causes of Functional Cardiac Murmurs."

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

ERRATUM.—In the List of Prizes in the Medical Schools (JOURNAL, September 25th, page 408), the name "A. B. Prowse Giles", in the second line of the St. Mary's Hospital list, should be "A. B. Prowse".

THE DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY.

At the meeting of the Committee of Management, on October 2nd, 1875, Dr. Robertson, the Chairman, stated that for the quarter ending September 30th, 631 in-patients were admitted during the three months; and 536 were discharged as having been beneficially treated; 64 as no better; 19 were discharged at their own request; 2 were discharged for breach of rules; one left without report; 3 died in the hospital; and 153 remained on the books at the end of the quarter. The hospital contains 150 beds for patients; and the pressure on its capabilities becomes greater and greater. Notwithstanding the increased number of beds, from 100 to 150, during these recent years, the number of patients waiting for admission, during some weeks of the present year, has been greater than ever, reaching the very large number of 350, and necessitating a delay in the reception of applicants of six or seven weeks. During the three months, 132 out-patients have been received; and of these, 101 have been discharged as beneficially treated, 13 as no better, and 18 are described as having left without report.

In pursuance of the endeavour to obtain from the patients the results of the treatment six weeks after their discharge from the hospital, replies have now been received from 65 patients, and they convey the important information that 49 are stated to be quite well, 449 to be improved, 153 to be no better, and 5 to have died. The severity of the cases, their chronic character, their duration, and the limitation of the time spent in the hospital, ranging from three to six weeks, are considered to render this statement highly satisfactory.

MEMBER B. M. A.—You will find on page 352 of the JOURNAL for September 11th, a short account of the institutions which make the teaching of State Medicine a feature; and at page 407 of the JOURNAL for September 25th, the regulations of the Universities which grant degrees or certificates.

EARLY MENSTRUATION.

SIR,—I have observed frequent letters from some of your correspondents, calling attention to the so-called "early menstruation" of young infants. Any old experienced nurse will be able to tell them that the coloured discharge from young girls is of almost daily occurrence. I have had my attention called to it repeatedly.—Your obedient servant,
W. D. S.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

MAUNSELL MEMORIAL FUND.

Amount already acknowledged, £79 3s. 6d.

The following subscriptions, in addition to those already acknowledged, have been received.

	£	s.	d.
The Rev. James Baxter, C.C.	1 0 0
Dr. Benson, Sheffield	1 1 0
B. Banks, Esq., Secretary Local Government Board, Ireland	2 0 0
Dr. Burnside, Medical Officer, Clondalkin	1 0 0
Dr. Cahill, Ballynacargy	0 5 0
Dr. Chapman, Medical Officer, Donnybrook	2 2 0
W. Colles, F.R.C.S.I.	1 1 0
Dr. Connolly, Multyfarnham	1 0 0
Mr. Henry Coulter	1 1 0
E. W. Collins, M.D.	1 1 0
Dr. Davey, Medical Officer, Terenure	1 0 0
Dr. Davys, Swords	1 1 0
R. Donnell, Esq.	1 0 0
Dr. Dwyer, Camden Street	0 10 0
Dr. Denham	1 0 0
John Ferguson, M.B., North City Dispensary	1 1 0
Dr. Finegan, Medical Officer, Glasnevin and Finglas Dispensary	1 1 0
Edward Gibson, Esq., Q.C., M.P.	2 0 0
E. Dwyer Gray, Esq., <i>Freeman's Journal</i>	1 1 0
Rev. S. Haughton, M.D., F.T.C.D.	1 1 0
J. S. Hughes, F.R.C.S.I.	1 1 0
Mr. James Hynes	1 0 0
Patrick Joseph Hayes, M.H.	1 1 0
Dr. Hayden	2 2 0
Dr. L.	0 5 0
Dr. Lalor, R. D. L. Asylum	1 1 0
Francis Mayberry, M.B., Medical Officer, Kenmare	0 10 6
George Mayberry, M.D., Kennmare	0 10 6
Dr. Charles Maunsell, R.A.	35 0 0
J. W. Moore, M.D.	1 1 0
Dr. Hyman Marks, Resident Med. Officer South City Dispensary	2 2 0
Dr. Murphy, Camden Street	0 10 0
Dr. Neary, Medical Officer, Howth	1 0 0
Dr. Newland, Richmond Street	1 0 0
Dr. Nicolls, Longford	0 10 6
W. H. O'Leary, F.R.C.S.I., M.P.	3 3 0
Dr. Purcell, South City Dispensary	2 0 0
Dr. Seward	1 1 0
Dr. Strahan, Castletown-Geghegan	0 5 0
H. R. Swanzy, M.B.	1 1 0
Henry H. Stewart, M.D.	5 5 0
Dr. Stock, Camden Street	0 10 0
L. M. Tabuteau, M.B., Medical Officer, Portarlington	1 1 0
S. G. Wilnot, F.R.C.S.I.	1 1 0
Albert Walshe, F.R.C.S.I.	2 2 0

Subscriptions will be received at the office of this JOURNAL, or by Dr. Joseph Rogers, Dean Street, Soho, London.

It is the intention of the Council of the English Poor-law Medical Officers' Association to have a special meeting in London, in order to promote the Memorial Fund.

AN APPEAL.

SIR.—Will you kindly allow me a corner in your JOURNAL to make an appeal to the charitable among your readers on behalf of the widow and family of a medical brother? The gentleman referred to, after practising some time in South America, settled in the neighbourhood of Edinburgh, where he resided to the time of his death. This event took place somewhat suddenly several months ago, and he has left a widow and family of six children (the eldest but nine years of age) in very straitened circumstances. The widow is a native of Chili, and has no relatives of her own in this country. As there is no prospect of her being able to support herself and her family here, she is naturally very anxious to return to her own country and friends.

It is with the object of assisting her to do this, that the present appeal is made. It is not considered prudent to mention names; but reference is kindly permitted to Drs. Warburton Begbie and Joseph Bell of this city, or to the Rev. J. Langwill, The Manse, Currie, near Edinburgh; the latter of whom, or the undersigned, will be most happy to receive contributions in aid of this charitable object.

I am, etc., J. JAMIESON, L.R.C.S.E.

52, Rankeillor Street, Edinburgh, October 5th, 1875.

Q. IN THE CORNER.—Every member will have an opportunity of expressing his opinion by filling up a form, which, by resolution of the last annual meeting, the General Secretary will issue under the direction of the Committee of Council.

MEDICAL PRACTICE IN AMERICA.

SIR.—The reply made a few weeks since to H. G. D. by a gentleman signing himself as an American M.D., was correct, except as relates to his first reply. The law in eighteen of the States of the Union is as strict as that in England as relates to medical men. No one is allowed to practise unless he be a regular graduate from some regular school of medicine, no matter whether allopathic or otherwise. The Board of Health of New York City prosecute all irregular practitioners; and in many States, if any one practise without a genuine diploma, he is liable to a fine of 1,000 dols. (£200) and imprisonment. The law is almost similar to that of Great Britain; and it has been my lot, during sixteen years' practice in dispensaries, etc., and privately, to meet with many characters. As one of the medical inspectors of health of the city of New York for several years, I am well acquainted with the laws.

I enclose my name, and would be pleased to communicate further in relation to American practitioners with H. G. D.—Yours, etc.,

AN M.D. OF THE NEW YORK COLLEGE OF PHYSICIANS AND SURGEONS (Medical Department, Columbia College.)

NOTICE TO ADVERTISERS.—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than *Thursday*, twelve o'clock.

DEGREES BY EXAMINATION WITHOUT RESIDENCE.

SIR,—In reference to the letters of Dr. Hitchman and M.D. Edin. in your recent issues, may I be allowed to point out that neither in the application to the Medical Council, nor in the resolution of that body thereupon, was any idea suggested of the registration of foreign medical degrees other than those obtained after strict examination? The *Medical Directory* at the present time rightly discriminates between degrees obtained after examination at foreign universities and those not so obtained, refusing to insert the latter; and that the Medical Council should exercise like discrimination with official authority is all that registered practitioners possessing foreign degrees can expect. The recognition of purely honorary degrees, wherever obtained, is clearly beside the question.

In conclusion, I would add, *propos* of the letter of M.D. Edin. (ii) that university residence, rather than rigour of examination, is really the essential difference between the requirements for his own degree and for the degrees of the best foreign universities. Practitioners who have as students passed through what is virtually an academical course of study (though, it may be, not at a chartered university school), finding no M.D. examination of good character open to them in this country, are induced to obtain abroad academical testimony to their higher attainments; and experience having taught them the superior examinational value of their foreign degrees as compared with their British qualifications, they not unnaturally seek to be allowed to register the former as well as the latter.—Yours obediently,

A REGISTERED DENTIST AND FOREIGN GRADUATE BY EXAMINATION.

SIR,—In the second letter of M.D. Edin., recently published in your *JOURNAL*, it is stated that Dr. Hitchman's letter was an argument against the registration of foreign degrees. I cannot agree with M.D. Edin., for all foreign degrees are not obtained in the same manner as that of Erlangen used to be some thirty years since. M.D. Edin. seems to think very highly of his own university degree, and rightly, too; but it would be folly in him to imagine that no foreign university grants degrees after examinations equally stiff with his own. Our insular position, I suppose, has, by restricting intercourse, contributed to generate a contempt for foreign degrees and diplomas, and an unreasonable notion of the importance of our own universities, which is often ludicrous, and always to be regretted. Does M.D. Edin. consider such degrees as those obtained at the universities of France, Berlin, Vienna, Brussels, Heidelberg, etc., inferior to his own? Perhaps he does; but, then, different people have different opinions. I quite agree with him in his remark, that M.D. degrees obtained with inadequate tests should have no place in our *Register*; but I cannot see why those degrees which are obtained after examinations, which in many cases are very much more difficult than those of some of our own university boards, should be ignored and refused registration. I have passed the ordinary examination for the degree which I possess, and I think it certainly hard that I may not register it, when I think that by paying £55 I may obtain F.R.C.S. Edin., and £50 M.R.C.P. Edin., both of which are registerable diplomas. M.D. Edin. had better refer to the *Medical Directory* for such names as Frederick and Hermann Weber, London; George Bodington, Dudley; S. Sutro, London; John Stanton, London; Samuel Smith, London; Henry Port, London; James Bennet, London; Thomas Laycock, Edinburgh; and then express his opinion about the value of foreign degrees. The *Medical Directory* admits all foreign degrees which are obtained after examination, but refuses those which have been bought; and I think the *Register* ought to follow its example, and at the same time refuse all honorary British degrees and diplomas.—I am, sir, yours, etc.,

M.D. GIessen.

LIFE INSURANCE CERTIFICATES.

SIR,—We all now and then receive, from some life insurance office, an application for a precise and detailed certificate as to the date and nature of the illness of which some patient has lately died—a certificate evidently required only for the safe management of the business of the insurance office—and yet not one of such applications that has reached me has been found to contain any fee. I scarcely know what fee to charge. The trouble of filling up these certificates is somewhat. In one now lying before me my signature is required in two places, and one is to be witnessed; still, the time and trouble required are much less than would be necessary in examining a candidate for life insurance; therefore, a less fee would suffice, and I should be glad to know what is usual. On one former occasion I wrote to the office, and was told I must apply to the friends of the deceased. This I object to utterly. Whatever fee is fixed on, ought to be sent by the office with the form desired to be filled in, and this we should all insist upon. I have known registrars question the right of a medical man to give a certificate of death to a savings' bank or provident institution; but I apprehend we have a perfect right to do so, provided we make a proper charge for the same, and provided it is not a copy of the certificate we furnish gratis to the registrar.—I am, sir, your obedient servant,

A COUNTRY SURGEON.

Brighton, October 2nd, 1875.

MEDICAL DIGNITY.

At a recent meeting of the St. Pancras Board of Guardians, Mr. Fildew, the clerk, said that a certain medical officer for one of the wards in the south part of the parish called upon him, and handed to him a paper, in which was the following, in his own handwriting, and which had reference to the deputy medical officer of that ward.

"Subscription, medicine, and advice.—One shilling during illness only. Home visiting, if necessary. Three shillings weekly during illness only. Hours of attendance, daily (Sundays excepted): morning, from eleven to one; evening, from seven to nine o'clock. Medical officer, Mr. —, M.R.C.S. England, formerly House-Surgeon, — Hospital. All cash in hand, or advance. Patients to bring their own bottles. Dr. —, Surgeon, etc., etc. Dispensary will be closed on Tuesdays and Fridays, until further notice."

"This disreputable advertisement caught my eye the other day on the window of a dilapidated house in — Street; and as you take an interest, I hear, in the respectability of the party, inclose copy for your edification, which read to your Board, and then forward a copy to the guardians' solicitor.—*Deo homo.*"

Mr. Joseph Salter thought this a very serious matter. The guardians owed a duty to the ratepayers; and if the Local Government Board would not consider their own responsibility in regard to this medical officer, the Board ought to consider theirs, and advertise at once for another.—The Board decided that the document brought forward by the clerk should be sent to the Local Government Board.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

TREATMENT OF WHOOPING COUGH BY CARBOLIC ACID.

SIR,—Having seen the use of carbolic acid vapour highly spoken of in late numbers of your *JOURNAL*, as a treatment of affections of the respiratory organs, I think the following case, which came under my care last spring, may prove interesting.

On the 21st of February last, I was called to see Mr. Marsh, an elderly man suffering from empyema, which, from the history, I found had followed a pleurisy of some weeks' duration. The disease was situated on the left side of the chest, and there was considerable bulging of the integuments at the fourth and fifth intercostal spaces. Ulceration had taken place into the lung, and an immense quantity of very fetid expectoration was flowing from his mouth, without much cough, and with very short intervals of rest. The patient was so greatly distressed, and apparently in such imminent danger, that I thought it expedient to make an incision through the walls of the chest, and so afford relief by giving another means of exit to the discharge. I was unwilling, however, to do this on account of the proximity of the bulging portion of the heart and great vessels. I therefore ordered the patient to inhale the vapour of carbolic acid, by adding thirty drops of the acid to half a pint of boiling water. I ordered this process to be repeated every two hours. Not having very great faith in this treatment, I called early on the following morning, fully prepared and quite determined to make an external opening in the chest. I found, however, that this course was not necessary, for the expectoration, which had amounted to some pints of a very foul liquid during the previous day, had been reduced to a very few ounces during the night; the smell was gone, and the appearance was that of healthy pus. My patient was lying tranquilly in bed, with quite a happy expression, instead of labouring fearfully in an upright position, with a countenance depicting the utmost misery.

I will not take up more of your valuable space by making comments on this case; I will simply give two good reasons for my belief that the cure was due to the carbolic acid vapour treatment. They are these; in the first place, the disease had previously resisted other treatment, and the symptoms had gradually increased in severity until this was tried, when, according to the patient's own account, relief was almost immediate. The other is, that on the second day after I first commenced the use of the vapour, I ordered him to leave it off entirely instead of using it every four hours, as he was then doing. On my seeing him about twelve hours afterwards, I found him again sitting up, in considerable distress, and large quantities of fetid liquid coming away at intervals, though not to anything like the extent that it had done at first. My patient continued the treatment more or less for four or five weeks, and made a good recovery.

Hoping that this case may prove useful to others in the treatment of similar cases, I remain, dear sir, faithfully yours,

S. ALFORD, M.R.C.S. (S.), S.A.

Member of the British Medical Association.

Stanhope House, Southsea, September 30th, 1875.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The *Bristol Daily Post*; The *Evening News*; The *Sheffield Post*; The *Metropolitan*; The *Blyth Weekly News*; The *Edinburgh Daily Review*; The *Glasgow Herald*; The *Western Daily Press*; The *Merthyr Telegraph*; The *Leighton Buzzard Observer*; The *Bristol Daily Times and Mirror*; The *Derby and Chesterfield Reporter*; The *Lincolnshire Herald*; The *Sunderland Daily Echo*; The *Co-operative and Financial Review*; The *South Wales Daily News*; The *Macclesfield Courier*; The *Melbourne Argus*; The *Southampton Times and Hampshire Express*; The *Jarrow Express*; The *Birmingham Daily Post*; The *Leamington Journal*; The *Sheffield and Rotherham Independent*; The *Derbyshire High Peak News*; The *Liverpool Daily Courier*; The *National Food and Fuel Reformer*; The *Worcester Herald*; The *Norfolk News*; The *Worcester Chronicle*; The *North British Daily Mail*; The *South Science Review*; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. W. T. Gairdner, Glasgow; Dr. W. Rutherford, Edinburgh; Mr. W. Cadge, Norwich; Dr. Edis, London; Dr. Mc Kendrick, Edinburgh; Dr. T. Skinner, Liverpool; Our Paris Correspondent; Mr. Crosse, Norwich; Mr. H. E. Cauty, Liverpool; Mr. George Godwin, London; Mr. T. E. H. Johnson, Liverpool; Dr. James Hogg, London; The Registrar-General of Ireland; Mr. E. De Tomazie, Derry; The Secretary of State for the Colonies; Dr. Thomson, Bourne-mouth; Dr. Langmore, London; Dr. J. Crichton Browne, Wakefield; The Registrar-General of England; Mr. T. M. Stone, London; Mr. J. Raphael Joseph, London; Dr. Byrom Bramwell, Newcastle-upon-Tyne; Mr. H. E. Armstrong, Newcastle-upon-Tyne; Mr. W. Fairlie Clarke, London; Mr. N. A. Humphreys, London; Mr. P. H. Holland, London; Dr. W. H. Corfield, London; The Secretary of the Dental Hospital; Mr. John Benson, Sheffield; Dr. Fayrer, London; Dr. Davey, Bristol; Mr. W. D. Spanton, Hanley; Mr. S. Alford, Southsea; Mr. W. E. Nourse, Brighton; Dr. Henry Harris, Redruth; Mr. R. Cuffe, Horncastle; Dr. C. E. Underhill, Edinburgh; Dr. Alexander Robertson, Glasgow; Mr. R. M. Mann, Manchester; The Secretary of the Devonshire Hospital, Buxton; Dr. Thomas Lewis, Llanelli; Dr. Thomas Cole, Bath; Mr. Charles J. Cullingworth, Manchester; Dr. Paton, Paisley; Dr. John Brunton, London; Mr. Joseph A. Baly, Leamington; Dr. Robert C. B. Holland, Matlock; Dr. D. H. B. Anderson, Campsie; Dr. Thomas Partridge, Stroud; Mr. W. E. C. Nourse, Brighton; Mr. J. Jamieson, Edinburgh; Mr. J. Hamilton Craige, London; Dr. Edward Dickinson, Liverpool; Sir Robert Christison, Edinburgh; Mr. Dolman, Derby; Mr. Batty Tuke, Edinburgh; Mr. R. Davy, London; Dr. Andrew Wynter, London; Mr. A. E. Cumberbatch, London; Dr. J. Curnow, London; Mr. H. A. Reeves, London; Mr. Warren Tait, London; Mr. H. Morris, London; Mr. Pick, London; Mr. W. W. Wagstaffe, London; Dr. Charlton Bastian, London; Mr. Charles Crombie, Aberdeen; Dr. Goldie, Leeds; Dr. James B. Spence, Earlswood; Mr. A. Hunt, Derby; Mr. W. Furlley, Craiglockhart; Mr. Dix, Hull; Dr. M. Tomson, Newport; Our Dublin Correspondent; Dr. G. E. Shuttleworth, Lancaster; Mr. Fontaine, London; Dr. Copeman, Norwich; Dr. J. B. Russell, Glasgow; Dr. T. Lauder Brunton, London; Mr. Eastes, London; Mr. F. W. Lowades, London; etc.

AN ADDRESS

ON

THE USE OF EMPIRICISM IN THE ART OF MEDICINE.

*Delivered before the Birmingham and Midland Counties Branch of the British Medical Association.*By WILLOUGHBY FRANCIS WADE, M.B., F.R.C.P.,
Physician to the General Hospital, Birmingham; President of the Branch.

AN old poet commences his laudatory description of a medical man by saying,

"He was a very parfyt practisour".

We may see from these words that the author was well aware that an absolutely perfect practitioner is an impossibility—absolute perfection can not be qualified.

It is the ambition of most of us to merit such a compliment as Chaucer paid to his friend; and it is well to ask ourselves sometimes, Are our methods those best calculated to make us successful practitioners? A mere monetary success, whilst it may satisfy our trade, ought not to satisfy our professional instincts. The two things are not identical. The one depends largely upon qualities which would bring their possessor emolument if exercised in any business; the other requires qualities of mind and tones of thought which may or may not impress the outside world so favourably as they ought.

Our object, then, on the present occasion is to consider some general principles and modes of thought which may conduce to the more successful application of our scientific knowledge to the cure or relief of disease. As practitioners, we require not merely abstract science, but the capacity to utilise and apply that science to achieve the objects set before us; namely, the prevention, relief, and cure of disease. That is to say, we require to possess not only the science, but the art of medicine.

Many years ago, this science was so imperfect that we ourselves now have justly but little sympathy, and no respect, for it. But its professors, dogmatic and resolute, were determined that its precepts should even then be carried out in practice. Common sense rebelled against this tyranny. Men arose who said, if the results of treatment appear to us to justify the accuracy of your dicta, we will obey them; if, on the other hand, it plainly appears that these results show you to be wrong, we will not obey them: and this quite regardless of whether we can show wherein, scientifically, your error consists. We will go further, they said; if we can hit upon any plan which produces good results, we will adopt it; and this, though it may be diametrically opposed to what your science teaches, and, also, though we may be quite unable to offer any adequate explanation of the results we obtain. These persons were termed empirics, and their principle empiricism.

In coming down to our own times, and considering our own position, two questions suggest themselves.

Firstly: Is there any necessity to guard against science being so represented as to mislead us in practice?

Secondly: Does empiricism afford us any security against being so misled?

Having regard to the admitted imperfections of those sciences upon which our art is, as it ought to be, based, greatly as those sciences have progressed; and also believing that, in spite of great advances in the direction of freedom of opinion, dogmatism is not yet eradicated from the earth; I submit that the first question must be answered in the affirmative. It is unfortunately necessary to protest against an opinion which such a statement sometimes elicits; viz., that these views disparage science, and must lead those who hold them to ignore its advances. There is, in my opinion, no scientific discovery which may not become utilisable; I never hear one announced without saying to myself, Can I see my way to applying it to the purposes of the art of medicine? But there are many new facts which I cannot see my way so to utilise. I am conscious of no inconsistency in admiring and attempting so to utilise them, whilst I refuse to be led astray by hasty generalisations, illogical inferences, and fanciful speculations. The question really is, shall we base our art upon true scientific facts only, or upon these in combination with scientific fancies? A rigidly scientific mind could give but one answer to such a question. The truth is, that submission to pseudo-scientific teachings equally debases our art and discredits genuine science.

Admitting, then, which we do without any special disparagement of ourselves, that the human mind, when exercising medical art, may err, do the teachings of empiricism tend to limit its deviations from truth? In answer to this, I propose to point out some obvious—indeed, necessary—influences which empiricism exercises upon our modes of thought and action, results to which it leads, and practical guides which it may furnish in cases of doubt and difficulty, where exact science fails us; and to give some illustrations of results which may be obtained by reliance on these methods from cases which have happened to myself.

Our object, then, should be to obtain experience. The wise man, we know, profits by the experience of others; the fool, if by any, only by his own. Let us, then, respect the opinions of trustworthy observers and practitioners, even if we do not thoroughly understand them; but not if they are disapproved by our own temperate reason. We wish to learn what art can do for disease; and this necessitates that we should, in the first place, ascertain what nature can do—that is to say, the natural history of disease; this can only be satisfactorily noted in undrugged cases. We know that many diseases, of which some cases require energetic treatment, will, in many other instances, do perfectly well without any treatment at all. For example, pneumonia is such a disorder; so are all the exanthemata, even including typhus. I have often managed acute pneumonia without any drugs. I have my student notes of a pretty severe case of typhus so managed by Dr. Stokes in the Meath Hospital. Undoubtedly this is the proper way to deal with a large proportion of the cases of the ordinary exanthemata. This is an easy matter in a hospital, no doubt; but it is much easier in private practice, particularly amongst the higher classes, than many practitioners think. This is anything but a lazy method; it involves the closest attention to see that nothing is going wrong which drugs might set right. By this attention, we acquire the most intimate familiarity with the appearances and phases of disease. This familiarity may sometimes assist us in prognosis. In the beginning of the year, I was called to see a medical man who was evidently very ill. He had a solid pneumonic patch, apparently about the diameter of a crown piece, in the back of the left lung; and mucous *râles*, of medium fineness, over the back of both lungs. I was much alarmed; for patients do not die in pneumonia from the amount of solidification, but from congestive disturbance—for the most part unannounced by physical signs—of the unconsolidated portions. Such disturbance may occur in any case; but is, on the whole, more likely to do so where the exudation is limited in extent. Free exudation seems to exhaust the force of the disorder. The next morning, he was better. A very favourable prognosis was now given. Why? Because the back of both lungs, over the greater part of their surface, had become solid, and there was no extension of the mucous *râles* to fresh portions. We know that, in ninety-nine cases out of a hundred, when the inflammation has ceased, an acutely solidified lung will resolve. The prognosis was justified by the result.

A still greater advantage of non-interference is found when symptoms do arise which we know indicate danger; and not merely justify, but require, our interference. We have perfect confidence that these are symptoms of the disease, and not of our treatment.

Drugs, especially strong ones, are edged tools with which it is proverbially dangerous to play. That which can do good, can do harm; though we find it difficult to realise this when our administration has the sanction of authority. One of the greatest responsibilities which falls upon us is, when we have to decide whether symptoms of a grave character are due to the disease or to the treatment.

The case, for example, is one obviously of the most extreme danger, the slenderest chance of safety remains; if we pursue the treatment, and if it be wrong, inevitable death. The treatment may have the sanction of authority. In older times, it was generally reckless bleeding; now-a-days, perhaps an equally unmeaning stimulation. If we change it, and success do not follow, we incur the gravest imputations. Under such circumstances, nothing but the highest sense of honour, of our duty to exercise our judgment for the benefit of our patient, regardless of the consequences to our own reputation, would induce us to interfere. We must, in such cases, have the courage of our opinions; and happily, occasionally, but only occasionally, our courage is rewarded by the event. Such a difficulty, no doubt, most frequently presents itself in consultation practice, not because the previous treatment had been careless or improper, but because we have not had the opportunity of watching its effects upon the progress of the disease. But the same dilemma has presented itself to me in cases over which I have myself had from the outset the fullest control, and in which I had exercised the greatest care and watchfulness. The chief dogma of empiricism is that the effect of a drug in the individual case in hand has to be determined, regardless of the effect it may seem—even justly seem—to have

had in a thousand apparently similar cases. Perhaps the most certain specific in any given disease is quinine in ague. It may fail. Some few years ago, a soldier contracted ague in India. He was treated in several military hospitals, and finally at Netley—an institution which is a credit to the profession and an honour to the country. Quinine had been continually and lavishly administered. Being invalided, he returned to Birmingham, and, at last, came into the General Hospital. He was more cachectic in appearance than any ague patient I had ever seen. His fever had for a long time previously presented a remittent, almost more than an intermittent, type; but he had no visceral enlargement. There could be no good in wasting more quinine because that drug is reputed a specific for ague. One specific having failed, we had recourse to the one next best in repute—arsenic. After taking five minims of Fowler's solution three times a day for a week, he was not only better, but had lost so much of his cachectic appearance, that I should not have known him; and he made a rapid and complete recovery.

One or two illustrations of the possible difficulty in sometimes determining whether the symptoms are those of the disease or of drugs used in its treatment may not be uninteresting.

Some years ago, I was consulted in the case of a lad who was suffering from diarrhoea, caused by the poisonous water of a surface-well. One child had died, the mother had with difficulty recovered, and the father was even then barely out of danger. The boy's symptoms had been most urgent; and, though the diarrhoea had, when I saw him, abated, other symptoms had set in of so alarming a character, that my colleague thought his recovery impossible. Indeed, so certain was he on this point, that, when I suggested the possibility of a favourable issue, he doubted whether I was really serious. I was obliged, therefore, to explain. Had the then symptoms been certainly and entirely due to the disease, my opinion would have coincided with his. But some of them, at least, were not inconsistent with their being due to opium, which had been administered very properly, but very fully. It seemed to me that, if he were suffering from opium-poisoning, and the opium were discontinued, he might recover; and he did. I think that infants may and do die from opium administered for diarrhoea, in a sort of collapse, without presenting the more common symptoms of opium-poisoning.

To give another example: An elderly gentleman had an attack of influenza. When recovering, but enfeebled, he one night had symptoms of collapse, for which stimulants were administered. As he remained in a condition which made the return of exhaustion not improbable, their use was continued. He regained no strength, lost his appetite, had constant pain at the epigastrium, with nausea and occasional vomiting, and a dry hard brown tongue. His only nutriment was a sort of custard containing brandy, which he took frequently in doses of one or two teaspoonfuls. Ever this aggravated the gastric disturbance. There was no fever. As he was not only very feeble but becoming daily more so, his condition was alarming. The gastric disturbance was so marked, and the only food he took was so offensive to the stomach, that it occurred to me that the brandy it contained might be the cause of his symptoms. On the other hand, dryness of the tongue is not uncommonly an indication for the use of alcohol. And further, of four medical men who had seen him quite recently, three were distinctly of opinion that his only chance of life lay in free stimulation. I resolved to make an experiment, and to stay for some hours to watch the result. Some custard was made without any brandy. Of the first teaspoonful he said that it was the only food he had taken for days that had not caused pain and a desire to eject it. In a few hours, his tongue was moist, and he made a good recovery, with but one relapse caused by a dose of brandy. Consideration of this case and of others, where the tongue is dry, teaches us this lesson. Dryness and brownness of the tongue dependent upon the state of the system at large are indications for the use of stimulants, but, when dependent upon the condition of the stomach only, are contraindications. But we cannot rely upon any single or invariable diagnostic in cases of this kind. We must consider the symptoms in their totality, and we must also look at each individually, if perchance we may obtain a clue. For example, in a very anxious case of fever in a child where things were going very badly, a certain amount of rigidity of the pulse seemed to contraindicate the use of alcohol, and it was resolved therefore to suspend its use and watch the result. This was satisfactory, and at that moment life was probably saved by the discontinuance of a drug, the use of which but a few days before had probably preserved it. Such examples might readily be multiplied did time permit. Perhaps enough have been given to show the importance of being guided in the administration of potent drugs, not by what we think they ought to do but by what we see them do. But unless we daily exercise our discrimination in simple cases, and so form a habit of exercising an unbiassed judgment, we can have no chance of acting with discretion in times of difficulty and danger,

often with all surrounding circumstances conspiring against our self-possession. How often, when coolness is most essential, do we see, in its lieu, panic. Want of education on this point is not from want of opportunity. It is the fashion nowadays to be carried away by the vague idea that almost everything is debility. And so, in vast numbers of chronic cases, a practitioner will go on giving iron, or cod-liver oil, or quinine, regardless of the obvious fact that in the particular case they do no good, or even do harm. Why does he not reconsider the case from the beginning, and lay down his treatment upon other lines? Because he has not accustomed himself to a candid consideration of the results of his treatment, and to dismiss with rigour that which has not been, though he may fairly consider it ought to have been, successful. Allow me here to interpolate a little note upon alcohol. We are in doubt sometimes whether it is wise to commence its administration in an acute disease. It is well known that a reduction in the rapidity of the pulse is the best test of its action being beneficial. Under such circumstances, it most rarely fails to do good. On the other hand, if it accelerate the pulse, it rarely fails to do harm. Now, it is not generally known that we can ascertain which effect it will produce in almost as little time as I have occupied in saying these few words. Give the patient what under the particular circumstances you would consider to be a full dose, taking care not to alter his position before or whilst doing so. Keep your finger on the pulse, which must have been carefully counted two or three times beforehand for not less than a full minute each time, and count it by the minute. Before two or three minutes have elapsed, you will probably find the rate altered; it may be that you may have to wait five or six minutes. The result of this test is a sure indication of the effect which proper doses of alcohol will have on the circulation. For example: Since this was written, a young girl in a state of extreme asthenia from shamefully neglected typhoid was admitted into the General Hospital. At the time the following observation was made, her pulse was 135. Two teaspoonfuls of brandy diluted with water were administered without disturbing her. Within a minute, her pulse was again counted, with the following results: First minute, 140; second, 140; third, 145; fourth, 145; fifth, 145. She died two days afterwards, and we found, as had been anticipated, most extensive ulceration of a large tract of the small intestines, and also a little peritonitis, but not, so far as we could discover, any perforation, though several of the ulcers were very nearly through. I have seen a similar case before, where, with extreme ulceration, brandy was very badly borne.

The proposition which we were just now considering was, that we should not adhere to a treatment which, though presumably in accordance with scientific teaching, was doing no good and might be doing harm. There is a converse proposition to which we will now turn. We should not interfere with a treatment which, though presumably contrary to scientific teaching, is doing good.

Sound principles sometimes involve their holder in great difficulties, as the following case will show. A young lady of noble family, a fact which, while it ought not to increase our sense of responsibility, certainly does not diminish it, had scarlatina. About a fortnight afterwards, she began to vomit, and nothing stayed on her stomach; various remedies were tried without any benefit. About eighteen hours before I saw her, she was ordered half a grain of opium every four hours. At the time of my visit, she felt better, and by the concurrent testimony of all her attendants, the vomiting had diminished in frequency and violence. There was no drowsy, but the action of the kidneys was almost suspended, and the excretion was nearly black, and, on boiling, became semi-solid. Here was an appalling dilemma. On the one hand, you will admit that nothing could be more opposed to scientific teaching than the administration of opium in a case of scarlatinal suppression. On the other hand, it had allayed the vomiting, and the free ingestion of liquid is in such cases of vital importance. A more orthodox treatment would, if it happened to re-excite the irritability of that most wayward organ, the stomach, defeat our object by preventing an adequate ingestion of liquid. Under all the circumstances, I elected, but with the most painful reluctance, to continue the opium. The only subsequent alteration in the treatment was that, three days afterwards, she had her food and drink tepid instead of iced. She made a rapid recovery. A medical friend afterwards asked my advice in a similar case, which I did not see. Mentioning the foregoing history to him, he tried opium, and, as he afterwards told me, with good effect.

This experience was afterwards turned to good account in another case. A farmer in Staffordshire broke his leg. For this, he was confined to bed for several weeks, enjoying excellent health till three days before I saw him. He had been seized with some pains in the upper regions of the abdomen, which became very violent, and were attended with incessant, or at least most frequent, vomiting and spasm of the abdominal muscles. The day previous, the storm had extended to the

kidneys, the secretion of which had become most scanty, blackish, mixed with lithic acid, and, on boiling, it became almost solid. The vomiting had been somewhat restricted by limiting him to water and thin gruel in very small quantities; but the attacks of spasm were still frequent and violent; and even in their absence he was not free from pain. For these latter symptoms, opium was an obviously appropriate remedy. But for the kidney-disorder, the most threatening to life, it would have appeared to me, and probably to many persons, most inappropriate but for two considerations: firstly, the history of the preceding case; for, judging by its secretion, the state of the kidney in the two cases could not be very dissimilar; secondly, the history of this man made it probable that the disordered innervation of the kidney was produced by the nerve-disorder of the part which was primarily the seat of pain, and, if so, was similar to it in kind, and for this latter no one would have hesitated to prescribe opium. We accordingly gave him opium, and with this he made a good though not uninterrupted recovery. Curious facts such as these stimulate us to seek for an explanation of them. It is no part of empirical medicine to reject or slight the plain interpretations of science; on the contrary, it earnestly seeks to know to what other apparently similar cases hints thus accidentally obtained may be usefully applied. The more perfectly we understand what has happened in the first case, the more certainly can we afterwards deal with subsequent ones.

Now, if we refer to experimental physiology, we find that, in the last few years, it has thrown great light on the subject of secretion. Glands cannot secrete unless their own arterial circulation be in a certain state of activity. This state depends directly upon the influence of the vaso-motor centre, which in its turn may be influenced, amongst other ways, by irritation of ganglionic nerves.

Now, as regards the kidneys, listen to what happens when the splanchnic nerves are divided. "The vessels of all the abdominal viscera are seen to be dilated. The portal system is filled with blood, the small vessels of the mesentery, and those which ramify on the surface of the intestine, are beautifully injected; the vessels of the kidneys are dilated, and the parenchyma is hyperæmic." The blood-pressure under such circumstances is only 31 by the mercurial gauge. But galvanise the peripheral cut extremity of the nerve, and the mercurial gauge indicates a pressure of 115. We see here, then, if not the actual explanation of the *modus operandi* of opium in such cases as we have been considering, at all events, a promising clue to the mystery.

Here is another way in which the renal blood-pressure may be affected. The depressor nerve of the circulation "contains centripetal fibres, the function of which is to diminish the activity of the vaso-motor centre, and thereby diminish the arterial pressure". If this nerve be divided, and its central end excited, what follows? "If the abdominal organs are exposed and inspected during excitation of the depressor, they are seen, according to Cyon, to become congested. The effect is most perceptible in the kidneys, which change colour from pale to red and back again as the induced current is closed or opened." This chapter of physiology cannot yet be fully written, still less can its pathological correlative; but even now it affords hints of surpassing importance to us as practitioners, and the blanks in it are every day being filled up. It is only lately that sphygmographic observations have ascertained the presence of undue arterial tension in all the ordinary phases of albuminuria; viz., in Bright's disease and in the scarlatinal and puerperal forms. But, in many instances of these, it does not require any instrument but the finger to detect it. I remember, years ago, seeing two cases of puerperal convulsions in which it was most obvious in the rigid pulse; both were bled several times, and, after the bleeding, the tension disappeared, as did the convulsions, a return of which was each time preceded by returning rigidity. Both these cases did well. In such cases, we now administer chloroform, which may not improbably act by reducing arterial tension. Only this year I have seen two very severe and obstinate cases of scarlatinal hæmaturia with next to no drowsy; in both, the pulse was obviously and palpably rigid, though both patients were under 16. Other remedies failing, I tried the extract of Calabar bean in one case, and its action was so favourable in reducing the pulse-tension, and concomitantly the hæmaturia, that I also gave it in the other with equally good results. In the large and important family of hæmorrhages, alterations of arterial blood-pressure play a most important part. It is an old observation that slow pulse is not infrequently a sign of an impending hæmorrhage. Now, slow pulse is often, especially in connection with hæmorrhage, but another term for increased arterial tension. The epistaxis of young children is not due to any undue congenital laxity of the nasal capillaries, but to, as I think, disturbance of the vaso-motor centre of either centric or eccentric origin. In older persons, a similar disturbance is present. The same remarks apply to hæmoptysis, regarding which I entirely concur with those who hold that it is not merely a possible but

a frequent cause of those changes in the lungs which produce phthisis; and this when it occurs accidentally in lungs previously sound. There is, in my opinion, no just basis for the dogma that, in cases where phthisis follows hæmoptysis, the latter has been caused by latent tubercle. Pulmonary phthisis is a disease which, as Broussais taught, has its origin in inflammation of some portion of the lung-structure to which the miliary tubercle is secondary. The general recognition which this truth is now happily obtaining, must exercise a most important and a most beneficial influence upon the treatment of consumption.

The singular disorder known as paroxysmal hæmaturia is probably a vaso-motor nerve-storm affecting the renal circulation. Some element of this kind is probably at or very near the root of gout and its metamorph expressions. The same may be said of some forms of diabetes and of spasmodic asthma.

Probably such a case as the following is to be thus explained. A woman has an attack of spasmodic asthma. She has had a few before; but in this one is brought to the hospital. The urine is found to contain an enormous amount of sugar, all trace of which disappears as the asthmatic attack subsides.

These opinions are speculative, it is true, but they suggest very important clinical inquiries, the result of which must furnish, and have in my hands already furnished, practical results. But it must not be forgotten that, even should it prove true that disorder of a nerve-centre is at the root of some of these affections, yet that disorder may be rather a suspension of action than a storm of active discharges. Even in hemicrania, it is doubtful to which of the two the pain is referable, though I am much disposed myself to the nerve-storm view, even in opposition to the opinion of Anstie on this question. The next subject shows how we may sometimes successfully puzzle out the treatment of cases which we are conscious of not understanding, and also how we may sometimes light upon the explanation of such cases after many years.

In a paper on the Treatment of Rheumatic Fever, published in 1863, I drew attention to certain cases of this disease which seemed to form a group by themselves. Almost suddenly, the type and aspect of the disorder seemed to change. A drowsy muttering delirium set in, accompanied, often for a short time preceded, by diarrhoea, the discharges being occasionally hæmorrhagic; dry brown tongue, diffused bronchitis affecting the smaller, if not the smallest, tubes, and not infrequently some pneumonia, appeared. The condition of the patients was always alarming, though fortunately none of them died. The indications for treatment were obvious: stimulants, stimulating expectorants, and astringents. The employment of these remedies left no room for the continuance of the ordinary alkaline treatment which, with certain qualifications, I then employed and still confide in. The alkalies were accordingly in each case discontinued. My attention was continually directed to these strange cases, in the hopes of lighting upon some explanation of them; but none came. In January 1872, I was attending in consultation a case of diphtheria, which was progressing favourably with iodide of potassium, chlorate of potash, and ammonia. But one morning we found him in a state of depression and somnolence, but without any distinct delirium. Things were going wrong, and it, therefore, became desirable to make a change. The state of affairs was one in which the experience of many has shown that acids and iron exercise a favourable influence, and I suggested that they should be tried. The anomalous and unfavourable symptoms soon disappeared, though the patient subsequently suffered from a severe and protracted attack of diphtheritic paralysis.

Some little time after this case occurred, I happened to come across Waring's account of the untoward effects of alkalies in certain constitutions. In some persons, however strongly indicated, they cannot be borne, as they produce great excitement of the nervous system and cerebral functions. In some, they apparently alter the quality of the blood, destroy the cohesive property of the blood-corpuscles, render the fibrin less plastic, induce a thin and liquid state of the circulating fluid; petechiæ appear on various parts of the body; the patient perspires profusely, becomes low-spirited and emaciated, and less capable than when in health of physical exertion; the assimilating functions are deranged, and serious disorder of the nervous system results. I could not but be struck with a certain family likeness between this class of symptoms and those to which I have previously adverted. The fact that, in the rheumatic cases, the alkaline treatment had been discontinued, and that, in the diphtheritic one, an acid treatment had been substituted, seemed to assume great importance. On the other hand, there are the facts that, in rheumatic fever, the system has over and over again been completely alkalisied without any deleterious effect being observable; that, out of a great number of cases of this disease treated by myself, a very few only had presented the above described symptoms, though in all alkalies had been freely employed. Whilst these opposing arguments compelled a suspension of judgment, there was

evidently abundant ground for submitting the matter to the therapeutic test on the first opportunity. Cases of the kind are rare, and consequently it was just two years before such an opportunity presented itself. I was attending, in conjunction with my eminent colleague Dr. Bell Fletcher, a medical friend suffering from severe and most complicated rheumatic fever. Symptoms of great depression, with muttering delirium and stupor, suddenly appeared. The kidneys, as we know, furnish us with a very reliable test of the alkalinity of the system, and, in this case, their secretion left no doubt that this alkalinity existed. The case appeared to both of us one of extreme gravity. I set before my colleague the views which have just been placed before you, and he agreed with me in the propriety of cautiously acting upon them. The result was most unequivocal. After the third dose of hydrochloric acid, the symptoms abated, and, coincidentally with this abatement, we found the urine faintly acid. Several examples have since shown me the great practical importance of recognising the facts just set forth, and the advantage of acting upon the inferences to be drawn from them. But the recital of them might be wearisome. It is at the same time necessary to add that this alkalinity may arise quite spontaneously; that is to say, in cases where no alkalies have been administered, and also in chronic as well as in acute diseases. It is not impossible also that we may sometimes infer the propriety of giving acids from the general symptoms alone, when chemical tests fail to demonstrate the presence of the alkaline condition. But then the acid must be given purely empirically; that is, only in consideration of its obviously producing a favourable effect, which it may do up to a certain point only, and this point may be very rapidly reached.

And now, in the last place, let me offer some suggestions as to our handling desperate cases—those in which we have run through the whole list of remedies likely to be successful, but without success; those in which we see that, unless some change occur, the patients' very hours are numbered. It is not merely because a person seems, or is, very ill, that his condition is desperate, because these very serious symptoms may have arisen suddenly, and we may have in reserve a reliable and appropriate remedy. The first thing to do is to determine to maintain one's self-possession. It is easily lost if we do not acknowledge to ourselves the probability of losing it. We have, then, to make a careful and cool review of the whole condition and circumstances of the case; to determine, in the first place, whether nature is more likely to pull the patient through without our assistance or with it. If we honestly think the former, it is our bounden duty to act upon that opinion, regardless of the odium we may incur by failure. Some time ago, I was called in to see a little girl who was in that typhoid condition we occasionally see at the end of scarlatina. She took her food well, but had extreme repugnance to medicine. Drugs have but little efficacy in such cases, whilst the maintenance of nutrition is all-important. There was a fear lest perseverance with medicine might set her against her food, and we advised that the best chance of her recovery lay in a reliance upon milk only. This confidence was not misplaced, for, after an arduous struggle, she recovered.

Sometimes the exigencies of the case compel us to do that which, under other circumstances, would be justly blameable. For example, in two cases last year I felt compelled to cause children's chests to be tapped with a simple incision, because there was not time to procure the proper instruments. It was a choice of two evils; and, though both did well, such a proceeding can, of course, only be justified by urgent necessity.

The object of reviewing a case is to see if we can determine what is the key of the position. This is a definite object; and if we can, as we sometimes may even in cases of great complexity, accomplish this, a great number of considerations are eliminated which before perplexed and distracted us. Sometimes this key is very remote, as in the following case. A young lady was suffering from asthma of the continuous kind, though paroxysmally exacerbated. There were also disturbances in various other functions. Two very able practitioners had exhausted their powers when I was called in. My powers were likewise exhausted; and, although she subsequently and slowly emerged from the attack, I could not conscientiously say that any of our prescriptions were of any benefit. Some two or three years afterwards, she had another attack, in which she was attended by one of her previous advisers and another very able practitioner. After matters had gone on for as long time as they had done before, I was again sent for. On careful reconsideration of the history of the two attacks, we recollected that about the commencement of each there had been a certain amount of dysmenorrhœa. The highways of medicine had not led us to our goal; and it was, therefore, justifiable to try the byways. Now, although almost every drug has been employed in asthma (Waring gives a list of fifty-two), I do not know that guaiacum has; but it is known to be efficacious in rheumatic dysmenorrhœa, and in

this patient there had been suspicions of a rheumatic element. Though much of the treatment had been directed against rheumatism, we resolved to try the guaiacum in full doses. A drachm of the simple tincture was given every hour. After the first dose, some relief was obtained; and after the third she fell asleep, the next morning was much relieved, and made a speedy recovery.

It is an useful dogma, that cases and the effect of drugs, though they may be rare, are not unique. When, therefore, we get a happy though casual result, we should store up the remembrance of it for future use. Some time after the occurrence of the preceding case, I saw a lady who had long suffered from attacks of true spasmodic asthma, which nothing had ever been found to produce any decided effect upon, though medicated cigarettes afforded slight temporary alleviation. Driven thus into a corner, I resolved to try the guaiacum, of the ammoniated tincture of which half a drachm was given every two hours with excellent results. It was a natural thing to advise that some of the drug should be kept at hand, and resorted to in case of another attack. This was done; but on the next occasion it completely failed. But now chloral-hydrate, given in small (about five-grain) doses every fifteen minutes, produced great relief after five doses. It is to be noted, that the first attack had lasted many days before the guaiacum was given; whereas the second time it was taken quite early. Here is another example of success attending treatment based upon such slight grounds that nothing would justify its adoption except the fact that the case was desperate, and indeed hopeless, as regards cure, though not as regards life, if treated in a more orthodox manner.

Diphtheritic paralysis is a disease as little, probably, influenced by drugs as any with which we are acquainted. It is true that there are certain drugs and classes of drugs which are recommended and used in its treatment. But it is not cured; it gets well. Some persons will say it always gets well; but it does not. I saw, a good many years ago now, a lad who, from paralysis of the muscles of the throat, could swallow nothing, and a part at least of what he did try to swallow got into his lungs. At least, there was a loose mucous rattle over the back of the chest, which seemed probably due to this cause. His debility and emaciation were extreme, and he died a few days afterwards.

Last year, I saw just a similar case in a young girl. In an attempt to swallow a little water in my presence, I thought she would have been choked. The voice was almost extinct; the arms and legs almost powerless and terribly wasted. She was dying of inanition; and, with the former case before me, it seemed almost a certainty that, unassisted, she could not live more than two or three days at the outside. Even when it gets well, diphtheritic paralysis generally, if at all severe, takes a long time—weeks or months—to do so. Nutritive enemata are a poor resource under such circumstances. Reflection on the former case had led me to the conviction that the only real prospect of recovery in a similar one would lie in frequent feeding through an œsophageal tube. My colleague said it would be impossible for him to undertake the passage of this sufficiently frequently. He asked me to take her into the hospital, and I readily assented; for, although considerably above the ordinary rank of hospital patients, the circumstances of her case made her eminently proper for admission. The parents, however, foolishly fond, absolutely refused the proposition, and urged me to do something for her at home. After many most earnest endeavours, we failed to move them. But what to do! I protest I could not at the moment have felt much more helpless had the undertaking been the bringing of the dead to life; the more so, that we know nothing of the pathology of this paralysis. In what part of the nervous system changes have occurred, what is the nature of these changes, are matters upon which our ignorance is absolute. One thing was vividly before my mind: the necessity that whatever agent we employed should be one capable of acting speedily. I happened to recollect that in the last century it was the custom to treat some affections of the throat with blisters to the back of the neck; indeed, they were used in diphtheria itself, but only in its early stages, not in the subsequent paralysis. I had myself seen curious and speedy results in some throat-inflammations from blistering the nape. Whatever effect blisters produce, is generally soon after their application. Upon grounds so slender, and for reasons so trivial, that in any ordinary case it would be a disgrace to act upon them, we resolved to apply a blister to the nape. I saw her no more; but some time afterwards I learned that within thirty-six hours she was able to swallow. She made a good recovery, though the paralysis of the arms and legs took their usual long time to disappear.

In the beginning of this year, a man was admitted into the General Hospital under my care suffering from diphtheritic paraplegia. With a person holding him on each side, he could just shuffle along the ward to his bed. I put a blister about an inch and a half wide the whole length of the back, by the side of the vertebræ. It ought to have been

wards during micturition at the umbilicus, welling up into the umbilical cup, filling it, and running over in such quantity that the parents had no reason to entertain any doubt as to the nature of the fluid. The urine was passed with difficulty by the urethra, and fell down from the orifice. No tumour was visible at the umbilicus; the prepuce was long, contracted, and adherent to the glans. Tincture of perchloride of iron had been applied to the umbilical aperture to produce contraction, but without avail. I operated for the phimosis according to Dr. Gordon's plan of slitting up the prepuce, as it seems to be very simple and efficacious. A *nævus-needle* was passed between the glans and the prepuce, and out through the prepuce at the corona. The prepuce having been grasped longitudinally beneath the needle by a pair of strong forceps, as much of it as was thus embraced was cut away by running a knife through the tissues along the lower border of the forceps. The mucous membrane was separated with difficulty from the glans, then cut freely, and its edges fixed to the skin by two sutures. Dr. Redfern saw the child lately, and has written me to say that, since the operation, the mother has been "quite pleased to see the urine projected to some distance from the body in the natural manner. Very little urine has come through the umbilicus; but at one period some blood oozed away," which was readily stopped by the application of tincture of perchloride of iron. "When I last saw it," he continues to say, "there was scarcely any appearance of ulcer or opening of any kind."

In some instances where the cure after circumcision has not proved complete, it might be necessary, in addition, to operate directly on the urachus according to the plans already mentioned; but neither in patent urachus nor in umbilical *facæ* fistula can we reasonably expect a cure, so long as there is an obstacle to the passage of urine or feces by the ordinary route.

PROLAPSE OF OVARIAN CYST.

By A. W. STOCKS, M.R.C.S.,

Surgeon to the Salford Royal Hospital.

E. I., AGED 45, a fustian-cutter, pallid, slightly built, married, had three children; she was last confined about twenty-two years ago. She menstruated regularly up to two years ago, irregularly till eight months ago, and not at all since. About eleven years back, a tumour about the size of a walnut appeared at the anus when getting out of bed, becoming larger on exertion. It was accompanied by faintness and uneasiness, especially when sitting down. She was always costive, and could neither micturate nor defæcate unless she replaced the tumour manually. She had lately experienced difficulty in coition. The lump had increased in size during the last ten months, and come down always while at work, producing a good deal of pain in the hypogastrium, more particularly when she was in the upright position. She felt best when lying down. The prolapse was large, being about the size of a small cocoa-nut.

March 15th, 1872, 12 noon. When she was placed upon the operating-table, and under the influence of chloroform, for the purpose of having the simple prolapsus ani, as it was supposed to be, relieved by operation, defæcation took place, the contents of the bowel being expelled in such a peculiar manner as to lead to the further and more precise examination of the tumour. It was then discovered that the orifice of the bowel, instead of being at the most dependent part, was on the posterior aspect, and about half way between the edge of the anus and the lowest part of the prolapse. On introducing the finger into the rectum, a large mass was found to occupy the anterior fold of the prolapsed bowel, of globular shape, and capable of being encircled easily at its base. *Per vaginam*, the cervix uteri was found tilted forward and to the right side. The uterine sound could only be passed three-quarters of an inch, and a finger passed into the rectum could be easily approximated to the one in the vagina over the tumour, clearly showing an absence of continuity between the uterus above and the mass below. Moreover, on rubbing the tips of the fingers together, a hardened cord could be felt slipping between them. The conclusion, therefore at once arrived at was that this cord was the Fallopian tube, and that the tumour was a small ovarian cyst, which had fallen through Douglas's pouch, became entangled with the prolapsed rectum and protruded through the anus, dragging the uterus itself out of its normal position. It was evident that to give permanent relief it was necessary that this tumour should be removed. Accordingly, an incision was made in the anterior aspect of the prolapse parallel to the axis of the bowel, and, after breaking down some slight adhesions posteriorly, a small ovarian cyst was easily turned out. The pedicle was divided, after being secured by a strong hempen ligature, the end

of which was left hanging out of the wound, and the wound was drawn together by an uninterrupted suture. There was considerable hæmorrhage, and the flaccid bowel was left outside the anus.

At 5 P.M., she had slight vomiting, the skin was cool, hæmorrhage slight, and the prolapsed bowel was swollen. She expressed a feeling of relief and lightness about the rectum, and it was noticed that the ligature had slipped off the pedicle and lay outside the wound. The catheter was passed, and she took an opiate.

March 16th. The countenance was good, pulse 120, temperature 98.2 degs. She had vomited frequently up to 7 A.M.; most probably from the chloroform. There was slight pain in the hypogastrium and right iliac fossa.

March 17th. There was no tenderness. The prolapse was supported by a T-bandage. She went on well until the 24th, when she passed a solid motion involuntarily, as she did daily for some time.

April 5th. The tumour was much smaller.

April 9th. The prolapse was easily returnable.

April 16th. She walked about and felt more comfortable than she had done for a long while back.

April 23rd. The protruded portion of the bowel was about the size of a walnut. Defæcation was fairly under her control, and she could draw the prolapse back without manual assistance.

1875, July 15th. The prolapse still existed, but was accompanied by no discomfort in, or obstruction to, either the act of defæcation or micturition.

The tumour (the dried preparation of which is in my possession) was an unilocular ovarian cyst, and contained about 5½ ounces of brown, slightly viscid fluid, specific gravity 1.025. The ovary and fimbriated Fallopian tube were attached to it, and on it were found marks of slight adhesions.

This extraordinary case is of perhaps more interest from its singular pathological character, rather than from any peculiar practical surgical value. The numerous factors, each of which must have furnished its own particular but necessary influence in bringing about such an unusual result as a prolapse of an ovarian tumour through the anus, will, in all probability, be long looked for ere a similar instance will be recorded.

POISONING BY TOBACCO.

By E. R. MORGAN, M.R.C.S., L.S.A., Medical Officer of Health to the Neath Union.

THE history of the following cases of poisoning by tobacco is, I venture to think, of sufficient interest to merit a place in the JOURNAL. The manner in which the poisoning was effected is, as far as my knowledge goes, quite unique, not that I mean to say poisoning by tobacco is unknown; on the contrary, I know many cases are on record. By some means or other, some tobacco got into a well, the water from which was drunk by three persons, and in each very severe symptoms of poisoning were set up, causing death in one instance; how the tobacco was discovered, will be described more fully hereafter.

It happened in a large village called Ystalyfera in Glamorganshire, which at the time was in the district over which I had jurisdiction as medical officer of health; hence I took great interest in the cases, and investigated the facts upon the spot. The other details were kindly furnished me by Dr. Thomas.

On Wednesday, March 10th, 1875, Dr. Thomas was called to visit a man, aged 55, living in a row of five houses, called "Cwmtawe". He found him lying helpless in bed with very confused ideas, unable to swallow, with complete loss of power over his lower extremities, hands trembling, and skin clammy and cold; heart's action very feeble; pulse hardly perceptible; he did not vomit, but had constant nausea; it ought here to be stated that he had been a habitual smoker for many years. With such symptoms, Dr. Thomas's suspicions were immediately aroused; and forthwith he made minute examinations in the garden for any vegetable poisons, and as carefully inquired of the wife of the patient whether she had procured any drug recently from some itinerant quack or chemist; but from these sources nothing could be elicited to account for the symptoms, and so for the time his mind was obliged to rest satisfied that the case, in all probability, was one of vegetable poisoning, but what that poison was he was then unable to say.

The same morning a child, a nephew, aged four years, was taken ill, but not with severe symptoms. However, on the next day, the doctor's attention was drawn to him. The lad was very sick, prostrated, with severe pains in the bowels; their action was arrested, necessitating the use of enemata; throat parched; pupils dilated, fixed and staring; pulse scarcely perceptible at the wrist; head thrown back, almost

amounting to opisthotonos. These symptoms continued while the prostration became worse, until on Monday, the 15th, about twelve o'clock, convulsions came on; and at 5 P.M. the same day he died.

After death, the face was bloated and the eyes suffused; the head was thrown back. There was nothing else remarkable. An inquest was held; but I regret to say no *post mortem* examination was made.

On Sunday, March 14th, a girl, aged 6, was taken ill with the same symptoms as the other two. I visited the place; and, on the fifth day of her illness, examined her, when she complained very much of her head and throat, and the former was thrown back. The face was red and swollen; the skin hot and dry. Temperature in the axilla, 103.4 deg. Pulse 95, weak. The pupils were dilated. The tongue was thickly furred; the bowels confined. After a prolonged convalescence, she recovered.

In the same house, there were the mother and six other children, but the three mentioned were the only ones affected.

According to the evidence produced at the inquest, none of those who were not taken ill partook of the water from the well in which the tobacco was found; hence the explanation of the absence of any symptoms in them. The persons in the other houses of this row procure their supply of water from a spring near a railway, two hundred yards away. It seems, however, that one other house, making two in all, also had been accustomed to get water from the well first mentioned; but, for some unexplained reason, some time before the 10th March, they likewise had taken their water from the well near the railway.

The source of water-supply to those in the house who were taken ill was a small shallow well some hundred yards away, situated near a canal; and, upon examination, I found there a shallow well cut out of a steep bank, with a feeble but persistent spring at the bottom of it.

While a sister of the deceased (the one taken ill on the Sunday) was taking water from this well on Sunday (14th), she noticed some tobacco in the water, and drank some of it; but, thinking no more of it, did not touch it nor mention the fact at the time to anyone. But next morning she spoke about it; and the same evening Dr. Thomas was made aware of this.

He immediately communicated with the police, and requested a policeman to go and remove the tobacco forthwith. This was done on the following (Tuesday) morning, and it was proved that half a quarter of a pound packet was taken out, and the tobacco shown to be of the strongest quality, viz., shag. On examining the tobacco, it was quite evident from its appearance and taste that it had been in the water for several days.

And here was, without doubt, the solution of the cause of all the symptoms, the chain of evidence being complete; but, at the inquest, though I carefully examined all the witnesses (being allowed to do so through the courtesy of the Coroner), I could not solve the other mystery, viz., how the tobacco got into the well, whether by accident or through the wilful act of some person. The jury, therefore, were obliged to find an open verdict.

INJECTION OF PERCHLORIDE OF IRON IN POST PARTUM HÆMORRHAGE, RESULT- ING IN DEATH.

By H. W. BODDY, M.R.C.S. and L.S.A.,
Cheetham Hill, Manchester.

IN the absence of the usual medical officer, I was summoned, during the night of April 4th, to attend a protracted case of labour at the Prestwich Union Workhouse. The patient, Elizabeth H., aged 28, had been in labour about five hours; and during the last hour had, as the nurse informed me, made little or no progress. On examination, the head was found to present in the right oblique diameter of the pelvis, in the occipito-anterior position. The head was low in the pelvis, the forehead occupying the hollow of the sacrum. After waiting two hours, and finding no advance made by the head, the pains becoming weaker, and as no mechanical obstacle to the passage of the head was apparent, I proceeded to apply Roberton's long forceps. After application of the forceps, by assisting the pains with firm traction, the child was born, without difficulty, in from ten to fifteen minutes; being alive, of full size, and well nourished. The placenta was removed in about twenty minutes, in the usual way; and, immediately on its removal, I was alarmed by a sudden gush of about eight to ten ounces of blood following it. A flow of blood continued for a short time, until, by friction and pressure on the uterus, I caused it to contract, and the hæmorrhage was much diminished, but not entirely arrested. A binder was then firmly applied, and pressure kept up upon the uterus with the hand. The nates were kept sufficiently uncovered to see any external

hæmorrhage that should occur. The moment my hand was ever removed from the uterus it dilated, and a gush of blood poured forth; and though again, by pressure and friction, contraction was established, still the "thin red line" trickling over the nates reappeared after it was wiped away.

Having given several large doses of ergot, and having twice injected cold water into the uterus with but temporary good effect, I determined to adopt Dr. R. Barnes's plan of injecting into the uterus a solution of perchloride of iron. Accordingly, I made the solution recommended by Dr. Barnes (four ounces of liquor ferri perchloridi fortior to twelve ounces of water), carefully measuring both the iron solution and the water. An ordinary enema-apparatus was used; and after pumping the solution through the delivery tube a few times, to get rid of all bubbles of air from the apparatus, I introduced the pipe well up to the fundus uteri, a gush of blood occurring as I dilated the os for the passage of the tube. The nurse then worked the syringe, while I held the pipe in its position. The hæmorrhage ceased immediately on the injection of the solution; and, during the first part of the process, the patient made no complaint, and the uterus began to firmly contract. But during the latter part of the process, she began to be uneasy, complained of pains in the belly, then severe cramps of the flexors of the leg occurred; next she gave a shriek, crying, "Oh my belly"; a general convulsion took place, the eyes rolled and turned up, the skin became blue, the pulse ceased, and she expired. (All this took place during the last two or three strokes of the enema-syringe.) Artificial respiration was then kept up for some time without any good effect. The uterus was firmly contracted round the injection-tube, some little force being required for its withdrawal.

That the injection of the perchloride of iron was the immediate exciting cause of death, there can be but little doubt, as the patient conversed sensibly with me two or three minutes before the operation, and complained neither of pain nor of any other symptom. The hæmorrhage could not be the cause; for acting on Dr. Barnes's advice, of it being better to do it too soon than too late, as we cannot supply again blood once lost, the injection was used before the loss of blood had begun to affect the nervous system. Therefore, the convulsion cannot be confounded with those that occur at the closing scene of death from simple hæmorrhage.

The death was due, in my opinion, to excessive irritation and shock to the cerebro-spinal and ganglionic nervous systems; and my reasons are the following. During the first part of the injection, while the irritant action of the perchloride of iron was engaged in causing the strong tonic contraction of the uterus that occurred, the irritation to the sensory nerves was reflected no further than those nervous centres that preside specially over the reflex action of the muscles of the uterus. After contraction was established, the irritation, as it could not be further expended in causing more uterine contraction, seems to have been further reflected to the lower part of the spinal cord, probably through the uterine branches of the sacral plexus, and this would account for the cramp or violent contraction of the flexors of the leg. Passing higher up the cord, the irritation would next cause the general convulsion that took place; and the shock, at the same time, to the ganglionic system, would cause cessation of the heart's action through the cardiac nerves; the consequent blueness of surface arising from accumulation of venous blood in the capillaries of the skin.

It may be suggested that death occurred from entrance of the solution into the general circulation. But could absorption, to any extent, take place through a rigidly contracted uterus? If blood cannot pass through the walls of the uterus well contracted (and we know it cannot), is it possible for any other fluid to do so?

Again, it may be objected that cutting and cauterising operations are frequently done upon the uterus, no shock supervening. But I contend that the sensibility of the uterus in the pregnant and that in the non-pregnant state, are two extremely different things. Though it has not yet been proved that the nerves of the uterus are increased either in size or number during pregnancy, yet their power of conducting impressions, without doubt, is, as evidenced by the pain felt during the contractions, and by the reflex contractions, easily brought on during labour by irritating the os or cervix uteri. The area, too, over which an irritating and caustic injection would act is immensely increased in the uterus of a woman recently delivered.

My conclusion, then, is, without any doubt, that death in this case resulted from the action of the solution of perchloride of iron upon the lining membrane of the uterus. I considered at the time, and do so still, that I was justified, on the authority of Dr. R. Barnes, in using the iron injection. The patient would doubtless have sunk gradually had this not been done, and it seemed to me that it was the only chance for her life. But this case does not give much encouragement for the further use of Dr. Barnes's plan. If again forced to us

use, I should immediately cease injecting as soon as contraction of the uterus was set up. I proceeded further with it in this case, partly to thoroughly promote firm contraction, and partly to use up entirely the amount of fluid recommended by Dr. Barnes. In conclusion, I would observe, as this remedy is only upon its trial, that it would be for the welfare both of the public and the profession if all the unsuccessful, as well as the successful, cases in which it was used were published. Then it might be seen whether the results would be such as to justify its general adoption in these cases of hemorrhage.

GELSEMINUM SEMPERVIRENS AS A REMEDY FOR COUGH.

By J. ROBERTS THOMSON, M.D., M.R.C.P.,

Physician to the National Sanatorium for Consumption and Diseases of the Chest, Bournemouth.

No symptom in pulmonary complaints more frequently calls for treatment than cough. The skill and the resources of the physician are alike taxed by its persistency or its severity, by the failure of medicines to relieve, or by the intolerance of remedies by the patient. Any addition to our *Materia Medica*, therefore, which proves of real therapeutic value in the treatment of this symptom, calls for a patient investigation at our hands. I know that some will say, "Do not direct your attention too much to the treatment of cough in cases of pulmonary disease, and more especially in phthisis. Deal with the conditions which give rise to the cough, and trust, by so doing, to alleviate it." In most cases, however, this symptom is so urgent and so harassing that we must treat it. For this purpose, I believe we have in *Gelsemium sempervirens* a very valuable addition to our armamentarium. Of late this drug has received some attention in this country with reference to its action in nervous affections (see *BRITISH MEDICAL JOURNAL*, May 2nd, 1874, and September 18th, 1875; *Evolution*, August 1875), but, so far as I know, little has been said with regard to its use in cough. I have administered it recently to a large number of patients suffering from pulmonary disease, as a cough sedative. The following cases will illustrate the results which have been obtained.

E. N., a young lady, aged 21, had a large vomica at the apex of the left lung. The rest of that lung was dull on percussion. Respiration was bronchial, and there was coarse crepitation both with inspiration and with expiration. The vocal resonance was bronchophonic. The upper lobe of the right lung was also the seat of limited softening. There was much troublesome cough, with copious expectoration. Tincture of gelsemium was administered in five-minim doses; this gave very great relief to the cough, which was most marked towards evening, the time at which the cough was most troublesome. The patient expressed great faith in the remedy, and preferred it to any other sedatives, of which she had had a great many. No bad effects were observed from its use. There was no nausea or sickness produced, and the appetite was not impaired.

N. T., a married lady, aged 30, had dulness on percussion over the upper half of the left upper lobe. Over the area of dulness there were bronchial breathing, fine crepitation, and bronchophony. She had a very irritable and spasmodic cough. The expectoration was very slight and mucopurulent. Eight-minim doses of tincture of gelsemium produced marked relief of both hacking and spasmodic cough. No unpleasant effect was produced by the remedy.

J. M., an unmarried woman, aged 26, had chronic phthisis in the second stage, over the whole of the left lung and the upper half of the right. She had an extremely irritable cough, especially in the night, which did not yield to any of the usual sedatives. Five-minim doses of tincture of gelsemium gave very great relief, and enabled the patient to get a fair amount of sleep.

J. H., an unmarried man, aged 35, had chronic phthisis in the third stage in the right lung. The deposit was scattered all over the left lung. His cough was very troublesome. Little relief was obtained from the usual remedies. Five-minim doses of tincture of gelsemium proved most useful in checking the cough. No unpleasant effects were noticed.

E. M., a young lady, aged 24, had congestion of the left apex, trachea, and larynx, and an excessively irritable cough, resisting all remedies general or local. Tincture of gelsemium in five-minim doses, combined with syrup of codeia, gave great relief.

J. G., an unmarried lady, aged 32, was subject to severe attacks of spasmodic asthma. Her attacks usually yielded best to bromide of potassium with belladonna; to this tincture of gelsemium was added, and the attacks were markedly much milder and of shorter duration. No unpleasant effects were observed.

A. B., a young lady, aged 23, had advanced phthisis. The cough was very troublesome. All the usual sedatives disagreed. Gelsemium gave relief to the cough, but could not be continued because of producing nausea.

These will sufficiently indicate the kind of cases in which I have found gelsemium useful. In some patients, when there existed much bronchial irritation, I have combined it with bromide of ammonium, tincture of squill, and syrup of codeia, and such a combination has often afforded very great relief. In no case, save the one last narrated, have I observed any unpleasant effect. In that, the nausea was only slight, but she was otherwise suffering so much that I did not think it right to persevere.

These results show that gelsemium has a marked power in subduing cough; that it acts probably as a nervous sedative; that it is useful when other sedatives have failed; that it seldom produces any unpleasant general effect; and that the kind of coughs in which it may be administered with advantage is very varied.

I believe further investigation will heighten our estimate of the value of this drug in dealing with so troublesome a symptom in the treatment of pulmonary complaints, and that a more extended acquaintance with its action will enable us to differentiate those forms of cough in which it is likely to be of most service. It is undoubtedly a remedy of no mean efficacy, and will, I feel sure, hold a permanent place in our list of *materia medica*.

SURGICAL MEMORANDA.

SYME'S OPERATION MODIFIED AND IMPROVED BY SAVING THE PERIOSTEUM OF THE OS CALCIS.

IN THE *BRITISH MEDICAL JOURNAL* of the 2nd ult. is a paper by Mr. Joseph Bell of Edinburgh, in which he describes a modified and improved method of performing Syme's operation by saving the periosteum of the os calcis. I beg to inform Mr. Bell that Dr. G. H. B. McLeod, in the Glasgow Royal Infirmary, has performed Syme's operation exactly in the same way as Mr. Bell describes. From 1869 till 1873, I saw Dr. McLeod perform Syme's operation about fourteen times, in all cases saving the periosteum of the os calcis, and with the greatest success. Since that time, I had occasion to perform the operation four times. In all the cases, I saved the periosteum of the os calcis. All the cases did well; in two of them a considerable amount of new bone formed in the flap, making a splendid stump.

JOHN AITKEN, M.B., Carlisle, N.B.

THERAPEUTIC MEMORANDA.

TREATMENT OF WHOOPING-COUGH WITH CARBOLIC ACID INHALATION.

IN THE *JOURNAL* of the 2nd ult., Dr. R. J. Lee has mentioned my name in connection with the employment of carbolic acid vapour in the treatment of whooping-cough. I am glad to have the opportunity of furnishing a concise account of the way in which it was used, and also of my experience of the remedy in question.

During the early part of the present year, I had under care about forty cases of the above affection (occurring amongst the children of officers connected with Her Majesty's Convict Prison, and not, as might be inferred from Dr. Lee's remarks, amongst the convict class). At the suggestion of Dr. Lee, I tried the inhalation of the vapour; but, owing to the number of cases on hand at the same time, and having only one inhaler on the spot, I was not enabled to apply the remedy separately to each case, as I should have wished. This difficulty was, however, in a measure, got over by having had two rooms placed at my disposal, the inner one of which was thoroughly impregnated with the vapour, made by boiling one part of acid with three of water. The little sufferers being then let into the apartment, the inhaler was kept in working order during the time they remained, generally about fifteen minutes; after which the door communicating with the outer room was thrown open. In this latter place, they were kept five minutes, and then, being well wrapped up, were despatched to their respective quarters; a distance which, at the most, did not exceed two minutes' walk. Great relief followed these inhalations; the distressing paroxysms accompanying the cough being especially alleviated; and the parents remarked that a good night's rest invariably followed after they had inhaled. This course of treatment was continued every other day for about five weeks, and proved eminently successful in all but two cases, in which

it caused some amount of bronchial irritation, and had in consequence to be discontinued. During the epidemic, two fatal cases occurred, both having suffered the previous winter from capillary bronchitis, being of weakly constitutions; these two had not inhaled the vapour. Two adult cases came under notice, one aged 23, the other 35. The inhaler used on the occasion was the same as that alluded to by Dr. Lee in the JOURNAL.

RICHARD HARRISON, L.R.C.P.Lond., Dartmoor.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

ST. MARY'S HOSPITAL.

CASES OF INTESTINAL OBSTRUCTION.

(Under the care of Dr. BROADBENT.)

1. *Obstruction of the Upper Part of the Small Intestine by a Band of Adhesion.* (Reported by Mr. G. M. Giles.) Ed. M., aged 16, was admitted on Tuesday, June 1st, 1875. He had always been a very healthy boy. He came home three days ago from his work, feeling as well as usual, and went to bed at his ordinary time. About four o'clock in the morning, he was awakened by severe griping pains in the abdomen, feeling as if "he was all tied up in a knot". About an hour after this, he began to vomit "green shiny stuff". He had eaten nothing during the day but some corned pork and pie. About an hour after he began to feel ill, he had a stool, consisting of frothy, pinkish, offensively smelling stuff. Since then, he had had no motion, but had been incessantly sick. On Sunday night, his mother gave him a dose of half an ounce of castor-oil. On Monday night, he had two doses (half an ounce) of castor-oil. He had one pill on Monday morning and two doses of a mixture prescribed by a practitioner, which made him more sick. During the whole time he had been in much pain.

On admission, his countenance was anxious; he lay on his back, breathing slowly and regularly with his diaphragm as well as by his ribs. His abdomen was very tender, and marked across by the lines of two or three very much distended convolutions of intestine. Yet, on the whole, it was by no means distended. He was very thirsty, and had passed very little urine since he had been ill. Pulse 112, rather small and hard. Temperature in axilla, 99 deg. Resonance was good in both chests; also breathing. The heart-sounds were normal, but rather weak.

OBSERVATIONS.—The diagnosis, so far as it could be carried, was very clear, and the points of the case are well brought out in the report. First, it was obvious from the total cessation of the action of the bowels and from the vomiting, that there was intestinal obstruction. It was obvious also that the obstruction was high up. The very early setting in of vomiting pointed to this. There may be reflex vomiting in these cases, as in obstruction of the common bile-duct or ureter by calculus; but here it was evidently due to filling up of the intestine above the obstruction by food and secretion, and the short time in which this took place showed that there was no great length to fill, though, no doubt, secretion had been increased, and contraction of the intestinal walls provoked by the purgatives administered. More conclusive evidence of the situation of the obstruction was, however, afforded by a comparison of the degree of distension of the abdomen with the size of individual coils of intestine as seen through the abdominal wall. These were approximately as thick as the wrist; and, had any great length of bowel been distended to such a degree, there must have been extreme general tympanitis, whereas the abdomen was not at all greatly blown out. Further corroboration of the conclusion thus arrived at was furnished by the suppression of urine, attributable to the diminished surface for intestinal absorption. The nature of the obstruction was less easy to make out than the seat, but it clearly did not imply strangulation of the intestine, and was, therefore, probably not hernia; examination, however, was made for hernia, and the rectum was explored with negative results. Had there been strangulation for three days, the collapse would certainly have been greater, especially when the symptoms had been so acute. Peritonitis, again, was excluded, notwithstanding the tenderness on pressure, by the free movement of the abdomen in breathing; the general symptoms, moreover, were not quite such as would have attended inflammation of the peritoneum. There were no indications whatever of intussusception.

TREATMENT.—The question at once arose whether one of the surgeons should be requested to open the abdomen, as everything pointed to a condition capable of relief by operation. Had the only consideration been the risk attending the operation, no hesitation would have been permissible; but the boy had not had the chance offered by opium. Every physician has seen cases in which intestinal obstruction was complete so long as the violent peristaltic action set up by it or by purgatives continued, but in which, when this has been quieted by opium, the passage of the contents of the bowels has been permitted. The circumstances here were not promising, but it was thought right to make the trial. Accordingly, a grain of opium and a third of a grain of extract of belladonna were given in the form of a pill every four hours. Food by the mouth would clearly be of little use, and an enema of beef-tea was, therefore, ordered every three hours; a little brandy being added on the 2nd. The boy was permitted to drink water *ad libitum*, and milk if he wished. He was also supplied with ice.

The further progress of the case is as follows.

June 2nd. He was evidently weaker. He had passed nothing but one or two small pieces of fecal matter with a quantity of fluid from injection. Nothing was found to account for obstruction on examining the rectum. The abdomen was more distended and very tender, and occasionally a sudden contraction, apparently of the upper fibres of the transversalis muscle, caused spasmodic depression in the right hypochondriac region. His face expressed the most intense anxiety. He had passed no urine since yesterday. Pulse 126, small and weak. Hands cold. The pain was less severe, but was increasing again. Temperature 98.4 deg.

June 3rd. He was worse; intensely restless, so that there was difficulty in keeping him in bed. He was decidedly incoherent, and his expression was extremely anxious. Temperature 97 deg.; yet he complained of heat. The temperature of the ward was 72 deg. The extremities especially, and the surface generally, were extremely cold and clammy. The pulse was so feeble that it could neither be felt nor counted at the wrist, and barely at the carotid. The white mark produced by pressure of the hand took twenty seconds to disappear. After a dose of brandy, the pulse could be feebly counted as about 160 in the femoral artery. The abdomen was, if anything, less tense. He had strong priapism. Respiration was good. The urine was slightly smoky in colour, of acid reaction, and of specific gravity 1015; no albumen. At about 3 P.M., his breathing was very embarrassed, 43 per minute. After this, the breathing dropped to about 12 per minute, the previously restless limbs lay helpless, and in a short time respiration entirely ceased, the heart having apparently stopped first. He died at about 4 P.M.

POST MORTEM EXAMINATION.—The body was badly nourished, but well formed. The lungs were very healthy. The heart was normal; the right side contained a *post mortem* clot; the left side was empty. The liver, kidneys, spleen, and brain were all normal. On opening the body, three or four distended coils of small intestine were seen lying transversely across the abdomen, exactly as mapped out during life; below this, both large and small intestines were empty and contracted; one coil of the latter descended into the pelvis. The great omentum was adherent to the parietes on each side by very old adhesions. About five feet from the duodenum, the intestine was found, in the left lumbar region, sharply bent across an old adhesion band between it (the omentum) and a very large old caseous gland about the size of a walnut. Obstruction had taken place here, and the remainder of the small intestine and the entire large intestine were empty, and a considerable length of bowel lay in a cul-de-sac behind the left end of the stomach. There was no strangulation, but the distended portion was deeply congested.

With this case may be compared the following.

Thos. J., aged 52, was admitted February 6th. He had enjoyed good health, and the bowels had been regular till ten days before his admission, at which time a sharp pain suddenly came on in the lower part of the abdomen, and the bowels ceased to act. The pain gradually increased; the abdomen became much distended and very tender; and all food was vomited. The abdomen was enlarged to its utmost extent, and there were general tension and tenderness, with increased hardness in the left inguinal region. The tongue was dry and furred in the centre, clean and red at the edges. Pulse 30, short and sharp; heart-sounds normal. Urine passed freely. The vomited matters were yellow. The rectum was empty; a copious enema of gruel with castor-oil administered soon after admission was retained altogether.

OBSERVATIONS.—Here also there was obstruction of the bowels, without strangulation or peritonitis, either of which would have been attended with more urgent general symptoms. The cause could not be ascertained. The obstruction, however, was low down, and apparently in the large intestine, the abdominal parietes being everywhere

put on the stretch by the distended bowel. Purgatives had been given very freely without effect. The treatment now adopted was as follows: Opium one grain, and extract of belladonna one-quarter of a grain three times a day; an enema twice daily; in milk, beef-tea, and beef-jelly as food, with four ounce of brandy.

February 10th. After three days of treatment, there was no improvement. There was great pain in the abdomen, and the swelling and tenderness were the same or worse. He had very little sleep. Pulse 96. Temperature, 99.4 deg. Tongue dry and furred. Urine was passed freely. There was no action of the bowels, the enemata returning uncoloured. The enemata were discontinued; the treatment was otherwise the same.

On the 11th and 12th, the same state of things continued, but the patient was weaker. It was now proposed to aspirate the distended intestine; but, as a preliminary to this, a final exploration of the rectum was made, and feces were felt. An enema, therefore, was given, and a little faecal matter was for the first time brought away, after which, at an interval of six or seven hours, the bowels acted spontaneously and repeatedly, with great relief of all the symptoms.

There were several recurrences of the obstruction, with pain, distension, and tenderness of the abdomen and vomiting; and it was not till March 16th, after more than a month in hospital, that the patient could safely be allowed to leave.

In this case the cause of the obstruction remained obscure. In old people there is often with a daily evacuation imperfect expulsion of the feces, which accumulate and completely block up the lower bowel in some part of its course, most frequently perhaps at the sigmoid flexure, but sometimes higher. This did not appear to be the explanation here; the matters passed when relief was obtained not having the characters of an old accumulation. An instance of this kind was in the hospital in 1872. The patient, aged 72, was admitted on May 30th, having had no action of the bowels for five days. He was vomiting offensive matters; the abdomen was large, tympanitic, and tender, with special pain, tenderness, and hardness in the region of the caecum. The urine was retained, and had to be drawn off by the catheter. Purgatives and enemata had been given without effect, and the rectum was found on examination to be quite empty. A grain of opium was given every four hours; and at length, on the 5th and 6th of June, copious enemata were followed by the expulsion of enormous quantities of hardened feces, after which the patient was well, with the exception of weakness and cough.

HULL GENERAL INFIRMARY.

TRAUMATIC TETANUS: USE OF CALABAR BEAN: RECOVERY.

(Under the care of Dr. LUNN.)

[Reported by Mr. HENRY THOMPSON, House-Surgeon.]

JOSEPH W. S., aged 7, was admitted into the hospital on August 6th, 1875, complaining of stiffness and pain about his jaws. On July 26th, the patient had received a wound on the under surface of his left great toe, from a piece of broken pot, as he was running about the streets barefooted. The hæmorrhage, though profuse, was restrained by some cold water, and a poultice was applied by the child's mother. The wound apparently was healing; and there were no signs of irritation until August 3rd, when the patient was seized with "severe cramp" at the pit of the stomach; and, from the mother's account, he seemed to have been in a condition of opisthotonos, but accompanied by no difficulty of breathing or swallowing. The eyes were staring and prominent, but not suffused; and the patient perspired freely. The attack lasted for about an hour, after which the boy fell asleep; and, next morning, was allowed to run about the streets as usual. The mother, however, noticed that he could not speak distinctly, that he was somewhat bent forwards, and that his face was slightly distorted.

In the evening of this day (August 4th), the patient was again seized with general muscular rigidity, with marked contraction of the facial muscles, increased on attempting to speak, and accompanied by great pain in the abdomen.

On August 5th, the patient had no return of the cramp, and ran about the streets as usual.

On August 6th, the mother was advised to take her son to the hospital, as "there seemed to be something the matter with his face".

Prior to the attack, he had been much exposed to the weather, leading the life of a street Arab, and had been badly fed and clothed. For some months previously, he had been in a delicate state of health.

On admission on the morning of August 6th, it was noticed that he could not open his jaws to their full extent, the angles of the mouth were slightly drawn outwards, and his speech was thick and unintel-

ligible. Still, however, his countenance did not bear the expression of pain, nor was there rigidity of any other part of the body. An unhealed inflamed wound, about an inch long, was noticed on the under surface of the great toe. On the same evening, his bowels being constipated, he was ordered two grains of calomel; and this was followed, on the morning of the 7th, by a dose of castor-oil, but without any effect.

August 7th. He could still partially open his jaw at will, but the abdominal walls were noticed to be hard.

August 8th. At 3 P.M., a drop of croton oil and two grains of calomel were placed on his tongue; and, as the jaws seemed to be more fixed, he was ordered one-twelfth of a grain of extract of Calabar bean and fifteen minims of solution of morphia every two hours. At 10 P.M., an enema of castor-oil and gruel was administered. The administration of this produced a violent attack of opisthotonos, the jaws becoming rigidly closed, and the abdomen becoming as hard as a board. The attack lasted about five minutes, after which the trismus was more marked than it had been previously. The bowels were moved shortly afterwards; owing to some misunderstanding, the extract was discontinued from 11 P.M. on the 8th to 11 A.M. on the 9th.

August 9th. The rigidity of the jaws was more marked, and the risus Sardonius more apparent. The muscles, also, at the back of the neck, and those forming the boundaries of the axillæ and the walls of the abdomen, were rigid; but at no time, except during the paroxysmal attacks, were the feet or hands at all affected. He was ordered the same dose (one-twelfth of a grain) every half hour at 8 P.M.; as he had had a good sleep, the morphia was omitted.

August 10th. He had no severe attack, and was otherwise in the same condition.

August 12th. The patient seemed weaker, and the symptoms had increased in severity. He was ordered to have a quarter of a grain of extract of Calabar bean every half hour, except during sleep; also two eggs and three ounces of wine daily, in addition to the previous milk and beef-tea.

August 13th. He had another paroxysm during the night, waking up and screaming violently. The calomel was repeated, and it operated in four hours; the bowels not having been moved since the 10th.

August 14th. The trismus was less marked. The abdominal muscles were still rigid. The extract was continued in the same dose.

From this date, up to the 20th, he began gradually to improve; and, on the latter day, the Calabar bean was given every hour instead of every half hour.

August 22nd. The abdomen was more flaccid. On the 23rd, he was still improving, and was ordered to take the extract every two hours; on the 26th, every four hours; and, on the 28th, twice a day.

September 3rd. All the rigidity was gone. He could move his jaws freely. He was ordered to take a fourth of a grain of the Calabar bean extract daily.

September 5th. The boy was out of bed. There had been no return of the spasm.

September 8th. The Calabar bean was omitted, and he was ordered meat diet, and a drachm of cod-liver oil twice a day.

September 10th. He was discharged cured. He subsequently attended as an out-patient, and continued well.

Recoveries from traumatic tetanus, if not extremely rare, are, at all events, sufficiently so to render every case worthy of record; especially when, as in the present instance, they present peculiar features of interest. First of all may be noted the large quantity of the extract of Calabar bean taken. During the first three days, he took, on an average, about three grains daily. Then, during the next ten days, he took about ten grains daily. During the next seven, he took about five grains daily; and, after that, the quantity was gradually reduced to half a grain daily. Altogether, in twenty-six days, one hundred and thirty-three grains were taken—a daily average of about five grains. In the *Practitioner* for November 1874, is recorded a successful case in which one hundred and forty grains were taken in eighty-six hours; but the patient in that instance was an adult, and not a child of seven years.

Another circumstance to be noticed is the low temperature which existed during the attack. Only once (on the morning of the 7th) was the temperature 100 deg.; and, after the evening of the same day (when the thermometer registered 99.4 deg.), it was never above normal. On several occasions, it was a degree or more below normal; and, on the evening of the 17th, the thermometer only reached 96.3 deg. Several thermometers were used, in order to see if there might be a flaw in their registration. They had all been registered at Kew, and all gave about the same result. During the greater part of the illness, there was profuse sweating.

One favourable symptom was that the child was always able to swallow freely, except during the two or three paroxysms mentioned. The thorax, also, was never much affected, and moved fairly with respiration, the breathing for some days being carried on without the aid of the diaphragm. In spite of the large quantity of the extract taken, it produced no physiological effect upon the pupils until the 13th; and, when the medicine was discontinued for a short time, they soon regained their former rather dilated condition. The extract of Calabar bean was quite fresh, and was obtained from Messrs. Battley and Watts, which was held to be a sufficient guarantee of its purity. The wound on the great toe, which, on admission, was rather inflamed, after being poulticed for a short time, cicatrised naturally.

SELECTIONS FROM JOURNALS.

MEDICINE.

THE OPHTHALMOSCOPE IN INTRACRANIAL DISEASES OF CHILDREN.—L. Heingel (*Zeitschrift für Kinderheilkunde*, vol. iii) in sixty-three cases of intracranial disease in children, found, in forty-seven, affections of the optic nerve or retina, or of both. There were eighteen cases of neuroretinitis; thirteen of neuroretinitis with congested papilla; four of congestion of the optic nerve; four of optic neuritis with congested papilla; two of consecutive atrophy of the optic nerve; six of atrophy (genuine?) of the optic nerve; and in sixteen the ophthalmoscopic appearances were normal. The cases are thus classified according to the disease: In thirty-one cases of tubercular meningitis of the base of the brain—fifteen of neuroretinitis, five of neuroretinitis with congested papilla, four of congestion of the optic nerve, two of incipient atrophy, one of atrophy, and four with normal fundus of the eye: in ten cases of the same disease with tuberculosis of other organs—three of neuroretinitis, one of optic neuritis with congested papilla, three of atrophy of the optic nerve, and four normal; in fourteen cases of cerebral tumour—five of neuroretinitis, two of neuroretinitis with subsequent atrophy, four of atrophy, and three normal; in two cases of œdema cerebri—congestion of the optic nerve. In the remaining seven cases (œdema and hyperæmia of the meninges, sclerosis of the brain, cerebro-spinal meningitis, and effusion in the cord), the fundus of the eye was normal. It was observed that neuroretinitis frequently appeared within a few days, and that in all cases it affected both eyes alike.

RHEUMATOID DISEASE IN DILATATION OF THE BRONCHI.—C. Gerhardt (*Deutsches Archiv für Klin. Medicin.*, vol. xiv) relates two cases to show that, just as puerperal fever may accompany pyæmia, and rheumatic inflammation of the joints gonorrhœa, so rheumatic affections of the joints may attend bronchial dilatation, as soon as the purulent secretion becomes stagnated through imperfect expectoration. In both cases, many joints were affected; and in one there was endocarditis, with consequent mitral insufficiency. He explains the connection between the primary disease and the joint-affection by supposing that the decomposed pus was absorbed and infected the blood. In both cases, expectoration was assisted by compressing the thorax during expiration. The dyspnoea and fever ceased under this treatment. Sphygmographic observation showed that the compression had no influence on the pulse, the arterial systole being prevented. In order to further assist respiration, Gerhardt has applied faradism during inspiration, and has endeavoured to assist expiration by compression.

TRISMUS NASCENTIUM.—Dr. Philip A. White reports fourteen cases of trismus nascentium and of trismoid, which he distinguishes as the acute and the chronic forms of the disease. The first symptom of trismus is inability to suck. This is pathognomonic of the disease. The child loses the power of seizing the nipple; and if the nipple should be forced between the jaws, it has no power of suction. The child seems to be indescribably distressed, moans, whines, cries, is colicky, sometimes has griping passages from the bowels, is restless, uneasy, sleeps badly, has hiccough, slight spasm of one or both upper extremities, then tonic rigidity of the whole muscular system with clonic spasms, which come on at intervals, and are often excited by touch or a noise. The expression of countenance is very peculiar, and can never be forgotten when once seen. The acute form terminates fatally in two or three days, sometimes in less time; while the chronic or milder form of the disease may continue for weeks and even for months—the child slowly wasting away to a mere skeleton, and dying of what was formerly called marasmus, but which is merely another name for gradual starvation. Dr. J. Marion Sims, many years ago, contended that this disease was not traumatic tetanus, but was caused by pressure, generally the result of an inward displacement

of the occipital bone, which already existed at birth, was kept up by the dorsal decubitus, whether in the cradle or the mother's lap, and which could be removed together with the symptoms of trismus simply by adopting the lateral decubitus. Dr. White cured seven of his cases by position alone, the other seven dying without treatment. He concludes that these cases justify the conclusion that trismus nascentium is the result of mechanical causes; the predisposing causes being protracted or tedious labour, and a too well ossified state of the fetal cranial bones. The exciting cause is undue pressure on these bones, more especially the occipital; while the immediate cause is undue compression of the medulla oblongata and the nerves originating from it. The cases given are all of one general character, and all go to show that the disease is the result of pressure exerted at the base of the brain. In all of them the pressure was produced by an inward depression of the occiput, differing, however, from the slightest to the greatest possible degree.—*The Richmond and Louisville Medical Journal*, July 1875.

PERIODICAL MELANCHOLIA.—Dr. William Suflet, after careful study of numerous cases, has observed that, although repeated attacks of melancholia in the same person are not unusual, yet they are generally very few and very far apart, and, if the patient do not entirely recover, he passes into a permanent state of melancholia, or into some other form of insanity. Loss of flesh invariably accompanies the attacks, and an increase in weight always follows as soon as they are over. The attack always commences with a subacute anæmia. The general anæmia continues during the entire attack, and disappears during the interval. The skin and the mucous membranes are pale; the pulse is small and feeble; the veins, on the contrary, are dilated and distended with blood. These phenomena are also quite constant, and admit of no exception. As regards the treatment of the disease itself, it is necessary to bear in mind that the psychical organ in this state is unable to produce any but painful sensations, and, therefore, all kinds of excitation, all impressions, even pleasant ones, have to be avoided, and the patient must be advised to keep quiet bodily and mentally. A few days' rest in bed is sometimes the most beneficial remedy. Exercise, travelling, admonition, and religious consolations only aggravate the psychical hyperæsthesia. On the contrary, everything that produces relaxation of the vaso-motor spasm and congestion of the brain acts beneficially. Thus, prolonged tepid baths, and, above all, opiates, though only palliatives, often make life endurable, especially in the variety of melancholia with great præcordial distress. Other remedies which act similarly may also be tried, as inhalations of ether, chloroform, nitrite of amyl, chloral, etc.—*New York Medical Record*, August 14th, 1875.

INTESTINAL OBSTRUCTION.—Dr. A. B. Copeland reports a case of persistent intestinal obstruction relieved by placing the patient in an inclined position, administering large distensile enemata of warm water, and finally injecting tartaric acid and bicarbonate of sodium, and following them immediately with an injection of water.—*Atlanta Medical and Surgical Journal*, August 1875.

DIET OF INFANTS AFFECTED WITH ACUTE INTESTINAL CATARRH.—Dr. R. Demme, after an extended experience, recommends as the most appropriate food for infants affected with gastric or intestinal catarrh the following diet. Add from a quarter of a pound to a pound of beef, freed of fat, to two quarts of cold water, and let this stand from half an hour to an hour; then boil down to one pint; after cooling, skim off fat from the top, and filter. At each time of using (every two or three hours) without being warmed, this is to be mixed with freshly prepared rice or barley-water. In the intervals of meals, the latter should be given alone, best without sugar, to relieve the thirst. If this food be refused, Dr. Demme gives a drink made with the white of an egg, using, according to age, from one to three eggs in half a pint to a pint of water which has been previously boiled and cooled down to 98 deg. If the child's strength begin to fail, brandy in doses of from five to thirty drops is added to the rice- or barley-water from three to five times a day. With older children, a mixture of milk with the rice-water or barley-water may be tried.—*Boston Medical and Surgical Journal*, August 12th, 1875.

PATHOLOGY.

ABSENCE OF THE CLAVICLE.—In the *Archiv für Heilkunde*, vol. xvi, O. Kappeler describes the case of a girl, aged 16, in whom on one side there was only a rudiment of a clavicle, an inch and a half long, loosely connected with the sternum; and in the other, where also the cleido-mastoid muscle was absent, one only three-fifths of an inch

in length. Both humeri could be easily brought in front of the chest until they touched; and yet there was no functional disturbance, the absence of the clavicles being completely compensated by muscular action, especially as regarded the fixation of the scapulae.

CANCER OF THE THYROID BODY.—In the *Prager Vierteljahrschrift*, vol. cxxvi, H. Eppinger relates an interesting case of cancer of the thyroid body. The tumour occupied the whole mediastinal space, from the sternum to the vertebral column, and from the jugular fossa to the diaphragm; it was firmly adherent to the sternum, and superiorly was intimately connected with the lower part of the thyroid body, the upper portions of which could still be recognised. It also extended into the lungs in the form of nodules as large as a fist. The heart and large vessels, the lungs and bronchi, and the oesophagus, were compressed. The presence of gelatinous lumps on various parts of the tumour and of gelatinous masses within the epithelial tumour-cells in the neighbourhood of the thyroid, indicated that the tumour originated from this body.

VISCERAL EPITHELIOMA.—H. Eppinger describes, in the *Prager Vierteljahrschrift*, vol. cxxvi, a multiple finely nodulated tumour of the pia mater of the brain and spinal cord, with secondary deposits in the pleura, lungs, and pericardium. The masses, arising from the pia mater, followed the course of the vessels, and sent small processes, often several millimetres wide, into the brain. The growth was developed from the epithelial covering of the subarachnoid spaces, and from the perithelium of the cerebral vessels; and also (in the secondary deposits) from the epithelioid lining of the vessels.

SURGERY.

CURE OF CYSTITIS BY DILATATION OF THE NECK OF THE BLADDER.—Dr. Howe reports the case of a woman, aged 35, who had for more than a year been afflicted with a chronic cystitis, for which various remedies had been tried without avail. It was decided to try the effect of dilating the neck of the bladder, in order to give the organ a rest and to examine the inflamed membrane. She was placed under ether, and the urethra gradually dilated with Molesworth's dilator until it was large enough to admit a finger. The bladder was thoroughly washed out, and she was then placed in bed and given quinia in tonic doses. She complained of soreness about the urethra, and the urine dribbled from the bladder until the fifth day after the operation, when the sphincter muscle again resumed control. From that time, micturition was performed in a natural manner, without pain, or uneasiness, and she entirely recovered.—*New York Medical Record*, August 14th, 1875.

NASAL POLYPI.—Dr. George Troup Maxwell "guarantees" that muriated tincture of iron is a radical cure for nasal polypi. He gives an example in the *Philadelphia Medical Times*. A carpenter had his nares closed with gelatinoid polypi, which always produced a feeling of discomfort, and sometimes considerable pain. The distension was at times very great, and caused some disfiguration. He had used a number of astringents without effect, but had never been able to summon the courage required to submit to evulsion. Dr. Maxwell injected about a drachm of the tincture of iron, reduced in strength one-half by admixture with water, into each nostril, holding his head back so as to retain the fluid in contact with the polyp a few seconds. This simple operation was repeated daily, and on the third day the masses began to slough and to be discharged. At the end of a week, their destruction seemed to be complete; the nares were pervious, and the sense of smell was recovered. The treatment of this case was more protracted than any he had before encountered, three or four days being usually sufficient. The delay in this case he attributed to the impacted condition of the nostrils, which prevented access of the tincture to any but a limited portion of the body of the polypi. As soon as the fluid gains access to the pedicle, the cure is rapid, because the death of the polyp is quickly effected. In this case, the injection was repeated the third or fourth time before the fluid could pass through the posterior nares into the pharynx. The irritation of the nares caused by the dilute tincture is trifling in severity, and of short duration. Dr. Reeder first proposed this treatment in the *Chicago Medical Journal*, September 1859; and Dr. Maxwell contributed three cases to the *St. Louis Medical Reporter*, 1867.

EXTIRPATION OF A TUMOUR OF THE BLADDER.—Dr. Carl Gusenbauer reports the case of a boy, aged 12, who was supposed to have a vesical calculus, but who was discovered by Professor Billroth to have a tumour of the bladder, and was operated upon by him in the

following manner. After the patient was narcotised, the lateral incision for removal of stone was made. The finger introduced into the bladder showed immediately that a tumour nearly of the size of the fist, with an uneven surface, projected from the posterior wall and extended towards the top of the cavity of the bladder. Owing to its size, it was found impossible to extract the tumour with the finger from the perineum. A suprapubic incision was then made, without injury to the peritoneum; and, to give sufficient room, both recti muscles were cut across at their insertion; a transverse incision into the bladder was also made. Professor Billroth soon came to the conclusion, after examination with the finger, that the use of the *crasseur* was not practicable or desirable, as the tumour possibly might be already adherent to the peritoneum, in which case the latter would have been so injured as to delay healing. He therefore decided to tear the tumour with his finger near its base, and to cut out the remainder from the wall of the bladder, after passing a ligature round to check bleeding. The extraction of the torn pieces of the tumour was not so easy, in spite of the large size of the incision, as would have been supposed. In dissecting out the pedicle, it was necessary to turn the bladder partly inside out. It then appeared that the tumour took its origin from the muscular coat of the bladder, but had not attacked the outer coat or the peritoneum. The plan was, in case the peritoneum had been opened, to close the hole with sutures. Two arteries were tied, and the ligatures brought out through the upper incision in the bladder. The wound in the bladder was not closed, but a drainage-tube was drawn through the bladder, and brought out at the incision in the perineum. There was no subsequent difficulty; and, in one month, the patient was discharged, perfectly well. The tumour was found to be a well-marked mixed tumour, principally a myosarcoma, but in places a myocarcinoma.—*Boston Medical and Surgical Journal*, July 8th, 1875.

PHYSIOLOGY.

ACTION OF EMETICS ON THE STRIATED MUSCLES.—The observations of Harnack and others have shown that many emetics and nauseants have a paralyzing action on the voluntary muscles. Among these are emetin, apomorphia, tartar emetic, cyclamin, asclepiadin, sanguinarin, delphinin, veratrin, and digitalin. Harnack has also (*Archiv für experim. Pathol.*, vol. iii) made experiments with copper and zinc salts, and some drugs derived from the organic kingdom, in order to ascertain whether this coincidence of effects is constant. But few experiments have hitherto been made on the action of salts of copper. In order to avoid, as far as possible, local disturbances, especially those arising from coagulation of albumen, he used the double oxide of copper and soda. In the frog, copper-salt acted distinctly as a paralyser of the striated muscles. A solution containing from 0.0075 to 0.015 grain of oxide of copper, injected subcutaneously, produced complete paralysis in a few hours; and 0.045 grain produced the same effect in an hour. In rabbits, paralysis of the circulation and respiration, and death, were produced in one case in a few hours after the subcutaneous injection of 0.075 grain of oxide of copper, and in another in a few minutes after the introduction of 0.015 or 0.022 grain into the veins. The striated muscles, especially those of the hinder limbs, completely lost their irritability, so that the strongest induction-current had no effect; there was no dyspnoea, nor convulsions. The pupils were dilated. Similar results were produced in dogs by the injection of 0.0375 grain subcutaneously or into the veins. Vomiting was not produced by this mode of administration; this is contrary to the statement of Orfila, but in accordance with that of Daletzky. Harnack found that the introduction of nine or ten grains into the stomach was necessary to produce vomiting. Of zinc-salts, Harnack used the pyrophosphate of zinc and soda and the valerianate of zinc. The action is similar to that of copper, but less certain. In frogs, the minimum dose required to produce complete muscular paralysis is 0.03 grain of oxide of zinc. In dogs, 6 or 7 grains introduced into the stomach or injected subcutaneously produced vomiting; 1.5 grains injected into the veins caused death. Various other metallic salts which have not a specific emetic property, such as those of lead, manganese, and tin, do not, according to Harnack, remove muscular irritability, unless given in lethal doses. The salts of mercury are not fitted for comparative experiment, on account of their violent local action. Harnack also made experiments on arsenic and colchicin. The former is derived from the root of *Asarum Europaeum*, formerly officinal as an emetic and nauseant. In frogs, 0.15 grain given by the stomach had a distinct paralyzing action on the muscles; of colchicin, half that quantity produced the same effect. Harnack does not attempt to explain the cause of the connection between the emetic and paralyzing action of the drugs; but he considers it certain that the two actions have not a causal connection with each other.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, OCTOBER 16TH, 1875.

LUNACY IN SCOTLAND.

THE Seventeenth Annual Report of the Commissioners in Lunacy for Scotland, on the condition and management of lunatics and lunatic asylums in that division of the kingdom, is a very elaborate specimen of statistical ingenuity. It may, perhaps, be questioned whether there is wisdom in pursuing with such intricate research the movements during twelve months of 7,936 insane persons, and whether a smaller volume might not have sufficed to convey to us all that it is desirable for us to know respecting madness in 1874 within the region of their research, but no question can possibly arise as to the arithmetical industry of the Commissioners. Perhaps the real secret of the figurative expansiveness and minute detail of their annual manifesto is to be found in the fact, that they have spacious leisure in which to compile it. The inspection of asylums (public and private), workhouses, idiot schools, and prisons in Scotland, occupied seventy-four days in the year to which the report refers; and as two commissioners, who visit singly, undertook that duty of inspection, just thirty-seven days of inspectorial work must have fallen to the lot of each of them. Allowing an ample margin for the time occupied in travelling and for an annual holiday, each commissioner must have had at least nine months for statistical studies; and it is not wonderful that, under such circumstances, they should have indulged freely in the harmony of numbers, and should, consequently, have fallen into some extraordinary vagaries. They have rung the changes on the returns made to them in the most assiduous manner. They have deduced conclusions from very insufficient data, and have apparently forgotten the great truth, now generally received, that manipulated statistics may be made to prove almost anything. They have actually gone so far as to formulate a law as to the exceptional seasonal progress of diarrhoea in asylums, founded upon two hundred and thirty-five attacks of that disorder occurring in one institution during a period of eight years. It will, we are sure, surprise the Commissioners to learn that their own official activity may be statistically shown to be subject to the same law that, according to their great discovery, regulates the prevalence of diarrhoea in Scotch asylums. Diarrhoea and the Commissioners are prevalent in asylums at precisely the same times. In the warmer months—July, August, and September—the attacks of the Commissioners and the bowel-complaint have a decided maximum, expressed with most emphasis in August; and in the colder months, notably in January, there is a second maximum, expressed with comparative feebleness. In the months of July, August, and September, forty-one establishments were visited by the Commissioners, and in October, November, and December, only eight. In January, sixteen establishments were officially afflicted, and in March only one so suffered. But there is a graver and more radical defect in the statistics of the Scotch Commissioners than mere absurdity and riotous profusion: preconceived notions and crotchets seem in some cases to have influenced their construction. Decided opinions have been adopted by the Board upon various questions, and no opportunity is lost of obtaining evidence in favour of the views which have been espoused.

Among the decided opinions which the Scotch Commissioners have

adopted, is one unmistakably hostile to lunatic asylums; and we think it is high time that the attention of the medical profession should be called to the effects of the policy with reference to establishments for the insane which the Commissioners are steadily pursuing. By slow, and, we had almost said, sly disparagement, the confidence of the public in lunatic asylums is being weakened and undermined. By calumnious criticism, asylums are being made to appear costly, clumsy, and inefficient institutions, mere blemishes on our civilisation. By often repeated praises lavished on other methods of providing for the insane poor, asylums are still further discredited; and, by gradual inroads on their essential characteristics, they are being refined away, in the evident but vain hope that they may vanish off the face of the country. The Commissioners are bent on subjugating asylums absolutely to their authority, in order that they may finally, as far as possible, extinguish them. What they dexterously call a widening of the principle of non-restraint is really the abolition of the distinctive features of an asylum. Boundary and airing-court walls are to be levelled, single rooms are to be dispensed with, locks are to be abolished, and very shortly we shall hear that medical officers are expensive superfluities. All this would be excellent if it were only reasonable. The Commissioners would deserve well of mankind if they could do away with the necessity for the incarceration of those who are bereft of reason; if they could relieve the sane from the burden of providing safe custody and treatment for the insane. But is such a result practicable? Has "grim-visaged madness smoothed his wrinkled front" under the charm of phrenological admonitions, so that, instead of "frighting souls" surrounded by every safeguard, it may now "caper nimbly" in any private dwelling? We fear not. We believe that the insane are still full of danger, and that the public safety and their own well-being demand that a majority of them should have their liberty restricted, and should be subjected to constant supervision and careful medical control. We anticipate that before long some atrocious acts of violence, committed by emancipated lunatics in Scotland, will open the eyes of the public to the necessity which exists for maintaining their lunatic asylums, with their medical organisation, intact, and will dispose once for all of the mischievous nonsense talked *ad longam* by a *doctrinaire* Board of Lunacy taking its ease in Edinburgh, no member of which has ever had any practical experience in dealing with the insane.

Indications of the effects likely to flow from the policy of the Scotch Commissioners are not wanting even at the present time. The frequency of suicides in Scotch asylums is certainly not creditable to the Commissioners. Of 450 deaths occurring in Scotch asylums in 1874, seven were due to suicide, whereas of 4,180 deaths occurring in English asylums in the same year, only twelve were attributable to self-destruction. This comparison suggests that some Scotch asylums might be none the worse for airing-court walls and trustworthy locks; and the same conclusion is forced upon us by the fact, that 247 patients escaped from Scotch lunatic establishments in 1874. Then, among the nurses and attendants waiting upon the insane in Scotch establishments in 1874, 447 changes took place, ascribable to all kinds of causes, from voluntary resignation to undue intimacy with the opposite sex. Supposing that in these establishments there is, on an average, one nurse or attendant to every thirteen lunatics—and that calculation is within the mark—the startling conclusion confronts us, that the whole staff, male and female, of these establishments must have been changed in the course of twelve months. Surely a service in which so many changes take place must in some way be made exceptionally irksome or dangerous.

But the inconsistency of the Commissioners in matters referring to the administration of lunatic asylums is glaringly apparent in their own Report. On one page, they advocate the removal of airing-court walls, and express warm approval of the employment of 86 lunatics, male and female, out of an asylum population of 129, in farm and garden work during wet and boisterous weather; and, on another, they urge upon medical superintendents the propriety of abstaining from the use of branches of yew in decorating their wards, and of rooting up all labour-

num trees from their asylum grounds. Truly these paternal Commissioners are sometimes slightly contradictory in their injunctions. Let us, by all means, ameliorate the condition of the insane, but let us be guided by common sense in our philanthropic efforts.

It is to be regretted that, in their ponderous Report, the Scotch Commissioners have not given us more exact information respecting the condition of what they call single patients—those pauper lunatics who, to the number of about 1,500, are scattered over the country in private houses. We know that, in asylums where the most vigilant supervision is incessantly kept up, difficulty is experienced in securing the kind treatment, safety, and comfort of the inmates. What, then, must be the lot of those wretched beings who are farmed out in solitary places in the care of persons of a class rather lower than that from which asylum nurses and attendants are drawn, who are practically under no supervision, and who are so mentally degraded that they are incapable of reporting or of recollecting their own grievances? A trifling knowledge of human nature must convince us that some are reduced to a state of slavery, and that others are subjected to hard discipline and cruel privations. The Commissioners have furnished a very complete list of the accidents which happened in asylums during 1874. We much wish that an equally exhaustive record could be supplied of the mishaps that chequered the existence of single patients in that year. In them, however, black eyes, contusions, dislocations, wounds, scalds, and fractured ribs, find no historian; and when they die, there is no inconvenient *post mortem* examination. The Commissioners are quick to find fault with the dietaries in public asylums: would it not be advisable for them to procure some information as to what single patients feed on? They are critical as to the temperature of asylum wards: did they ever take thermometric observations in a hay-loft during a winter's night? They are extreme to mark the delinquencies of asylum nurses and attendants: have they ever ascertained the peccadillos of the custodiers of single patients? Upon many points connected with these single patients additional information is required; and we shall hope to have this defect remedied in future reports.

DEPARTMENTAL OFFICERS OF THE ARMY.

OUR attention has been called to the following War Office order, regarding leave of absence on account of illness to departmental officers of the army. It particularly affects the medical officers of the army now that they are no longer regarded as regimental officers, and have all become departmental officers.

When a departmental officer is sick at his station, whether in hospital or in quarters, his absence from duty on account of sickness will be recorded in the form upon which his pay and allowances are drawn; but no loss of pay or allowances will be entailed by such absence, if duly certified by a medical officer, and if not exceeding one month in duration. This absence on account of sickness need not be included in the period of leave with pay allowed by Articles 442 and 448 of the Royal Warrant of December 27th, 1870, if the general or other officer commanding at the station consider that the circumstances of the case warrant such a concession.

By the first part of this order, a medical officer who may be unfortunate enough to contract disease or injury in the performance of his duties, or who may be prostrated by the effects of an unhealthy climate to which he has been sent, is rendered liable to be further injured by being deprived of his pay and allowances, if his recovery do not take place within the period of one month. By the second part of the order, it is left to the discretion of the general or other officer in command at the station where the medical officer may have been seized with illness or met with injury, whether the absence from duty which his illness or injury has occasioned, even though it may be less than a month in duration, shall or shall not be deducted from the ordinary annual leave of absence to which all medical officers are entitled by the Royal Warrant alluded to in the order itself. A correspondent writing to us from Malta points out that for some time past a severe type of fever, commonly known as the "Malta fever," has been particularly prevalent

there, and that several medical officers have imbibed this fever while employed on duty there, and have been compelled to leave the station in consequence of it. The sequelæ of this fever are rarely recovered from, even under the most favourable circumstances, in less than three months, while they sometimes last much longer. Here is a case, then, in which the Government sends an officer to a station in which he is exposed to the risk of contracting illness of a severe type, and, having contracted it under circumstances entirely beyond his own control, he is then sentenced to loss of pay and allowances, and, it may be, all further leave of absence in addition, unless he recover and return to his duties within one month. As no one does recover, or can return to duty within one month, after being prostrated by Malta fever, the order shows the punishment which is to be meted out to him. The order, it may be noticed, contains no reservation or exception.

But it is not only the hardship of the order which is complained of; the most galling part of it is the partiality and unfairness of its application. It only applies to departmental officers; it does not apply to combatant officers. The combatant officer may have any amount of leave of absence within reasonable limits that is certified by a medical officer to be necessary for the recovery of his health, without losing his pay and allowances; the medical officer himself may not have more than a month without losing them. There are instances of combatant officers in plenty who have had a year's and two years' leave of absence for the recovery of health after illness contracted in the service, without loss of pay, and no one can say but they ought to have it under such circumstances. All that can be said is, that, if one officer doing duty in the public service have it, another ought to have it too; if the captain of a regiment have it, the surgeon attached to the regiment, whose risks and exposures are much greater, ought to have it also.

It has always been a matter of wonder to us why these invidious distinctions are made in army regulations. It is not now as it was in old times, when armies, in a great measure, fed and paid themselves by rapine and force; when the preservation of the health of the troops was unconsidered, and the sick and wounded were left to shift for themselves as they best could. Armies are now refined and highly organised living machines, in which the perfection of every part is essential to the integrity of the whole, in which no one member can be said to be more important than another member. The part on which the regular and systematic supply of food to an army depends, and that on which the preservation of health and cure of disease depend, are as essential to the efficiency and power of a modern army as the combatant part.

We cannot but regard the distinctions which are made in the order quoted above, and in hundreds of other orders similar to it which are issued by the military authorities from time to time, as relics of barbarism, as the mere continuance of customs handed down to us from the days when the fighting man in his armour was everything, and all others attached to an army were only "followers of the baser sort". Irrespectively of the injustice of forcing such distinctions on the differently functioned officers of the army at the present day, it strikes us as very remarkable that the impolicy of the proceeding should not prevent them from being applied to the detriment of the medical officers under existing circumstances. It is a matter of public notoriety that the medical service of the army is anything but popular; that, while an almost unlimited number of applications for the combatant ranks can be obtained, there is a difficulty in maintaining the requisite number of well educated surgeons in the army; and we should naturally have thought that the efforts of the military authorities would be directed, therefore, to rendering the medical branch of the army more attractive. The letters we are constantly receiving from medical officers, not from one station, but from nearly every quarter in which they are employed, sufficiently show that no such purpose of increasing a liking for the service is uppermost in the minds of the military authorities; at least no such view is entertained, if we may judge of intentions by published orders and practice. It is not possible that the prevailing dissatisfaction among the officers of the Army Medical

Department can go on without the usefulness of the department itself being more and more impaired, and, therefore, harm resulting to the public service at large; and we think that those who are invested with power in such matters may well take as a subject for their consideration, how far this objectionable state of things is due to the inequalities in treatment of combatant and medical officers, one of which is embodied in the order which forms the subject of these remarks.

DR. KUNDRAT, lately an assistant of Professor Rokitsky, has been appointed Professor of Pathological Anatomy in the University of Graz.

THE first meeting of the Society of Medical Officers of Health will take place this (Saturday) evening at their rooms in Crane Court, when the new President, Dr. George Buchanan, will read a paper On Some Directions of Scientific Work by Medical Officers of Health.

A MEETING of the Council of Poor-law Medical Officers will be held on Friday evening, October 15th, at eight o'clock, at Crane Court, Fleet Street, to discuss the future policy of the Association, to decide on the action of the Association in reference to the Maunsell Testimonial Fund, and for general business.

DR. SIBSON has been requested to deliver the first of the newly instituted annual series of Harveian Lectures of the Harveian Society of London. He has selected as his subject, "Bright's Disease and its Treatment, considered mainly in Relation with Arterial Tension from Blood-Contamination". The lectures will be delivered on December 2nd and 16th.

A FOREIGN visitor to Vienna recently placed in the hands of Professor Dittel, who had attended him through a severe illness, a sum of 5,000 florins (about £520) for benevolent purposes. With the concurrence of Dr. Hofmann, Director of the General Hospital, Dr. Dittel has applied the money to the foundation of a "Levien foundation for meritorious attendants and nurses in the Allgemeine Krankenhaus", among six of whom the interest is to be distributed half-yearly in equal parts.

A PARAGRAPH in the *Gazette* announces that the Queen has been pleased to give and grant unto William Cormick, Esq., Doctor in Medicine, who is actually employed beyond Her Majesty's dominions, in the medical service of the Shah of Persia, in which he holds the appointment of Chief Medical Officer attached to the heir-apparent to the throne of Persia, her royal license and authority that he may accept and wear the Insignia of the Second Class of the Order of the Lion and Sun, conferred upon him by His Majesty.

THE WORCESTER GENERAL INFIRMARY.

A SPECIAL meeting has been convened for the 29th instant, upon a requisition to the secretary, signed "by seven or more governors", under the rules, to consider the propriety of adding the following words to Rule 59, "But in case of the unavoidable absence of the honorary medical officer and his substitute, the house-surgeon shall attend to the out-patients of such absent officer."

DR. FERRIER'S RESEARCHES.

SOME of Dr. Ferrier's most brilliant experiments concerning the functions of the superficial parts of the hemispheres have lately been tested by counterinvestigations, some of which would seem to militate against the validity of the conclusions which he has drawn. As is now generally known, Dr. Ferrier found, by stimulating the cortical parts of the cerebral hemispheres, that certain spots exist, the excitation of which is constantly followed by definite and characteristic sets of movement. The area occupied by these spots is very small, and definitely circumscribed; and in the brains of dogs, cats, and rabbits, the topography of the active spots corresponds anatomically. All the movements produced are pur-

posive or expressional in character, and are such as we should attribute to ideation and volition. From these facts, he concludes that certain spots exist at the surface of the brain which act as voluntary motor centres, and whose function it is to originate combined movements. Dr. Dupuy made controlling experiments, in which, what he believed to be similar movements were produced by excitation of the cut surface after the removal of the parts containing the centres. These movements, however, Ferrier did not admit to be of the same constant character. With the object of clearing up that uncertainty, Dr. Burdon Sanderson undertook the following experiments, which he has described in a recent paper read before the Royal Society. Having produced some of the most characteristic movements in a cat, he localised the centres; these were found to correspond exactly with Ferrier's results. 1. He then severed the parts containing the active centres by means of a thin knife, without dislocation of the flap from the deeper parts; the centres being now irritated, the same results were produced as before the incision was made. 2. If the incision were made at a lower level, this was not the case. 3. When the flap was removed, spots were found on the cut surface, with the same topographical arrangement, by irritation of which the same movements were produced as in the case of the superficial centres: 4. By a horizontal incision, 10 or 12 millimètres deep, the upper and outer part of the corpus callosum was reached. Excitation of this part produced still more distinctly the characteristic movements; the relation of the active spots remaining strictly the same. From these facts, he concludes, "that the superficial convolutions do not contain organs which are essential to the production of the combinations of muscular movements now in question". This conclusion would at first sight appear to be directly opposed to the leading principle of Ferrier's views; however, this is not so. Ferrier does not pretend that the nerve-fibres which conduct the impressions to the several groups of muscles start directly from the cortex of the hemispheres, but rather from the ganglia at the base of the brain and spinal cord; the cortical centres being concerned merely in the effort of the will in originating the movements, the influence being then transmitted along fibres passing through the medullary substance to reach the corpus striatum. The excitation, in any part of their course, of the bundles of fibres which transmit the influence, is shown by Burdon Sanderson's experiments to be productive of similar effect, and to act as a substitute for the will.

PROSECUTION OF A MIDWIFE FOR MALAPRAXIS.

DR. JULES BERGER, in the *Gazette Obstétricale*, September 20th, 1875, relates the particulars of the examination of the bodies of two patients, which were exhumed twenty-five days after burial, on a coroner's order. Pelvimetritis in the one case, and pelvi-metroperitonitis in the other, were found to be the causes of death. In each case, the soft tissues around the uterus, the vagina, etc., were much bruised and torn, and were gangrenous. The position of the rents was such as to preclude the possibility of the foetal head having been the cause of these injuries. It should be stated that the bodies were in a good state of preservation. Evidence was given to show that the forceps had been employed in both cases, and left in the vagina many hours, during which time the midwife had made frequent attempts to extract the head. On being interrogated, she admitted having used the forceps twenty-four times in thirty labours, and had also performed the Cæsarean section with a razor, *post mortem*, on a patient who died under her care. On being further questioned, she showed the most lamentable ignorance of the most elementary points in the application of the forceps; and when examined with the mannikin, passed the blade over the back of her hand on the neck of the uterus. Other deaths were clearly proved to have occurred from the same cause; and in consideration of these, and of her having practised illegally without usurping the title of midwife, she was sentenced to fifteen months' imprisonment, fifty francs fine for the crime of homicide by imprudence, and ten francs fine for each contravention of the law—twenty-four in all—amounting to two hundred and forty francs, with, in addition, the costs.

POISONING BY RED BERRIES.

THE case of the child Frederick Shed, who, according to the recent verdict of a Surrey jury, met his death "from poison from eating deadly nightshade", requires notice for several reasons. So far as the newspaper report goes, it seems evident that the child was poisoned by eating some berries which were mistaken by him and his elder brother (aged 11) for "hawgaus", by which doubtless they meant the fruit of the hawthorn. This would indicate that the berries were red, and, if so, can have had nothing to do with the deadly nightshade (*Atropa Belladonna*), which, as is well known, has dark blue-black berries as big as a cherry. Have we here, then, another instance of the old confusion of the very distinct woody nightshade (*Solanum Dulcamara*), so abundant in the hedges, with deadly nightshade? This seems very probable; and, if so, the case is particularly worth remark, as death from poisoning by dulcamara has rarely been recorded. Though the young twigs of this plant still remain official in the *Pharmacopœia*, many practitioners believe the drug to be quite inert. On the other hand, dulcamara has been highly extolled by others as a most efficient medicine. Probably the quantity of solanine (which, there is no doubt, possesses narcotic properties) is larger in the berries than in the vegetative portions of the plant. We have no details of the case before us; but Mr. Steele of Richmond examined the stomach *post mortem*, and from his evidence the jury returned their verdict. An examination of a single seed would readily determine the plant eaten, whether, as is most probable, *Solanum Dulcamara*, or possibly *Bryonia dioica* or *Tamus communis*, both red-berried bryonies common in hedges, and both poisonous plants. But deadly nightshade can have had nothing to do with the case, and it is to be regretted that no one connected with it seems to have had a sufficient acquaintance with English plants to point out the mistake.

MEDICAL EDUCATION OF WOMEN.

OUR Birmingham correspondent writes:—It has been already stated that the Council of Queen's College, before giving a decided answer to the deputation which waited upon them with reference to the above subject, requested the opinion of the professors of the College. The latter, at their first meeting, were so equally divided in opinion, that an affirmative resolution was supported by nearly half of those present: eventually, a resolution to confer with the honorary staff of the hospital, before replying to the Council, was carried by the casting vote of the chairman. The conference which was then summoned was somewhat heterogeneous; it included gentlemen who were both hospital officers and college professors, others who were only the former, and others only the latter—for instance, the professors of classics and mathematics. This, perhaps, was not unreasonable, considering that all were interested in the matter, but it is to be remembered in estimating the medical bearing of the result. A resolution was proposed to the effect, "that the staff and the professors were unable"—afterwards altered to "not prepared to give the desired instruction". An amendment to the effect, "that the hospital staff would oppose no obstacle to clinical teaching, if the College Council admitted the said students", was also placed before the meeting. In support of the former, some speakers referred to the moral evils likely to result; others to the pecuniary loss and the probability of a fresh school being opened if professional feeling were offended; but it was noteworthy that almost every speaker said that he had no objection to the medical education and admission of women *in the abstract*, showing certainly a progress in liberal feeling since the debate of two years ago. The example of Edinburgh was quoted as a warning. On a division, twelve voted for the resolution and nine against. This being reported in due course to an adjourned meeting of the college professors, including again a non-medical element, the voting became more decisively in the negative, being nine to three. The professional feeling of the neighbourhood had been found to be much against the admission of women; and in several instances parents offered the fees for new students conditionally only; and others (all medical men, we believe, having already sons in the College) gave

conditional notice of their withdrawal. This should be mentioned, not as evidence that the question was settled by the money considerations (for the deputation had offered to make good any loss), but as evidence of the risk of alienating professional support. There were also difficulties arising out of the amalgamation of the two hospitals, and the formation of a "conjoint clinical board" in the sense that gentlemen felt bound not to force colleagues into a position of antagonism; one hospital being bound by charter to teach college students, the other not being so bound, but yet having taken part in a joint educational board. It was felt, moreover, that Queen's College was now prosperous; but to make innovations without strong and general professional support, was to run the risk of reviving difficulties from which it has only comparatively lately freed itself. We desire to make it clear that in this case there exist special difficulties complicating the general question of female medical education; and that whilst a number of representative medical men have given in their adhesion to it in the abstract, the actual deciders have had to consider more the interests of their institution. This is expressed by the terms of the resolution, to which the College finally agreed, and which was forwarded, with all due courtesy, to the Mayor of Birmingham, as representing the deputation. Concerning the resolution, we have further to remark that it was proposed and seconded by non-medical members of the Council. There were only three non-medical members present, and of these two were clergymen. It has been reported as carried "unanimously", though it would be more correctly described as *nemine contradicente*; inasmuch as a leading medical member, not agreeing, declined to vote. The wording of the resolution, which has not yet been published, was nearly as follows:—"That the Council of the Queen's College, after having conferred with their professors, and with the members of the hospital staffs, are constrained to decline to admit women to the medical classes in Queen's College. Without expressing any opinion on the general question of the medical education of women, the Council find that the difficulties as to their admission at Queen's College are so serious, and the risks so great, that they do not feel justified in imperilling the prosperity of the institution of which they are for the time being the trustees."

MYOPIA AND STRABISMUS.

THE Paris Academy of Medicine has been the arena for a discussion on myopia and strabismus, in which the disputants were M. Giraud-Teulon and M. Guérin. M. Giraud-Teulon, in an important communication, had insisted on the value of the ophthalmologic examination for military conscripts, and, in the course of his remarks, had called attention to the alarming increase of myopia, depending directly on much use of the eye in delicate work. This over-use of the eye plays a great part in the development of the infirmity. The deformities which accompany it are not of themselves hereditary. He called to mind the recorded labours which give the explanation of these facts, especially the well known ones of Donders, his own, and some others. M. Guérin blamed M. Giraud-Teulon for not having stated that there is a muscular myopia due to the retraction of the recti muscles, and that, when these are cut, the disturbances of refraction cease, as M. Guérin has demonstrated in his writings. What M. Guérin has advanced at the present time might have had some semblance of truth in 1841, the time when he first enunciated these opinions, but M. Giraud-Teulon demonstrated to him that his former observations were absolutely without scientific exactness, and that they have been refuted by thousands of observations made by conscientious men of science, who have easily demonstrated the following points. Persons attacked by strabismus are almost always first attacked by disturbances of refraction. Myopia is commonly coexistent with divergent strabismus. Hypermetropia, formerly confounded with presbyopia, is common with convergent strabismus. Myopia and hypermetropia depend on a lengthening or shortening of the posterior segment of the eye, but not on modification of the anterior portions nor of the cornea. The deformities which accompany myopia are progressive, and occupy the posterior segment of the eye.

Children are not born with this deformity, but they may have the tendency to acquire it, and especially under the influence of assiduous work, which develops it rapidly. The muscles of the eye do not make the accommodation; that depends on the accommodatory muscle, the intrinsic muscle of the eye. In order to prevent the development, aggravation, and multiplication of these troubles of refraction, it is important to adopt approved measures of ocular hygiene, and to recommend the timely use of correcting glasses. The facts which have led M. Guérin into error, are cases of difficult sight and of amblyopia, but not real disturbance of refraction.

OUTBREAK OF TYPHOID FEVER ON BOARD THE SCHOOL-SHIP
"CORNWALL."

TWENTY-ONE boys have been admitted into the Seamen's Hospital from the school-ship *Cornwall*, of which nineteen are suffering from typhoid fever. The authorities of the hospital have been obliged to limit the number of patients sent from the *Cornwall*, as, owing to the great pressure at the present time upon the beds at the Seamen's Hospital, it has been thought impossible, or at any rate unwise, to take a larger number of cases. During the present week, many other cases of typhoid have broken out on board the *Cornwall*, all of which have been placed in hammocks on board, and steps have been taken to secure their complete isolation. The authorities of the *Cornwall* have displayed praiseworthy energy in endeavouring to grapple successfully with the outbreak. The number of training-ships in the Thames at the present time, and the frequent outbreaks of fever and other diseases which have occurred on board these different vessels during the past few years, render it imperative that the authorities of those institutions should combine for the purpose of establishing a hospital on shore nearer to their anchorage than Greenwich, to which invalids from these ships could be at once sent. Last year, the authorities of the *Worcester* sent forty cases of scarlet fever to the Seamen's Hospital, many of which were injured by the exposure and change of temperature which their removal to the hospital necessitated. If the managers of these school-ships undertake the control of so many boys of comparatively tender years, they should be compelled to take all needful precautions to insure the perfect health of these children. We hope this matter will be taken up at once by the proper authorities, and that immediate steps will be taken to remove what is at present a great and constantly increasing evil.

CULTIVATION OF CINCHONA IN INDIA.

ACCORDING to the *Indian Medical Gazette*, the total number of plants in the permanent plantations at Darjeeling now amount to 2,765,000, including 2,390,000 red bark, 354,000 yellow bark, and 21,000 hybrid trees. The cultivation of cinchona calisaya has so far proved a failure. This species is much richer in quinine than any other—contains, indeed, according to Mr. Wood's analyses, about 6 per cent. (of its bark) of pure quinine in a total of 7.4 per cent. of alkaloid. The propagation of this plant would, therefore, greatly simplify the process of manufacture, and yield almost pure that form of alkaloid which has commended itself to physicians, on the basis of a vast experience, as the best febrifuge known. The plants grown from seedlings were, however, found, even after a selection of the richest varieties for seeding, to yield a very small proportion of alkaloid and little or no quinine. The propagation of the species is, therefore, in future to be accomplished by means of cuttings, and this method will obviously admit of a slower multiplication of plants. While the cultivation of cinchona calisaya has thus so far failed, that of cinchona succirubra has proved a brilliant success, and that of the other varieties is exceedingly promising. Mr. Wood estimates that the plantations are capable of producing a minimum of 366,000 lbs. of bark yearly, which should yield 12,810 lbs. of alkaloid. He has perfected a process, by means of which this alkaloid can be produced easily and cheaply, and estimates that, after paying a fair percentage on capital, in addition to cost of manufacture, the product can be sold at 12 annas per ounce. This alkaloid consists mainly of cinchonidine and cinchonine. The question is, is this alkaloid, and

is cinchonidine, which is its main constituent, equal or nearly equal to quinine as a febrifuge? The trials which have been already made have given very favourable results; but, under the orders of the Surgeon-General, an extended trial of both cinchonidine and of Mr. Wood's mixed alkaloid is now being made throughout the presidency, and the virtues of these preparations will be thus very thoroughly tested and sifted. The enterprise, which is now culminating in these very promising proceedings, is one of the most benevolent which any Government has ever undertaken, and we most cordially congratulate India on the measure of success which has been already obtained and the greater success which appears still possible.

PANCREATIN.

AT the last annual meeting of the American Pharmaceutical Association, a paper in answer to the following query was read by Professor E. Scheffer: "Is pancreatin converted into peptone when it is digested with acidulated pepsin?" The writer stated that he was enabled by his experiments to assert positively that pancreatin, when brought into the stomach, became destroyed; and that it, therefore, could have neither physiological nor therapeutic effect when administered internally.

THE MARRIAGE OF BLOOD-RELATIONS.

DR. HELLIOT has written a very interesting thesis on this subject (*De l'Influence de la Consanguinité*, Delahaye, Paris). In his conclusions, he rejects marriage between blood-relations up to the degree of cousin-german inclusively. The bad effects of consanguinity increase in proportion as the degrees of relationship approximate; and he afterwards cites some cases of incest, whence there originated beings whose cerebro-spinal system was absolutely defective. M. Heliot has taken great pains to show to what extent the partisans of consanguinity have perverted the facts of statistics to their advantage. He has shown that good results may occur in spite of consanguinity, but not as a consequence. The example of the Jewish race, so often quoted, is a bad one, since, according to M. Heliot, there is a remarkable predominance of deaf-mutism amongst that nation, an affection which is the most ordinary result of consanguinity. A defective argument has likewise been drawn from the breeding of animals, since in that instance breeding, by bringing together all the conditions favourable to the development of the individual, specially ends by creating a kind of artificial creature, in which certain excellencies of flesh or of swiftness predominate, but which cannot be considered as a creature worthily representing the qualities of the species. Adverse statistics and the most remarkable figures are to be found in the writings of Boudin, which have been the foundation for nearly all other writers on the same subject. With regard to deaf-mutism, the percentage of it is 18 amongst cousins-german, 37 in marriages between uncle and aunt, and 70 in those between nephew and aunt. In China, where consanguineous marriages are prohibited, Mr. Brown did not meet with any deaf-mutes. Other lesions and defects were met with, but deaf-mutism is the one of which the history is the most striking. Lesions of the cerebro-spinal axis are those most frequently found, and deaf-mutism belongs to them. M. Heliot, therefore, rejects the known observations of anthropologists, which only prove that in certain races no changes have taken place, notwithstanding consanguinity; he also points out that in these cases there is more distant relationship between the married couples than true consanguinity. He admits that morbid lesions in the parents aggravate the probable condition of the children; but, in his opinion, heredity plays but a very secondary part. In fact, whilst paying attention to the other consequences of consanguinity, he specially recalls to mind the facts of deaf-mutism, and observes that deafness scarcely ever shows itself as an hereditary disease. A large part of his work is devoted to the relation of cases which have come within his own knowledge, as well as of others borrowed from various writers. He remarks that individual observation has much value, often more than an inquiry quickly made in a given country. He concludes by deciding that there is no favourable degree of consanguinity. It may doubtless occur that there may

be no consequent change, but it creates a special aptitude, in virtue of which the fruits of these marriages may show change, even if the parents be healthy and vigorous. Civil and religious laws have, therefore, wisely proscribed consanguinity, and the physician ought to advise against these unions, especially in the near degrees of relationship. A decidedly opposite view of the effects of these marriages will be found in the current number of the *Westminster Review*. An article on the Marriage of Near Kin, which is, in fact, a review of a work bearing that title by Mr. A. H. Huth, comes to the conclusion that marriages between cousins should not be discouraged, but that unions between persons of nearer degrees of relationship are inexpedient.

PSYCHOLOGY AND THE NERVOUS SYSTEM.

WE publish in another column a critical letter from Dr. Crombie. Our critic no doubt overlooked the number under the heading "Psychology and the Nervous System", or he would have inferred that what he was criticising was only the first instalment of an article. The evidence which he supposes the writer to have forgotten is given in Nos. 2 and 3. We will reply to his criticisms, however, as carefully as we can. We see no contradiction in the statement that a problem is insoluble, and that it is a problem in metaphysics. Which of the great metaphysical problems has been solved? One of the most recent philosophical writers (Fiske, *Cosmic Philosophy*, vol. i, p. 126) says, "Metaphysics means a set of inquiries beyond the reach of Physics". He is not simply referring to the supposed accidental origin of the word. He says (p. 130) of the disputes of metaphysics, "that they have never led, and can never lead, to anything but an endless renewal of dispute, *in secula seculorum*". He says of the subjective method, by which he means the metaphysical method, that "its eternal impotence is illustrated on every page of scientific error". We are well aware that so distinguished a man as Mr. Lewes now thinks that "metaphysical problems have, rationally, no other difficulties than those which beset all problems". (*Life and Mind*, vol. i, p. 5.) But then he uses the word metaphysics as a name "for the highest generalisations of research"; he coins the new word metemperics, which "detaches from metaphysics a vast range of insoluble problems, leaving to it only such as are soluble". However, as we mentioned in our article (Part I), Mr. Lewes does not consider the problem of the nature of the connection betwixt mental and physical states an insoluble one. Our reason for dwelling on the distinction betwixt nervous states and mental states is, that they are being continually confounded. Our mere statement that the problem is insoluble would have been, with many, of no avail. Attempts are being constantly made to explain mind in terms of matter. Mind is sometimes said to be a force. The will is said to influence matter. It is absolutely necessary to insist again and again on the distinction. Nor are we singular in doing so, as the quotations and references in our article show. Let us quote further authority on the absolute distinction there is betwixt mental states and nervous states, and on the insolubility of the problem as to the nature of the connection. Laycock says: "Under the guidance of text-books, you will too often meet with useless metaphysics. You will read of 'palsy of the will'; that 'pain excites' this and the other; that 'the mind plays' upon the nerves like a performer on the keys of a piano; and therewith you will be led into fallacies in observation and practice. Now, the changes which, in nerve-tissue, coincide with the evolution of energy or force, always result from the communication of force or energy to the tissue, and never from mere states of consciousness." (*Med. Times and Gazette*, Jan. 14th, 1871, p. 31.) Spencer says: "Though accumulated observations and experiments have led us by a very indirect series of inferences to the belief that mind and nervous action are the subjective and objective faces of the same thing, we remain utterly incapable of seeing, and even of imagining, how the two are related." (*Prin. of Psy.*, vol. i, p. 140.) Elsewhere Mr. Spencer writes: "We can think of Matter only in terms of Mind. We can think of Mind only in terms of Matter. When we have pushed our explorations of the first to the uttermost limit, we are referred to the second

for a final answer; and when we have got the final answer of the second, we are referred back to the first for an interpretation of it. We find the value of x in terms of y ; then we find the value of y in terms of x ; and so on we may continue for ever without coming nearer to a solution. The antithesis of subject and object, never to be transcended whilst consciousness lasts, renders impossible all knowledge of that Ultimate Reality in which subject and object are united." (*Prin. of Psy.*, vol. i, § 272.) It was, indeed, needful for him to urge the distinction as strongly as he could; for, in spite of this and other equally explicit statements, Mr. Spencer has had to declare that the doctrine of Evolution does not involve materialism. Clifford writes (*Fortnightly Review*, Dec. 1874): "The assertion that another man's volition, a feeling in his consciousness which I cannot perceive, is part of the train of physical facts which I may perceive, this is neither true nor untrue, but nonsense; it is a combination of words whose corresponding ideas will not go together." Mill, speaking of colour, says: "Whatever number of hidden links we might detect in the chain of causation terminating in the colour, the last link would still be a law of colour, *not a law of motion, nor of any other phenomenon whatever.*" (*Logic*, vol. ii, p. 4.) Tyndall says: "Granted that a definite thought and a definite molecular action in the brain occur simultaneously, we do not possess the intellectual organ, nor apparently any rudiment of the organ, which would enable us to pass by a process of reasoning from the one phenomenon to the other." These distinguished men urge the distinction, and at the same time insist on the insolubility of the problem as to the nature of the connection betwixt mind and matter. Mr. Huxley, at a meeting of the Royal Society, *à propos* of Ferrier's experiments, spoke to the same effect as Tyndall. Lewes says: "Such is the argument urged in a hundred different quarters." Why do these distinguished men, believing the two things to be associated, urge that the nature of the connection betwixt them is unknown, when they believe also that the problem is altogether insoluble? For the simple reason, that there are some who do not make the necessary distinction, but write confusedly as if psychology and the physiology of the brain were universally agreed upon to be one and the same thing. Mr. Lewes does not belong to this class. To quote a *Westminster Reviewer*, Mr. Lewes "at least knows probably more about philosophy than any living author". Those to whom we refer are those who write as if the distinction had never been made; Mr. Lewes writes, knowing all that has ever been written on the matter. But Dr. Crombie wishes to know why, when, without prejudice to the question advanced, almost any view might be taken of the enigma—the connection, namely, in question—was it made so much of? Why, because we are bound to protect ourselves against the inference sure to be drawn by many of those who ignore the distinction, that we are endeavouring to give an account of mind in terms of anatomy and physiology; whereas our task was the far humbler one of giving some account of the *substrata* of mind. We wished also to urge on those who think the problem soluble, or who see no difficulty about it of any sort, that, supposing they were right, to give a materialistic or even a morphological explanation of mind is not to give an anatomical and physiological explanation; and that a mere materialistic explanation was in effect only a clumsy substitute for psychology. In stating our own opinions plainly, we do not ignore that many will hold other opinions; indeed, we quoted in terms of respect the opinions of G. H. Lewes, who considers the metaphysical problem to be soluble. For the truth of the statement that the unit of composition of speech is a proposition, authority is easily adduced. Dr. Thomson (*Outlines of the Necessary Laws of Thought*) says that the most obvious signification of language is, that "it is a *system of articulate words*". Bain says (*Logic Deductive*, p. 44): "Every portion of knowledge conveyed in language.....takes the form called in Grammar a *Sentence*; in Logic, a *PROPOSITION*." He adds that "A Proposition mentions two things, and is, therefore, made up of at least *two names*." (Italics and capitals in original.) In his *Grammar*, p. 5, he writes: "Speech is made up of separate sayings, each complete in itself, and containing several words; and these sayings are Sen-

tences." Dr. Crombie seems to suppose that the unit of speech is a single word. Bain says (*op. cit.*, p. 5): "A single word does not give a meaning"; and also: "Any complete meaning is a sentence". Again (*op. cit.*, p. 148): "Every sentence consists of two parts: the subject and the predicate." Possibly, however, Dr. Crombie's objection is to the expression "unit of composition". We can give good authority for it, and for the use of it in the sense in which we used it. Herbert Spencer, when speaking of a certain arrangement of afferent, efferent, and centripetal nerves, with a ganglion-cell, calls this arrangement the "unit of composition of the nervous system". Yet it may be that Dr. Crombie only means that he would prefer to take a word as the unit of speech, rather than take as a specimen of the unit of speech the proposition he quotes from our article. He does not know, it may be, what the word "process" can mean in the proposition criticised. We used the word because it not only implies an association of sensory and motor nerves, but a particular fixed order of association which is the order of action. The action of the sensory nerve precedes that of the motor nerve. This is, we admit, contrary to usage; but we should not have thought it possible that the novel use of the word would have led to any difficulty. We are sorry to find, too, that another expression, "experiments of disease", is considered misleading. It may be understood, Dr. Crombie seems to think, to imply that an inanimate agency is an experimenter. It never occurred to us as possible, we confess, that any one could take the expression other than metaphorically, especially as in the sentence containing it we use the expression "the experiments, *properly so called*, of Hitzig and Ferrier." Metaphorically speaking, we do not think there would be any great impropriety in calling the perturbations of Uranus, by which Neptune was discovered, an "experiment made by gravitation". But we do not think either of the phrases "ingenious"; we should have thought them too commonplace for criticism.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

At a special meeting of the Council on Wednesday last, for the election of three Fellows to be members of the Court of Examiners, Mr. J. E. Erichsen was elected in succession to Mr. Henry Hancock, and Messrs. F. Le Gros Clark, F.R.S., and W. S. Savory, F.R.S., were re-elected. We foreshadowed this point by the recent publication of a manuscript letter of Sir Astley Cooper, in which he urged the separation of the functions of surgical and anatomical examiners. The College progresses slowly. It has at length reached Sir Astley Cooper's wise suggestion. Certainly no better selection could have been made than of the eminent surgeon and teacher whom it has chosen.

THE CLINICAL SOCIETY OF LONDON.

THE first meeting of this vigorous Society was held last Friday, when, as will appear from our report of the same at page 509, the papers read were of the usual high interest. The President introduced to the meeting the eighth annual volume of the Society's *Transactions*, and subsequently read the names of some twelve or fifteen gentlemen who had been proposed for membership. The discussion on Mr. Pick's very interesting case of Compound Fracture of Patella, treated by Lister's antiseptic method, was wisely adjourned to the next meeting, when we shall hope to hear the opinions of some of our best surgeons on this most interesting of surgical questions.

THE TREATMENT OF INEBRIATES.

A PAPER on this subject by Dr. Crothers, published in the *Philadelphia Medical and Surgical Reporter*, contains this significant statement. "Since 1848, there have been received at the Albany Penitentiary, under commitment, 24,590 persons, of whom 21,057 confess to habits of inebriety." The Albany Penitentiary has been in existence twenty-seven years. Its reputation has become national, from its strict discipline and excellent financial management. Only one convict has ever escaped; and the earnings of the prisoners over all expenses have been 243,901 dollars; an average of 9,033 dollars per year. In the medical treatment of delirium tremens, which is the most common phase of

inebriety amongst the prisoners, hydrate of chloral is heroically administered. Nutritious food, bathing, and saline drinks, are also resorted to freely. The first thing, after the delirium has in a measure subsided, is to get the patient employed; to occupy his mind. If he be in the hospital, and cannot leave it, he is employed in sorting and covering books, or labelling packages. If he can go out, some work is given him which requires his undivided attention. This constitutes the general course of treatment. The result is that those employed recover rapidly, and but few cases are developed after the prisoners have come here. Those cases which remain in the hospital or cell until complete recovery takes place average from ten to twenty days longer than those treated by the plan last mentioned. Over twelve hundred cases of delirium tremens are noted on the records, with only forty-three deaths, showing how far this general plan has been successful. Full details of the treatment employed, both for male and female inebriates, are given in the interesting paper, from which we quote the general conclusions:

- "1. Experience indicates that inebriates of all grades can be made producers, and to more than earn their cost of living.
- "2. Whether curable or not, in the full meaning of the word, they can all be reformed, benefited, and made industrious for a time; a positive gain to themselves and the world.
- "3. The diseased will and physical force of the inebriate must, for the best results, be guided and controlled by the normal reason of another.
- "4. As in other diseases where perfect obedience to the dicta of the physician is absolutely essential, so in inebriety, submission, restraint, and faith must constitute the first elements of treatment.
- "5. The sharp discipline of prison life is particularly fitted to strengthen and develop the feeble impulses and to control the diseased longings, in which consists the beginning of true reform.
- "6. Labour of body and mind, in a moderate degree, is a powerful aid in breaking up the old channel of thoughts and giving the mind new responsibilities.
- "7. The experience and success of this institution, among the worst and least hopeful of patients, founded on two principles, military discipline and occupation of body and mind, indicate the most hopeful promise of future results.
- "8. The hints embodied in these facts, if carried out practically in an asylum, would be a clearer literal answer than is usually given to the oft-repeated question, 'Can you really cure a drunkard?'"

YET ANOTHER DEATH FROM CHLOROFORM.

WE are indebted to Mr. Johnson Smith for the following report on a further fatal case of chloroform-inhalation, which must be added to the terrible list. On the morning of the 6th of October, a seaman named Robert Summers was taken into the surgery of the Seamen's Hospital, for the purpose of having an operation performed upon him, for the removal of a small superficial sequestrum from the posterior surface of the left thigh-bone near the knee. The patient was fifty-six years of age, stout and muscular, presented no external signs of organic disease, and, beyond a slightly marked arcus senilis, none of structural decay. He was anxious, timid, and very sensitive to pain. During the administration of chloroform, he passed rapidly into the stage of excitement, and then struggled very much for about five minutes. At the end of this period, when he was quiet but not quite unconscious, Esmarch's bandage was applied to the left leg and thigh, and above this the constricting elastic band. Shortly after this had been done, the patient's face became livid, and the respiration irregular and noisy. After the man had been turned over to the left, and the tongue pulled forwards by means of hooked forceps, these symptoms passed off, and the breathing and pulse became good, and the face regained its natural colour. It was then decided that the operation should be done, but that no more chloroform should be given; and after this no other attempt was made to administer an anæsthetic. After the elastic bandage had been removed from the limb, and just as the sinus leading down to dead bone was about to be laid open, the patient, who had previously appeared to be half-conscious, again became livid, and again breathed noisily and irregularly; then, after an interval of a few seconds, both pulse and respiration suddenly ceased. During the following twenty minutes, attempts

were made to restore animation by Silvester's method, galvanism, intravenous injection of ammonia, frictions, and application of cold to the chest-walls, but without the slightest indication of any change in the lifeless condition of the patient. The chloroform in this case was administered by means of a long cone made of flexible material, which was open at both ends. Two doses of chloroform were given, and the total quantity administered did not exceed one drachm. A *post mortem* examination was made on the following day. The body was that of a stout man, and the subcutaneous cellular tissue of the trunk and the peritoneal folds of the abdomen were loaded with fat. The lungs were much congested, but in every other respect quite healthy. There was considerable deposit of fat on the surface of the heart; but the muscular structure of the walls of this organ was firm, ruddy, and of healthy appearance. All the cavities contained much fluid blood. The cardiac valves were all competent and free from deposit. The aorta was atheromatous. The surface of the liver was much puckered, and presented one small pale nodule (syphiloma). The kidneys were granular and contracted. The arteries at the base of the brain had rigid and diseased walls. The arachnoid, especially at the base, was thickened and very opaque. The membranes on the upper surface of the cerebral hemispheres were much congested. Surely these incessant fatalities from the use of chloroform plead trumpet-tongued for the adoption in its stead of what is avouched on high authority to be the safer anæsthetic—ether.

THE MEDICAL SOCIETY OF LONDON.

THE Lettsomian Lectures this year will be delivered by Dr. C. Theodore Williams, on the Influence of Climate in the Treatment of Pulmonary Consumption. The annual oration will be delivered by Mr. Erasmus Wilson, F.R.S. The subject of the essay for the Fothergillian Gold Medal in March 1876, is "Cataract and its Treatment"; and in March 1877, "Pyæmia". Essays competing are to be sent before the 1st of the previous November. The opening meeting of the 102nd Session will be held at the Society's House, 11, Chandos Street, Cavendish Square, on Monday, October 18th, at 8 P.M. The following papers will be read: Dr. Routh, on Hyperpyrexia, viewed specially in its surgical aspect; and Dr. Thorowgood on a Case of Acute Pneumonia.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

THE opening meeting of the twentieth session of this Society was held on Friday, October 8th, at the Royal Kent Dispensary; Dr. John Anderson in the chair. The following officers were elected for the session 1875-76. *President*: J. N. Miller, M.D. *Vice-Presidents*: Thomas Creed, M.D.; J. P. Purvis, M.R.C.S. *Council*: J. Anderson, M.D.; G. Hughes Cable, M.R.C.S.; William Carr, M.D.; William Churton, M.R.C.S.; Ralph Gooding, B.A., M.D.; Frederick Moon, M.B.; W. Lockhart, F.R.C.S. *Treasurer*: Prior Purvis, M.D. *Secretary*: H. K. Hitchcock, M.R.C.S. *Librarian*: J. B. Laundry, L.R.C.P. The next meeting will be held on Friday, November 5th, at 8 P.M., when Dr. Braxton Hicks will read a paper.

MANCHESTER PROVIDENT DISPENSARY ASSOCIATION.

A CORRESPONDENT writes:—The medical men connected with the provident dispensaries here are extremely dissatisfied with the treatment they have received at the hands of the General Council, and with the results of the practical working of the scheme here. A meeting has just been held to consider the recent resolution of the Central Committee deciding to admit friendly societies to the benefits of the provident scheme. It is regarded by the staff of the provident dispensaries, and by most of the general practitioners of Manchester and neighbourhood, as likely to be highly injurious to general practice, and a direct violation of the terms of the original scheme, upon the faith of which the Association received the support of a small section of the profession here. A protest, signed by nearly the entire staff, was sent to the General Council some time since; but, with the greatest indif-

ference to the interests of those concerned, the determination of the Council has been pushed to extremities. Great indignation is felt at the studied disregard of the feelings and views of the profession in this city; and, as a result, almost all the medical men who have given any countenance to a scheme, the principle of which is undoubtedly a good one, have decided to cease their connection with an Association which in other respects is found to offer but a miserable remuneration for an eminently extensive and unceasing expenditure of time and labour. A great deal more in connection with the imperious treatment of the medical men concerned in this movement will be placed before the profession in a short time.

EAST LONDON MEDICAL DEFENCE ASSOCIATION.

UNDER the Apothecaries' Act, this Branch of the British Medical Defence Association recovered, last week, two penalties of £20 each from persons who were illegally practising in the East-end of London. In both cases, registered medical men endeavoured to protect the defendants (one of whom keeps a large druggist's shop) in their practice; and we are informed that their conduct for so doing is to be brought under the notice of the English Branch Medical Council at its meeting in November or December next.

BATTERSEA PROVIDENT DISPENSARY.

THE Committee of the Battersea Dispensary have had under their consideration what steps it was desirable to take to adapt the institution to the altered condition of the parish. After careful deliberation, they have unanimously decided to adopt the provident system. The dispensary was founded in 1844, when Battersea was a mere village; and its regulations are hardly suited to a populous suburb, of which a large proportion of the inhabitants belongs to the well-to-do artisan class. In reconstructing the dispensary upon the provident basis, the Committee have introduced a novel feature. They propose to divide the members into two classes; first, those whose weekly earnings do not exceed thirty shillings; and, secondly, those who are receiving from thirty shillings to fifty shillings. The former class will be expected to pay one penny a week, the latter twopence, with proportionate payments for children. We are glad to see this experiment tried. It is a step in the right direction. There can be no doubt that many of those whom it is proposed to enrol in the second class are as much in need of a system of "sick assurance" as their poorer neighbours.

THE HOSPITAL FOR WOMEN AT NOTTINGHAM.

THIS institution, which has been recently opened, appears to have been started under circumstances which have caused much local professional annoyance. Mr. G. Elder, the surgeon to the Hospital, is reputed to have been the prime mover in the affair; and so quietly was it managed, that, until an announcement appeared one morning in the Nottingham journals stating the fact that a new Hospital for Women had been opened the day before, scarcely a medical man in the neighbourhood had heard that it was likely to come into existence. The members of the profession resident in the town assembled at the dispensary on the 1st instant, to consider the circumstances under which the institution had been established, and to discuss the question whether such a hospital was required at the present time. Dr. Ransom occupied the chair, and twenty-four other gentlemen were present. It was moved by Dr. Hatherly, seconded by Dr. Brookhouse, and carried unanimously: "That, in the opinion of this meeting, the Hospital for Women recently opened in this town is unnecessary and undesirable." It was also resolved unanimously, upon the proposition of Mr. Littlewood and Mr. Ellam: "That this meeting disapproves of the mode which has been adopted in establishing the Hospital for Women, by which existing institutions have been discredited as a justification for founding the new one, and by which the medical officers are appointed without the customary publicity." Twenty-four other medical men resident in Nottingham, forming altogether a large majority of the local members of the profession, have since signified their approval of the foregoing resolutions. We have seen a pamphlet which attempts to

detail the *raison d'être* of the new institution, and which is full of specious reasoning, liable to take with the public, but known to be fallacious by those who are really acquainted with the facts of the case. Thus, insufficiency of accommodation in the wards of the General Hospital, which is almost invariably on the male side, in consequence of the number of accidents happening at Nottingham, has a prominent place assigned it amongst the circumstances which necessitate the new building: whereas women, whose cases are suitable for admission, are scarcely ever sent back for want of beds. Then the statistics of the mortality after ovariectomy in the Samaritan Free Hospital on the one hand, and in five other large metropolitan hospitals on the other hand, are given, to "show that, in a small hospital, results may be obtained which cannot be approached in general hospitals." After which, one is scarcely prepared for the statement that, "at the commencement, it is thought desirable to limit the work (of the new hospital) to the relief of out-door patients". It will be instructive to watch how Dr. Morris, the physician to the new hospital, and who occupies a like position at the General Hospital, will manage to discharge his somewhat antagonistic duties at the two institutions. Can he do it? The medical posts in the new hospital were not thrown open to the whole profession in Nottingham, but were quietly filled, without previous advertisement of any vacancy. A hospital is a public institution; and it is a bad omen when its founders shun publicity in establishing it.

WESTMINSTER HOSPITAL.

A CORRESPONDENT writes:—The appointment of Surgeon to the Westminster Hospital, rendered vacant by the resignation of Mr. Holt-house, seems likely to afford some little excitement to the governors. Mr. Thomas Cooke, who has lately been having some passages of arms with his colleagues, has issued a circular to the governors of the Westminster Hospital, informing them that "it is his painful duty to undeceive them" as to the institution being under their control: and alleging that the affairs are managed by a private and self-constituted body of men. It is rumoured that he will not be nominated a candidate unless he previously resigns the post of assistant-surgeon; and he states in his circular: "My resignation, as thus demanded, in face of the organised opposition which every candidate must now encounter who is not the *protégé* of your medical staff, would be courting defeat; it would be wilfully throwing away the five best years of my life." Certain statements respecting the election and retirement of Dr. Gibb are given as an extract from the minutes of the special meeting of the Council, which are worthy of reproduction. "Dr. Gibb made a statement to the Council wherein he mentioned his desire and intention of retiring in twelve months if his present promotion was not opposed. It was proposed and seconded, and carried, that the *handsome offer* of Dr. Gibb, in the interests of the school, be accepted; and that those present *pledge themselves* not to oppose that gentleman's election." Mr. Cooke goes on to say: "I am now opposed, in my turn, by the selfsame constituted body who opposed Dr. Gibb, and who managed to procure his removal from the hospital without your knowledge and consent." A list of Mr. Cooke's *Tablets*, published October 1875, accompanies the address, together with extracts from the medical journals in the form of reviews. The mode of electing medical officers in some hospitals is still far from perfect; and it is high time that some standard of knowledge, as well as capability of imparting that knowledge, be adopted as the ground of a man's election, and not the uncertain and unsatisfactory method at present in vogue.

SCOTLAND.

THE death-rate of Leith, for the week ending October 9th, is reported at the very low figure of 13 per 1,000.

THE executors of the late Mr. T. B. Campbell of Edinburgh have intimated a legacy from his estate to the Royal Infirmary of £500, and to the Convalescent Home of £250, free of legacy duty.

THE annual mortality report of the borough of Dunfermline shows a death-rate of 22 per 1000, of which nearly one-half were children under five years of age.

IT may interest the friends and admirers of the late Dr. Hughes Bennett to know that an excellent and lifelike portrait of this distinguished physician was painted shortly before his death by Miss R. Solomon; and is now on view at her studio, 12, Fitzroy Street.

UNIVERSITY OF ABERDEEN.

AT the statutory meeting of the University of Aberdeen, held last Saturday, Dr. W. Stephenson of Edinburgh, and Dr. J. W. Smith-Shand of Aberdeen, were formally inducted to the chairs of Midwifery and Medicine, the former in the room of the late Dr. Andrew Inglis, the latter replacing Dr. Macrobin, who resigned in the spring. Dr. Carpenter has written to decline being put in nomination for the Lord Rectorship of Aberdeen University, in consequence of the responsible duties attaching to the office.

THE EDINBURGH POLICE BILL.

ACCORDING to the draft of the Edinburgh Police Bill, which is to be brought forward next session, powers are asked to take over the Princes Street Gardens from the present proprietors, and throw them open to the public, at the expense of the city. By another clause, the Council are empowered to acquire part of the lands of Inverleith, for the formation of an arboretum in connection with the botanic gardens, and to defray the costs out of the police funds. The medical officer of health is to be empowered to have filthy houses cleaned at the expense of the owner or occupier; and disorderly houses may, after a second conviction, be shut up. Touching drainage matters, it is proposed to form the whole burgh into one drainage district, and it is further provided that everything in the nature of watercloset apparatus, sewers, drains, etc., shall, in future, be authorised and constructed by the local authority, and a plan of these be lodged with a public officer, and a register kept, to which access may be had on payment of a fee. As regards existing works, the burgh engineer is empowered to report on any case that involves danger to health, and the local authority to provide proper works at the expense of the owners. Dairies, it is proposed, are to be licensed by the magistrates, the license to be renewed annually on a certificate from the medical officer of health. With regard to infectious disease, it is proposed to enact that notice of every case be given to the medical officer of health, and that any medical practitioner failing to do so shall incur a fine not exceeding forty shillings. These are a few of the provisions which appear among a number of clauses relating to other subjects connected with municipal and police routine.

NEW HOME FOR INCURABLES FOR GLASGOW.

THE new home for incurables from Glasgow and the rest of Scotland, was formally opened on the 6th ultimo by Lord Shaftesbury. It is situated at Broomhill, and is the result of a large bazaar held in Glasgow in March last, at which £14,000 was realised. The site which, including the grounds, is eight acres in extent, is a most suitable one for the purpose, and the house upon it will, at present, accommodate about one hundred persons, but additions will probably be made to it as may be required. It is proposed to establish several cottage homes in connection with it.

IRELAND.

QUEEN'S COLLEGE, CORK.

THERE have been several new appointments at Queen's College, Cork. Among them are those of the professorship of *Materia Medica*, and the professorship of *Anatomy and Physiology*. The latter chair has been filled by the appointment of Dr. Charles, a distinguished graduate of the Queen's University, who for several years has been

demonstrator under Professor Redfern at Belfast. His appointment gives universal satisfaction. (In last week's JOURNAL, it was stated by mistake that Dr. Charles Bell had been appointed to the professorship.) For the first-mentioned chair there were two candidates, Dr. Macnaughten Jones, well and favourably known as a rising physician and contributor to medical literature; and Dr. Matthias O'Keefe, who, for many years, has been connected with the medical teaching of Cork. The latter gentleman has been elected; and though, doubtless, the Senate acted in the best interests of the school, the appointment is not apparently so universally acceptable as the other.

PHARMACEUTICAL SOCIETY OF IRELAND.

THE following gentlemen were appointed Examiners at a meeting of the Council held last week:—Latin, English, and Arithmetic: Edward W. Collins, M.D. Materia Medica and Botany: Walter George Smith, M.D. Pharmaceutical and General Chemistry: H. Draper. Practical Pharmacy: Robert Montgomery. The Examiners hold office for one year, but are eligible for re-election.

MEMORIAL TO THE LATE SIR JOHN GRAY, M.P.

IT is intended by the friends of the late Sir John Gray to erect a memorial to his memory, in testimony to whose ability, scientific knowledge, indomitable energy and perseverance the citizens of Dublin are mainly indebted for an abundant supply of pure water. Subscriptions to a considerable amount have been already received, as the deceased gentleman was respected and esteemed by a very large section of the community. It is not at present determined, we believe, what form the memorial will take; but we hope something better than the usual "statue" will be inaugurated on this occasion.

WATER-SUPPLY OF MULLINGAR.

A MEETING was held last week in the Town Hall, Dr. Dillon Kelly, J.P., in the chair, to consider the subject of a water-supply for this town. Resolutions advocating efficient sewerage and a plentiful supply of pure water were put before the meeting, but the majority of those present rejected each resolution as it was brought forward, although it was stated that the meeting was merely a preliminary one to ascertain the cost of these improvements, and for this purpose the Lord of the Manor had subscribed £50. Explanations and arguments proving useless to influence the benighted residents, the meeting was dissolved; and Mullingar is likely to remain for some time longer one of the filthiest and most defective, as regards sanitary measures, of any town in Ireland.

ULSTER HOSPITAL FOR CHILDREN.

THE annual meeting of the friends of this benevolent institution was held on the 6th instant at Belfast, the chair being occupied by Sir John Savage, J.P. The medical report showed that the total number of patients to whom medical relief had been afforded during the past year was 4,724, almost 1,000 new cases more than during the preceding twelve months. Of these, 638 were treated at their own homes, and 146 were received into hospital for intern treatment. The committee of the hospital have not thought it desirable to set apart an operating-room, or to incur the expense of instruments and appliances, believing that the Royal Hospital is sufficient to meet these demands, and deprecating opposition to any other hospital; only such cases as required hospital treatment for their restoration to health have been received into the wards. After complimentary allusions to the zeal and success which characterised the labours of the medical staff, the meeting separated.

THE MEDICAL SCHOOLS.—The registration of students at the Royal College of Surgeons is not completed at the time of our going to press; but we learn that up to this time the gross number is 1,540. St. Bartholomew's, we believe, stands at the head of the list.

MEDICAL ADVERTISING.

AT a meeting of the East Sussex District of the South-Eastern Branch, held on Wednesday, September 22nd, the following resolution, proposed by Dr. Parsons of Dover (Branch Secretary), and seconded by Sir J. Cordy Burrows, was carried unanimously.

"That, in the opinion of this meeting, the practice of advertising medical books in the public papers is derogatory to the interest and dignity of the profession, and likely to occasion social inconvenience and annoyance, and should, therefore, be abandoned."

CHOLERA IN INDIA.

THE following information regarding the general distribution of cholera in India during July and the first half of August we gather from the *Indian Medical Gazette*.

Bengal.—The disease has greatly subsided, being reported from fewer districts and represented as declining in these. In Calcutta, the registered deaths in July only numbered 31, and the disease has not been much heard of. A few cases occurred in some parts of the twenty-four Pergunnahs district about the middle of July; but the disease was decreasing at the end of the month. Central and Western Bengal appear to have been exempt, with the exception of Hooghly, in which there was a little cholera during the first half of August, and Moorshedabad, where the disease was prevalent from the middle to the end of July.

From Eastern Bengal and Assam, no reports of cholera have come; but the province of Orissa has suffered somewhat severely. The occasion of the outbreak was, as usual, the festival of Juggernath in Pooree. This took place on the 5th of July, and the disease broke out in the town of Pooree and along the pilgrim routes. It was mainly limited to these, but seems also to have prevailed in a scattered way in some of the villages of the interior. The pilgrim routes passing through the adjoining districts of Balasore and Cuttack were also affected. The disease subsided throughout the province as August advanced.

In Behar, the disease has generally been subsiding. In Patna, it was still prevalent in July; but continued to decline throughout that month and up to the 12th of August. In Gya, there was a good deal of cholera prevailing in July, more especially in the west of the district; but it decreased considerably during the first half of August. In Shahabad, the disease had disappeared by the first week of that month. In Sarun, too, it was reported to be but mildly prevalent during the last half of July. There was an outbreak at Deoghur in the Sonthal Pergunnahs early in August; and the disease lingered in the district of Julpigoree throughout the period under notice. In Chota Nagpore, a few cases continued to occur in Hazareebaugh and Singhboom up to the middle of August; and there was a pretty severe outbreak in the Palamow subdivision of Lohardugga throughout July and the first two weeks of August.

Nepal.—Katmandoo has been visited by rather a sharp outbreak which appeared about the middle of July and lasted to the end of that month, reappearing in milder form in the first week of August.

North-Western Provinces.—Cholera still lingers in the districts mentioned in our last number; but it is uniformly on the decrease, and has not affected any city or cantonment with the exception of a few cases among the followers of the 35th N. I. at Cawnpore.

Central Provinces.—The disease has spread and increased somewhat in these provinces. Outbreaks have occurred in the following districts: Belaspore, Raipore, Betul, Bandara, Nagpore, Nimar, Hushungabad, Nursingpore, Wurdah, and Sumbulpore. The disease exhibited a tendency to increase as August advanced.

Central India.—The disease continued to haunt the Bheel villages and prevail in Malwa, but not with great concentration or severity.

Rajputanah.—Outbreaks occurred in Marwar, Ulwar, Tonk, and Kotah in July, but the disease disappeared towards the end of the month, except in Tonk, where it continued to prevail.

Hyderabad.—The disease was very prevalent and severe throughout the entire province during July, but seemed to be decreasing in the early part of August.

Punjab.—Cholera has been extending in this province. The districts affected have been Delhi, Umballa, Jullunder, Kohtuk, Hissar, and Simla. The disease was not, however, very intense anywhere, and did not threaten to become so.

The Simla outbreak has now subsided. No details regarding it have reached us. At Dhurmshala also, the outbreak in the 2nd Goorkas has passed away. Among Sepoys and camp-followers, 94 admissions and

36 deaths had taken place between the 3rd and 31st of July. The Sepoys were moved into camp with advantage. A sharp outbreak has occurred in the city of Umritsur: 260 admissions and 99 deaths had occurred between 28th July and 7th August.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.

THE Introductory Address was delivered on Thursday, October 2nd, by Dr. EDWARD H. DICKINSON, Lecturer on Comparative Anatomy and Zoology, and Physician to the Liverpool Northern Hospital.

After some introductory remarks, in which he congratulated the school on the circumstance that the meeting which he addressed was presided over by one of the great leaders in the van of scientific progress and improved medical education in this country—Professor Humphry of Cambridge—Dr. Dickinson said that he had intended to take as the text of his address the Times and Writings of Hippocrates. He was led to make choice of this subject, partly from personal taste and some little previous acquaintance with it; partly from the fact that, as far as he was then aware, it had not been similarly utilised of late years; but chiefly from the conviction, which had often forced itself upon him, that far too little knowledge exists as a rule among the younger members, at any rate, of our profession, of its early history and condition, as disclosed to us in the writings of the illustrious patriarch. In August, however, he found that his scheme had been thoroughly anticipated by Dr. Begbie of Edinburgh, in his able and scholarly address delivered at the recent meeting of the British Medical Association. He had been led, therefore, in a great measure to alter his original design, and proposed to give a brief sketch of the state of medicine among the ancients generally. The early history of the healing art and its origin and development as an element of civilisation must, he thought, ever possess the deepest interest for its present disciples, and vast stores of useful information and sound instruction may assuredly be derived from the contemplation of its records. The lecturer then referred briefly to the origin of medicine, and to its existence among the Egyptians, Hebrews, Chinese, Persians, and Hindoos, and the early Greeks. Having given a sketch of the Asclepia, he spoke of Hippocrates, whose birth he regarded as having taken place under happy auspices, occurring as it did at a time when the empire of literature, philosophy, and art in Greece was approaching the zenith of its fame. Among the associations by which he was surrounded in his earlier days, it was, perhaps, the less to be wondered at that the brilliant genius and powerful intellect of Hippocrates should have developed apace, and ripened into that penetrating sagacity and clear judgment which enabled him to free himself from the trammels of ignorance and superstition, and to rise like a star in the dim twilight of barbarism. He found medicine in a condition scarce deserving the appellation of an art; he left it raised to the dignity of a science. Hitherto, the sole guide for practice had been experience and observation of the casualties of disease, and a vast accumulation of traditional data; no attempt had been made to draw inferences from these, or to arrange them into anything like a definite classification. Effects were observed, their causes disregarded; symptoms arrested attention according to their severity, the measures for their relief rested upon the uncertain memories of previous successes, or the vague suggestions of individual caprice. For Hippocrates it was reserved to rescue the name of medicine from the grasp of charlatany, and from a vast chaos of undigested facts to found a new system of practice, based upon the combination of sound reasoning with experience, and upon the true principles of philosophical induction. Hippocrates was wont to recognise the all-pervading presence of some mighty and invisible power, "the hypothesis of a principle", which he denominated "Nature" (*φύσις*). This he believed to be the essential spirit of all vitality, promoting and modifying growth, preserving the functions of the body in health, and tending to restore them when disturbed by disease. Hence, he held that the physician should be nature's minister, and should seek to foster rather than retard her operations. Yet he fully appreciated the frequent necessity for extraneous interference; and, when the exigencies of the case demanded it, his practice was fertile in resource, and prompt and unflinching in action. That Hippocrates was pre-eminently a student of nature, as we in the present day understand the term, is evidenced everywhere throughout his writings, and his descriptions of its varying phenomena, and of many forms of disease, the types of which are but little, if at all, altered in our own day, are singularly apt and distinctive. Hence, we can understand the very close attention he always paid to prognosis, in which he acquired such marvellous skill as to earn for himself the title of the "Oracle of Cos". He fully recognised the importance of prophylactic and sanitary, as well as remedial therapeutic measures, and laid great stress, there-

fore, upon the proper regulation of diet, baths, and exercise. He was apparently the first who drew special attention to the nature of epidemics, and to the influence upon the animal economy of such external agencies as climate, water, and situation; and his treatises upon these subjects (*Ἐπιδημιῶν* and *Περὶ αἰσίων, ἰσθμίων καὶ τοπιῶν*) display in every line the discernment of their author, and the wonderful accuracy of his observations. As to the knowledge of anatomy possessed by Hippocrates, this must have been very small indeed. It seems probable that he never had an opportunity of dissecting the human body, so that all he knew on this subject must have been gathered from examination of the lower animals. This being so, and with such meagre and insufficient materials at his command, can we cease to wonder at and admire the marvellous genius and sagacity of this man, which enabled him to accomplish so much in his own day, and in many cases to foreshadow truths which were only established long centuries afterwards. Assuredly it may be predicated of Hippocrates that he was—

"One of the few—Nature's interpreters—

"The few whose genius give us lights to shine",

and that as he did more for the science of medicine than any or all that preceded him, so also has he never been surpassed in any after age as a glory and ornament to our profession.

Dr. Dickinson then referred to the sects of the Dogmatists and Empirics, to the influence of Plato and Aristotle, to the school of Alexandria, to the introduction of human dissection and its practice by Herophilus and Erasistratus—who may be regarded as the pioneers of strict anatomical research, to Asclepiades, Themison, Celsus, Dioscorides, Aretæus, and Galen, to the decline of the Alexandrian school, and to the last of the great schools of medicine in ancient times, that of Arabia and the Saracens. Having given some advice to the pupils of the school as to the manner in which they should pursue their studies, he concluded as follows.

"The history of ancient medicine has doubtless been long familiar to many of my hearers; for others it may, perchance, have had something of the charm of novelty. I have sought to-day—how imperfectly I am but too conscious—in the former case to refresh old memories, in the latter to stimulate attention to the fuller consideration of a subject which is not one of mere curiosity and passing interest, but of real importance and practical utility to every man who seeks to follow his profession in a liberal and philosophic spirit. For, inasmuch as the great object of all history is to deduce from the past instruction for the future, let us not forget that—no less from the fallacious doctrines, rash experiments, and mistaken methods of treatment adopted by our forefathers, than from their diligent researches, faithful observations, and ingenious discoveries—we may learn an invaluable lesson; that so, profiting by their experience, we may accept the true and reject the false, and, avoiding the resuscitation of exploded errors, may arrive at 'sober conclusions in theory, and successful treatment in practice'.

"Finally, I would say that, while I have endeavoured to attach due importance to the achievements of the ancients, I would altogether deprecate the character of a mere *laudator temporis acti*. For I firmly believe that in no department of modern civilisation does what is termed 'the march of intellect and of progress' more strongly exhibit itself than in the recent advancement of medical science. Thanks to the keen spirit of inquiry which is abroad, to the improved means and appliances for diagnosis which we possess, and, above all, to the many able and earnest workers in our midst, the mists are fast clearing away from the pathology of obscure diseases; new and invaluable physiological facts are being daily elucidated; and new therapeutic and operative measures adopted with success. Theories and opinions are, it is true, still too often at variance amongst us, and the proverbial disagreements of doctors continue to afford food for the sarcastic pleasantry of the multitude. But let us hope that, as each year rolls on, while independence of thought and originality of research still retain their vigour, there may be an increasing unity of thought and harmony of action throughout the ranks of our profession—the sure results of a perfected standard of knowledge. So that, still retaining a grateful memory of the good work done by our predecessors, and not ceasing to gather instruction from 'the garnered wisdom of the past', we may be able to re-echo, in no vainglorious spirit, the proud words of that well-greaved Greek, Sthenelus the son of Capaneus,

"Ἡμὲς δὲ τοὶ πατέρες καὶ ἀειβρότες ἐχόμεθ' εἶναι."*

LEEDS SCHOOL OF MEDICINE.

MR. T. R. JESSOP, Lecturer on Surgery and Surgeon to the Infirmary, delivered the Introductory Address.

After referring to the changes which had taken place in the staff of the school, and of the transference of the chemical class to the York-

* Homer's *Iliad*, iv, line 495.

shire College of Science, the lecturer said that, with all that had been and was being done, the modern system of teaching medical students was very faulty. "Formerly it was required of every one seeking admission to the ranks of the medical profession, that he should complete an apprenticeship of five years; and the custom was to spend these five years under the roof of a busy practitioner, away from all schools and hospitals, where he became initiated into the general routine of practice, gained familiarity with the more obvious properties of drugs, learned to recognise the leading symptoms of the commoner ailments, acquired some dexterity in performing the minor surgical operations, made practical acquaintance with the art of midwifery, and obtained possession of that indescribable quality we name 'tact'. And all this before entering upon hospital work, or the attendance at lectures. Two or three years more were then devoted to systematic school and hospital work, and as if, in consideration of so much time having been spent as a pupil, all test of efficiency were thought to be superfluous, a license to practise was granted after the merest farce of an examination. At the present day, the student is required, first, to give evidence of some proficiency in ordinary school work, and then to spend four years 'in the acquirement of professional knowledge'; after which, and on arriving at the age of twenty-one, he may present himself for examination at almost any of the licensing corporations. With regard to the preliminary examination, there cannot, I think, be two opinions. . . . That the institution of compulsory examinations in classics, mathematics, and general knowledge has already done much to increase the calibre of the average medical student is a fact that must be patent to every lecturer who is old enough to look back upon the times when the translation of a paragraph from Gregory, or from Celsus, was looked upon as the most formidable barrier between the student and the duly qualified practitioner. So far our modern system is in advance of the old. But when we come to examine the curriculum laid down for the guidance of students whilst prosecuting their professional studies, we shall find, I think, that our system is most faulty. Four years of professional study are now considered sufficient to produce a fully equipped and competent medical man! At the age of seventeen a youth may leave school, at twenty-one he may have received authoritative permission to announce himself to the world as ready to undertake the management of all diseases alike! He may throw off all dependence upon others, and accept the full responsibility of the lives of his fellow-creatures. Surely, if this be so, it should be provided at least that these four years shall be well spent. After carefully looking through the regulations of the College of Physicians, the College of Surgeons, and the Society of Apothecaries, which together give the country its chief supply of medical practitioners, I have come to the conclusion that these corporate bodies, in framing their regulations, have been vieing with each other in an endeavour to obtain general incompetency in the candidates for their diplomas, by requiring an acquaintance with such a multitude of subjects—most of them of a comprehensive character—in so short a space of time, as to secure that none shall be effectually mastered. From seventeen to twenty-one, in the opinion of the College of Physicians and Surgeons, a student may imbibe a competent knowledge of anatomy, general anatomy and physiology, chemistry, botany, materia medica, practical pharmacy, forensic medicine, pathology, morbid anatomy, midwifery, medicine, and surgery—I wonder the failures are not more numerous! It says much for the perseverance of the race of medical students, and not a little for the teaching in our schools of medicine, that so large a proportion succeed in giving evidence of having obtained such an amount of information upon so large a number of subjects as to satisfy the requirements of their examiners. One result of this too rapid learning I am sure will follow, viz., that much of what it is considered necessary to know at the time of examination, will thenceforth, without an effort to save it, be allowed to pass away from the memory for ever. Further, the regulations of the two Colleges fail utterly to make provision for anything like a practical acquaintance with disease, as it is met with in ordinary practice. . . . In the manner of our professional studies there is still ample room for improvement. Were I advising as to how a young man should be educated for general family practice, this briefly is the plan I should map out for him. Six years should be devoted to professional studies, commencing at the age of seventeen. The first two of these should be spent in the house, and under the immediate superintendence of an intelligent and successful practitioner, who would undertake to teach him the art of compounding medicines, such minor medical and surgical proceedings as are daily to be seen in his consulting room, and the general routine of his practice. He should be moreover permitted occasionally to visit a few patients, under the guidance, of course, of his master. And lastly, during these two years, he should, by attendance on lectures, by reading, and by studying, make himself thoroughly acquainted with chemistry, materia

medica, and botany. After the completion of his first two years, he should be entered in the usual manner as a student at a medical school, and for the next three years his whole time should be devoted to the duties of the school and the hospital. The first of these would be occupied almost exclusively with anatomy and physiology, the second should include, along with anatomy and physiology, the more advanced subjects of midwifery, surgery, medicine, etc., whilst the third should be given wholly to medicine, surgery, and the whole range of clinical work. During this period there should be no obligation on his part to do anything outside the hospital and the school. Then finally would come the last of the six years—perhaps the most important of all; and during this I would recommend that he return to the house of a well-occupied practitioner, who would be able and willing, under his own guidance, to find him employment in superintending the surgery, visiting patients, and the attendance upon midwifery, leaving him at the same time ample opportunity for perfecting his observation of hospital work. Some such a curriculum as this would do away with the disadvantages by which the students of former days were so heavily handicapped, and would at the same time, if wisely made use of, ensure, with much greater certainty than is the case under our present system, a competent knowledge of every department of our profession." In concluding his address, Mr. Jessop said:—"In having selected and laid side by side, as the subjects of my address, on the one hand some of the imperfections, as I conceive them to be, in the regulations provided for securing the education of our students—imperfections which are the direct offspring of competition amongst the medical corporations—and which, I confess, I have no hope of seeing swept away, except with the corporations themselves; and on the other a synopsis of some of the principal topics which have given occupation to the surgical world during the last few years, I have been actuated chiefly by the desire to point out to you how, by taking upon yourselves to remedy the defects in the curriculum mapped out for you by the 'examining bodies, you will be best consulting your own interests; and by the hope that in impressing your minds with the ever-advancing character of the work we are all engaged in, I shall be able to create in you a strong desire to keep abreast with all that is being done for the progress of our art. If I have succeeded in these, it will be my happiness to have sown seed which, if carefully tended in the future, will not fail to yield an abundant harvest, to the advantage equally of the patients committed to your charge and yourselves."

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

New School of Anthropology.—Proposed Free Medical School.—Prevention of Dampness in Habitations.—Dangers of the Abuse of Alcoholic Liquors.—Lectures in the Faculty of Medicine.

THE recently sanctioned law for the liberty of instruction in France is already bearing fruit, as great and numerous reforms are being effected in the educational institutions throughout the country, both public and private. You are aware that Government had the monopoly of these institutions; but since the new law they are open to private enterprise, the great Universities not excepted, so that any individual, or association of individuals, may now open an University or College independently or in conjunction with the State. We have just had an example of the latter combination in Paris, by the founding of a school of anthropology by that indefatigable and encyclopædic *savant*, M. Broca, who, it will be remembered, is also the principal founder of the Anthropological Society of Paris. Most men have their own *forte*, but it would be difficult to say what M. Broca's *forte* is, for his knowledge is so extensive that I would venture to say there is scarcely a single branch of science that he is not conversant with, or thoroughly master of. He is as an accomplished mathematician as he is a surgeon, and as great an historian as a physiologist—he is withal a great orator. But if he have a *forte* it is certainly anthropology, or, as he terms it, the science of man. The school he has just founded is to form part of the Faculty of Medicine of Paris, and is to be supported by private subscription. The following are the professors appointed to the new school of anthropology, with the subjects of which they to treat; M. Broca, anthropological anatomy; M. Dally, ethnological anthropology; M. de Mortillet, prehistorical anthropology; M. Hovelacque, linguistic anthropology; M. Bertillon, demography and medical geography; M. Topinard, general anthropology; names that will guarantee certain success to the undertaking if it required nothing else but talent. Until now, there has been for all France but one chair of anthropology, viz., that filled by M. de Quatrefages at the

Museum of Natural History attached to the Jardin des Plantes of Paris. Thanks to Professor Broca's personal efforts, to the co-operation of the Faculty of Medicine of Paris, France now possesses six additional chairs of anthropology, which is the crowning act of the learned professor's life-long efforts to raise the science of anthropology to a higher standard than it had hitherto occupied in this country; and, in attaching the new institution to the school of medicine, he wanted to show how intimately connected was a knowledge of anthropology with the art of healing.

Efforts are being made to found a Faculty of Medicine in Paris independent of the Government institution; and, in order to complete the clinical arrangements, the originators of the free school made an application to the hospital board to allow them a certain number of beds in the State hospitals for clinical instruction, but the application was refused.

The salubrity of habitations is a question intimately connected with the public health, and, among the causes of insalubrity, dampness of the walls and floors of lodging-houses may be ranked among the principal. Many plans have been from time to time devised to remedy the evil, such as paper coated with lead, different sorts of cement, asphalt, etc., but with varying success; besides which, these different means have been found too costly and often impracticable. The difficulty, however, seems to have been solved by a M. Seville, an architect, who has taken out a patent for his invention, which consists of injecting all ceramic materials, such as bricks, tiles, etc., with the tarry products, resulting from the distillation of coal in the manufacture of gas for lighting purposes. The bricks, etc., thus injected, become perfectly impermeable to humidity. This plan is inexpensive, and easy of application in all countries.

On a visit to the School of Medicine lately, I was attracted to a notice that was posted up on the wall, which rather startled me, as it was on a subject which one would hardly expect to meet with at such a place. The notice was headed, "The Dangers of the Abuse of Alcoholic Liquors". The document is a very curious one, but is, nevertheless, very instructive, and deserves to be posted up on all the walls where alcoholic liquors are drunk. I have not been able to ascertain who the author or authors are, but the document is not official, as it is not signed by the Dean of the Faculty; it has evidently emanated from some temperance or other philanthropic society. After having referred to the physiological and pathological effects of the different alcoholic drinks on the system, the writer describes the dangers of the abuse of alcohol in these terms. "Besides the long list of ailments and actual disease of the various organs, the confirmed drinker is subject to that form of necrosis termed Alcoholism, which is the result of the saturation of the entire system with the deadly liquor; and this impregnation of the system is also manifested by certain indelible signs, and may be read on the very countenance of the patient in the form of the various acnoid affections, redness and thickening of the skin of the nose, and permanent congestion of the conjunctival vessels; the body is covered with boils or carbuncles, and the patient generally becomes gouty. Moreover, it has been proved by experience, that drunkards are more susceptible than others to the influences of sporadic, epidemic, and endemic diseases, such as small-pox, typhoid fever, dysentery, and even cholera, which latter seems to single out the drunkards in its progress through a town or city. Acute diseases are aggravated, and, from being simple curable affections, often become intractable to treatment, or, if the patient be not carried off, the convalescence is indefinitely retarded. As regards surgical affections, the influence of alcoholism is even more marked in these cases; it compromises the cicatrisation of wounds, and the success of operations, and an ordinary wound, whether accidental or otherwise, assumes a much more serious character in a drunkard than in a sober person; the ambalances of the commune furnished sufficient examples of this fact. In a very able report, drawn up by Professor Verneuil on the subject, he cited several cases in which those wounded patients, who were addicted to the use of spirituous liquors, succumbed in the space of thirty hours, and, in many cases, earlier, even before any aid could be afforded." What a terrible warning for drunkards!

The Winter Session for 1875-76 begins at the School of Medicine on November 3rd, and the following courses of lectures will be delivered during that period: M. Gavaret, on Medical and Biological Physics; M. Duguet, on Medical Pathology; M. Sappey, on Anatomy; M. Chauffard, on General Pathology and Therapeutics; M. Wurtz, on Biological and Medical Chemistry; M. Dolbeau, on General Surgical Pathology; M. Le Fort, on Operations and Apparatus; M. Robin, on Histology; M. Lorrain, on The History of Medicine and Surgery; MM. Sec, Bélier, and Lasègue, on Clinical Medicine; MM. Richet, Gosselin, Verneuil, and Broca, on Clinical Surgery; M. Depaul, on Clinical Obstetrics; M. Blachez, on Diseases of Children.

ASSOCIATION INTELLIGENCE.

SOUTHERN BRANCH: DORSET DISTRICT.

THE next ordinary meeting of the above Branch will be held at the Dorset County Hospital, Dorchester, on Wednesday, October 20th, at 4.30 P.M.

Dr. Aldridge will read a paper on the Hygienic Treatment of Disease. Mr. Ewens: Case of Operation for the Cure of Hypospadias. Dinner at the King's Arms Hotel, at 6 P.M. Charge 5s., exclusive of wine.

WILLIAM VAUDREY LUSH, Weymouth } *Honorary Secretaries.*
C. H. WATTS PARKINSON, Wimborne }
October 8th, 1875.

SHROPSHIRE ETHICAL BRANCH.

THE annual general meeting of the above Branch will be held at the Lion Hotel, Shrewsbury, on Wednesday, October 27th, at 1 P.M.: President, RICHARD WILDING, Esq.; Vice-president, JNO. RIDER, Esq.

Dinner will be served at 3.30 P.M. punctually, for the convenience of the country members. Tickets, exclusive of wine, 7s. 6d. Members have the privilege of introducing friends, on transmitting their names to the President.

Members intending to read papers, etc., will oblige by communicating their titles on or before the 21st instant, to

JURKS STYRAP, *Honorary Secretary.*
Shrewsbury, October 12th, 1875.

BATH AND BRISTOL BRANCH.

THE first ordinary meeting of the Session will be held at the York House, Bath, on Thursday, October 28th, at 7.15 P.M.: W. M. CLARKE, Esq., President.

R. S. FOWLER, Bath, } *Honorary Secretaries.*
E. C. BOARD, Clifton, }
Bath, September 24th, 1875.

STAFFORDSHIRE BRANCH.

THE second annual meeting of this Branch will be held at the London and North Western Railway Hotel, Stafford, on Thursday, October 28th, at 2.30 P.M. precisely. President, R. GARNER, Esq., F.L.S. The President-elect (H. DAY, M.D., F.R.C.P.) will deliver an address. Dinner at 5 P.M. precisely. Tickets 10s. 6d. each, exclusive of wine.

VINCENT JACKSON, } *Honorary Secretaries.*
RALPH GOODALL, }
Wolverhampton, September 27th, 1875.

BORDER COUNTIES BRANCH.

THE autumnal meeting of the above Branch will be held at the County Hotel, Carlisle, on Friday, October 29th, at 1 P.M.

Gentlemen intending to read papers, or to be present at the dinner, are requested to give notice to the Secretaries.

STEWART LOCKIE, } *Honorary Secretaries.*
JOHN SMITH, }
Carlisle, October 2nd, 1875.

NORTHERN COUNTIES OF SCOTLAND BRANCH: ANNUAL MEETING.

THE annual meeting of the Northern Counties Branch of the British Medical Association was held within Gray's Hospital, Elgin, on Saturday, September 18th. Dr. ROSS (Inverness) took the Chair; and, after some preliminary business had been transacted, he vacated it in favour of Dr. VASS of Tain, the President-elect. Dr. Vass delivered an address on the subjects of prospective legislation, treating of such matters as the control of inebriates, cremation, vivisection, and the admission of ladies to the practice of medicine.

Paper.—Dr. ROBERT S. TURNER (Keith) read a paper on the Sanitary Condition of Villages and Rural Districts, which gave important details of the sanitary condition of the locality.

Abnormal Births.—Dr. DUFF (Elgin) read a paper on cases of abnormal births which had occurred in his practice. Two were cases of acephalous births, in one of which the skull from the superciliary ridge round to the occipital protuberance was entirely wanting. In the other, the bones of the skull were rudimentary. In both cases, brain-matter was

There was, further, a strange connection between the disorders; sometimes the chorea appeared first and the rheumatism afterwards. In many cases of chorea there was enfeeblement of mental power, after lasting some time; also a paralytic condition of the limbs. He did not agree with the theory of embolism of the minute vessels of the brain.—Dr. HUGHLINGS JACKSON had found embola in the small arteries of the brain in two cases; but in other cases of death from chorea no embola had been found—as in a case of tubercular meningitis with choreic movements. On the other hand, Dr. Bastian, in three cases, found what he regarded as thrombosis (rather than embolism) of the small vessels of the corpus striatum. The pathology of chorea was still an open question; and clinical as well as pathological evidence must be brought forward. Embolism did not lead to anæmia, but to hyperæmia, and a greater supply of blood to the nerve-cells. Red softening was due to plugging of the vessels. Prevost and Cotard had found that the injection of tobacco-seeds into the carotids of dogs produced obstruction in the arteries of the brain. In retinal embolism, there were extravasations in the neighbourhood of the vessels. He thought that embola could produce the appearances described by Dr. Dickinson. As to fright, he believed that it was an exciting cause, not acting unless there were some predisposition. Dr. Barnes had said that, if embola were the cause of chorea, they must have an unerring instinct leading them to the middle cerebral artery. Now, tobacco-seeds injected into the carotid went mostly to the middle cerebral; and embola were rarely met with in other arteries of the brain. Surely the frequent occurrence of rheumatism and endocarditis with chorea was in favour of the theory of embolism. When chorea occurred in adults, it was generally in puerperal women; and, if hemiplegia were met with in these, we should not hesitate to say that there was thrombosis. There was a difference of opinion among authors as to whether hemichorea more affected the right or the left side. He had found, in 20 cases, that the right side was affected in 14 and the left in 6. It was sometimes argued that, if chorea depended on physical changes, patients would not recover so readily as they do. But there is no plugging of the large vessels; and patients have recovered from lesions sufficient to cause not only chorea, but also hemiplegia—and this in spite of a great part of the lesion remaining. He referred to a case of recovery from hemiplegia in which, at the person's death some years afterwards, several convolutions were found affected, and a part of the corpus striatum destroyed. The absence of symptoms during the existence of lesion might be explained by compensation. There was a resemblance between hemichorea and hemiplegia, both in the parts affected and in the order in which they were affected. The early affection of the face was opposed to the view of the seat of the disease being in the spinal cord. He believed the corpora striata to be the seat of the disease.—Dr. DICKINSON, in replying, pointed to the symmetrical character of the morbid changes as an argument against the theory of embolism.

CLINICAL SOCIETY OF LONDON.

FRIDAY, OCTOBER 8TH, 1875.

SIR WILLIAM JENNER, Bart., M.D., D.C.L., F.R.S., President,
in the Chair.

New Volume of the Society's Transactions.—A copy of the eighth annual volume of this series was presented by the President to the meeting with the remark that, if not quite so bulky as some of its predecessors, it was yet full of valuable papers, and especially rich in good illustrations.

A Method of Performing Iridectomy for the Improvement of Sight.—MR. BRUDENELL CARTER read a paper on this subject. He commenced by referring to the cases in which it was desirable to excise a portion of the iris in order to make an artificial pupil, on account of opacity of the central portion of the cornea or of the crystalline lens; and mentioned the disadvantages attendant upon an iridectomy of the ordinary shape, which extended too far towards the ciliary border of the iris, and uncovered too much of the margin of the crystalline lens, thus diminishing the acuteness of vision by spherical aberration of the rays of light. He described the best attainable artificial pupil in such cases as a V-shaped opening; its base continuous with the natural pupil, and its apex directed towards the ciliary border of the iris; and mentioned the endeavours of Mr. Bowman and of Dr. de Wecker to make such an opening; the former by passing a knife under the iris, and cutting it against the cornea; the latter by thrusting one blade of a pair of scissors between the lens and iris, and the other between the iris and cornea, and cutting a slit in the membrane by closing them. The slit made by either of these methods would gape to the desired extent; but the author condemned both methods as being dangerous,

and very liable to produce traumatic cataract or dislocation of the lens. He pointed out that, if Dr. de Wecker's scissors were introduced closed into the anterior chamber, through a small opening in the corneal scleral margin, and suffered to expand, the iris would rise in a little plait between the blades, and that this plait would be excised by closing them, leaving the pupil which was wanted. The piece excised remained on the upper surface of the closed blades, and was readily withdrawn with them, aided by the final outflow of aqueous humour, or might as readily be removed from the anterior chamber by fine iris-forceps, from which the teeth had been filed away. The author had operated in this manner upon thirty eyes in sixteen patients, with no mischance except the production of traumatic cataract in the second eye operated upon; and he believed that such an accident would be effectually guarded against by directing the blunt extremities of the scissor-blades forwards towards the centre of the cornea. Four patients, each operated upon in this manner in both eyes, were present for exhibition to the Society, but only one of them was introduced into the meeting-room; in this case, the patient (a boy) had blue iridid, and the new pupils were well shown. As compared with other methods of making an artificial pupil, the author claimed for this the important merit of simplicity. After the first puncture was made, a single instrument was introduced once into the anterior chamber, was opened, closed, and withdrawn. The iris remained *in situ*; was neither seized, twisted, or dragged out of the eye, and had no opportunity of contracting any adhesions with the external incision. After a small amount of practice, it was not difficult to regulate both the breadth of the piece removed and its extent towards the periphery, and thus to obtain an artificial pupil of the best shape, of determinate size, and in any position which might be desired, with a minimum of injury or disturbance to other parts of the organ. It need hardly be said that, for the relief of tension, the operation would be almost, if not altogether, valueless.

MR. A. T. NORTON inquired if the operation were advised for nebulous cornea only, or for retinal affections as well.—MR. SPENCER WATSON remarked that, from the diagrams exhibited, it would appear that the operation was designed to give a pupil as near the pupillary margin as might be, to avoid the spherical aberration which rays of light received in passing through a pupil situated near the edge of the cornea. The same result might be attained by making the pupil upwards and inwards. Good results followed this plan, if the cornea were in its usual position in the eye. The object of doing iridectomy upwards and inwards was to make it less displeasing to the patient, the artificial pupil in that position being less noticeable than if made elsewhere. But in some cases the cornea was opaque in that situation; then, of course, the new pupil could not be made in that direction.—THE PRESIDENT remarked that the advantage claimed by Mr. Carter for his method was the mode of removal of the iris rather than the situation of the incision.—MR. CARTER said that was so. Very often good results were attained by the plan mentioned by Mr. Watson; but there was no choice of positions when the opacity covered all but one small part of the cornea.

Idiopathic Tetanus.—Dr. SOUTHEY gave particulars of this case. The patient, a railway ticket-collector, well nourished, aged 21, came into St. Bartholomew's Hospital. Fourteen days previously, he had remained for some hours in wet clothes, two days after which tetanic symptoms had supervened, and had been treated, without apparent improvement, by moderate doses of chloral. On being seen at St. Bartholomew's, he was sensible, able to move his arms, unable to move his legs, and had trismus. His skin perspired profusely. Temperature, 100 deg.; pulse, 120; respirations, 40. The muscles of certain regions felt hard and were tender. Attacks of opisthotonos, lasting from two to five minutes, came on about every hour. The bowels were confined; the urine was scanty and high-coloured. Fluid food only had been given. The treatment after admission consisted of one pill of calomel and opium, followed by a mixture of bromide of potassium (one drachm) and conium juice (two drachms), to be taken every three hours. Stimulants were discontinued, and the diet consisted only of iced milk alternately with beef-tea. Great quietness was enjoined. The skin of the body was hyperæsthetic, and exposure to draughts of air excited the tetanic spasms. For the first three days, the bowels did not act, and the spasms increased in violence and frequency. He was then ordered thirty grains of compound jalap powder, to be repeated every three hours until the bowels acted, and he was to be put into a bath, temperature 98 deg. Three doses of the powder had to be given; after the bowels were opened, the trismic spasm was lessened. On the fifth day, the bowels acted four times copiously. Temperature, 98 deg.; pulse, 120; respirations, 30. On the sixth day, three attacks of tetanic spasm occurred. After this date, the patient steadily improved, and no further spasms were observed. No wound or splinter could be found upon the patient's body after most diligent search. The

invasion of the disease, as well as its declension, was gradual. The improvement coincided with the evacuation of the bowels. Purgatives have been highly commended in tetanus, the normal peristaltic action of the intestines being invariably arrested so long as the spasms are severe and continuous, and returning coincidentally with the cessation of the spasms. But Dr. Southey did not think this indicated the administration of purgatives, which he considered might produce damage, precisely as excitation of the cutaneous nerves was harmful. He had given the compound jalap powder, almost against his own will, when perhaps the bowels would have been naturally opened without its aid. The tepid bath was employed daily, sometimes for nearly an hour, and had a marked tranquillising effect. Bromide of potassium was commenced only on the thirteenth day of the illness. If cases of tetanus survived this date, they often recovered; but the drug seemed to be specially indicated physiologically for the disease. Dr. Wood had recorded the results of its administration in sixteen cases, nine of traumatic tetanus (all of which recovered), and seven of idiopathic tetanus, with five recoveries.

The PRESIDENT inquired what was the usual result of tetanus when it had already lasted twelve days, at which date, in this instance, the bromide had been begun. He thought that, if patients suffering from tetanus were alive at the fourteenth day, they began about that time to recover.—Dr. SOUTHEY assented to that statement.—The PRESIDENT also remarked that the quantity of succus conii which had been given was much larger than the quantity administered to Dr. Southey's patient.—Dr. BURNEY YEO said that Dr. J. Harley had given two ounces before attaining decided effects.—Dr. CAYLEY said that no symptoms were produced by doses of less than an ounce in a case of torticollis in which he had prescribed the remedy. He had given as much as two and a half ounces for a dose.—Dr. JULIAN EVANS mentioned a case in which a patient suffering from tetanus was immersed for a fortnight in a warm bath, and recovered.—Mr. EASTES asked where the statement was made that nine cases of traumatic tetanus treated by bromide of potassium had all recovered. The effect of the drug in those instances was very unlike the usual effect of medicines in tetanus.—Dr. SOUTHEY stated that the statement was made by Dr. Wood at page 280 of his work on *Materia Medica and Therapeutics*.—Dr. BURNEY YEO remarked that the results in those nine cases certainly differed from the results obtained in this country. He thought that Dr. Southey had rather undervalued the treatment by purgation. A friend of his had treated a case by injecting chloralhydrate subcutaneously, and found that no result was produced, unless sufficient were given to produce a small abscess at the point of injection. After recovery, the boy was covered with the scars of hundreds of abscesses. Just as in that case the counterirritation of the skin produced by the drug had appeared to lull the spinal cord, so he also thought purgatives might be useful by acting as irritants of the intestinal canal, thereby perhaps drawing away from the spinal cord some of the impressions which would otherwise excite it.—Dr. SOUTHEY remarked that the records of the temperature were in the paper, but that the thermometer was never very high in this case. The worst cases of the disease were those in which the temperature was high. He had read Dr. Wood's paper, and had determined beforehand to try the bromide in any suitable case. At the same time, he was sceptical of the value of any one kind of treatment. As regarded Dr. Yeo's statement, he (Dr. Southey) thought that good was likely to result from the action of calming rather than from that of irritating agents applied to the peripheral nerves. Cold should be strictly warded off, and for this reason perhaps the hot bath had been employed. If the extreme irritability of the surface were allayed, the patient's recovery seemed to be helped. If bromide of potassium did diminish the irritability of the spinal cord, one could understand the benefit to be derived from its use. Did not purgation usually follow rather than precede the commencement of the improvement? In other words, was not the return of peristaltic movements in the intestinal canal amongst the earliest signs of abatement of the disease?

Salicylic Acid as an Antiseptic.—Mr. CALLENDER brought forward a series of cases illustrating the use of this agent as an application to wounds. The acid was used in various ways, and the three following preparations were the ones chiefly employed:—*a.* Phosphate of soda, 3 parts; salicylic acid, 1 part; water, 50 parts. *b.* Salicylic acid, 1 part; olive oil, 49 parts. *c.* Salicylic acid, 1 part; bicarbonate of soda, half-a-part; water, 100 parts. In addition to these, however, it was occasionally used combined with borax, or in the form of an ointment with prepared lard; and a preparation of the acid with mastic and spirits of wine was tried, but had to be abandoned by reason of the irritation caused, as it was thought, by the ingredients combined with the acid. Seven cases in which the acid had been employed were narrated. In three of the cases, a vesicular eruption was caused by the

acid, and necessitated its withdrawal. In one case, it was followed by considerable local irritation, which was relieved by the withdrawal of the acid. In a case of excision of the elbow-joint for strumous disease, the wound was washed out with salicylic acid, and was dressed with solution "a" on Japanese paper. There was considerable discharge from the wound, and the granulations were pale and flabby; the dressing after a time was changed to carbolic acid, when the granulations became florid and the discharge was reduced to a minimum. In the remaining two cases, the wound healed rapidly under the application of salicylic acid. From these cases and from other observations, Mr. Callender arrived at the following conclusions. Putting together its good points, he found that salicylic acid was free from odour, and so far was acceptable to the patients; that wounds healed under its influence, and, during the progress of the repair, were free from bad smells; that, unless strong with spirit, or but little diluted, it did not cause local pain. Its bad points seemed to be these: that, above the strength of 2 per cent., it caused local irritation, with some constitutional disturbance; and, if the patient had a delicate skin, even the weak preparation was a source of trouble; that there was more discharge from a wound dressed with salicylic than there was where carbolic acid was used; that its influence upon a recent wound, as after an operation, was not so efficacious against the occurrence of decomposition as was that of carbolic acid, chloride of zinc, or of boracic acid; that the repair of a wound was less active, and the granulations, if any, were more flabby than when other simple or antiseptic dressings were employed. On the whole, while admitting its use as a local application to be fairly commendable, Mr. Callender thought it inferior in its antiseptic properties to other agents, and did not consider it to be a remedy meriting the strong recommendations which had been given it by some of those who had made trial of it.

The PRESIDENT remarked (in the absence of Mr. Callender) that, from the paper, it would seem that the vesicular rash in the case in which its appearance was noted was local only, and occurred solely where the acid came into contact with the skin. He himself had seen a lady with a large burn dressed with salicylic acid, in whom a good deal of constitutional disturbance and a general rash, very similar to the rash of scarlatina, had been produced by the dressing with the acid. After a time, the rash returned, when the same dressing had been resumed. He could not find that the surgeons who had principally used the acid had noticed any rash to follow its employment. The rash in his patient had been quite general; it covered the face and all parts of the body. The dressing quite destroyed all fœtor; there was no smell at all from the wound, which was a very large one.

Extensive Wound of the Knee-joint treated by Lister's Antiseptic Method.—Mr. PICK reported the case. The patient, aged 18, a sawyer by trade, was working a small circular saw by means of a treadle, when his knee came into contact with the saw, causing a severe wound. When he was admitted into St. George's Hospital, there was found to be a longitudinal wound in front of the left knee-joint, four inches in length, and with jagged and lacerated edges. The wound had completely divided the patella, and extended some distance into the left condyle of the femur, producing a groove about an inch in depth in this bone. There were several fragments of bone and cartilage lying loose in the wound. The two halves of the patella were widely separated from each other, and the interior of the joint freely exposed. The patient was an apparently healthy man, and was reported to be temperate in his habits, and it was, therefore, determined to make an attempt to save the limb. Every part of the wound, including the interior of the joint, was first carefully sponged with a solution of carbolic acid, and all the loose fragments of bone and cartilage were removed. The edges were then brought together with cat-gut sutures. Just before the last stitch was tied, the interior of the joint was injected with a solution of carbolic acid of the strength of 1 in 40. The wound was then dressed with carbolic oil, silk, and shell-lac plaster, and put up in a swing cradle. During the progress of the case, for some days there were some febrile excitement and free discharge from the wound. The pus, however, was perfectly natural, and free from odour. About fifteen days after the accident, a large abscess formed on the outer side of the thigh, some distance above the joint; this was opened, and discharged freely. Throughout the time that the man was in the hospital, the discharge, though considerable, was never in the slightest degree offensive; and, after the first few days, there was no fever and no pain. At one time, he became somewhat low and emaciated from the free suppuration, and required a considerable amount of stimulants. Five months after the accident, he was discharged with a firmly ankylosed joint. Now, three years after the accident, he was strong and hearty, and stated that he enjoyed good health. There was firm bony ankylosis of the joint, and he was quite strong on the limb, and able to earn his living as a stoker at a gas factory. Mr. Pick remarked that cases of compound fracture

of the patella had received but scant notice in our ordinary text-books of surgery, most of them dismissing the subject with the remark that such cases required immediate amputation; but that the admirable and exhaustive paper of Mr. Poland, in the fifty-third volume of the *Medico-Chirurgical Transactions*, had put the matter in a new light. And it was in consequence of the cases there narrated, that he had determined to make an attempt to save the limb. His principal object, however, in bringing forward the case was to elicit the opinion of members present on the value of the so-called Lister's antiseptic dressing. Mr. Pick stated that he had the very greatest confidence in its efficacy, not so much because it retarded suppuration and hastened union, as that it promoted healthy suppuration and prevented decomposition of the pus. He was of opinion that the reason that some had not found any sufficient good from it was, because they had not been sufficiently particular in their manner of using it.—The discussion upon this paper was adjourned to the next meeting.

CORRESPONDENCE.

MORTALITY FROM RICKETS.

SIR,—Dr. Corfield, in his Introductory Address at University College on the 4th instant, quoting Sir William Jenner, says: "First among preventable diseases, I will place one, the mortality from which, in London at least, is so great as beyond question to swell largely the death-rate of children under two years of age; and yet one that has no place in the Registrar-General's Returns. I mean rickets, the English disease, as it was formerly called."

In a "supplementary table of causes of death" in the annual report of the Registrar-General the number of deaths from rickets has been returned for nearly twenty years. On reference to this table, it will be found that, during the five years 1859-63, there were 324 deaths in England from rickets; in the following five years, the number rose to 535; and further increased to 731 during the years 1869-73. In proportion to one million persons living at all ages, these numbers were 16.1, 25.0, and 32.1 in the three periods respectively; the great and rapid increase shows the urgent necessity of following Sir William Jenner's advice as to the teaching of practical laws of health being made compulsory in all schools supported by the public money. The children now being taught should have no excuse for perpetuating the evils resulting from improper food, from deficient light, and from air insufficient in quantity, and therefore soon rendered impure and unfit for respiration.—I am, sir, your obedient servant,
Forest Hill, October 12th, 1875. GEORGE RENDLE.

ON PLASTIC OPERATIONS.

SIR,—Seeing that you have opened your columns for the discussion of this subject, permit me to say, that I happened to see the case referred to in Dr. Wolfe's paper in the *JOURNAL* of the 18th instant. I, in common with others who watched the case, and saw it nearly a month after the operation, could not help being struck with the remarkable result so readily obtained. It appears to me that Dr. Wolfe's method of performing plastic operations does away with the need for skin-grafting, when one can get such skin-flaps, cut to shape, to adhere so nicely by first intention. I think, however, that Dr. Wolfe has scarcely done justice to the merits of his case. Indeed, it would not be easy to do so. Such a case requires to be seen to be duly appreciated. I noticed the omission of one interesting step in the demonstration; namely, having made the last flap larger than was requisite, he cut it to shape, and, after adjusting the portion required, he replaced the superabundant piece on the forearm, where it adhered perfectly without loss of cuticle even. Dr. Wolfe seems to have endeavoured to compress the result of various experiments into a few sentences, whilst I am sure a more detailed account would have been highly interesting.—

Yours faithfully,
Glasgow, September 25th, 1875. J. W. BEATTIE, M.D.,
Army Medical Department.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

THE NEW ADULTERATION ACT.—On October 1st, the Sale of Food and Drugs Act (38 and 39 Vic., cap. 63), passed last session, came into operation. It repeals all the Adulteration of Foods Acts hitherto passed, and contains severe penal clauses with respect to the adulteration of food and drugs. Any person mixing or colouring any

article of food with any ingredient injurious to health, with the intent that the same shall be sold in that state, shall be liable to a penalty of not less than £50 for the first offence, the second to constitute a misdemeanour, for which a person convicted shall be liable to be imprisoned for any period not exceeding six months, with hard labour. By Section 4, the same penalties apply to persons mixing drugs with injurious substances, except for the purposes of compounding and selling the same. Under a penalty not exceeding £20, a seller is prohibited from selling any article of food or drug which is not of the nature, substance, and quality of the article demanded by the purchaser, with certain exemptions as to preparations of food, etc. A penalty not exceeding £20 is incurred by any person who, with the intent that the same shall be sold in its altered state without notice, abstracts from any article of food any part of it so as to affect injuriously its quality, substance, or nature. By Section 12, power is given to the proper officers to purchase articles of food, etc., for analysis; and Section 17 imposes a penalty not exceeding £10 upon any person refusing to sell an article of food for that purpose. The forging or uttering of a false warranty is made punishable by imprisonment with hard labour for any term less than two years. Labels stating that articles are mixed will give protection to the seller. By Section 30, special provision is made for the examination of all tea imported, giving power to the Commissioners of Customs, in case the tea is mixed with other substances or with exhausted tea, to deal with it as they think proper, or have it destroyed.

POOR-LAW MEDICAL APPOINTMENTS.

ROBERTS, Arthur, M.R.C.S. Eng., appointed Medical Officer of the North District of the Keighley Union, *vide* T. H. Cockcroft, M.D., resigned.

MILITARY AND NAVAL MEDICAL SERVICES.

MEDICAL CONSCRIPTION.

FRENCH students who have not yet satisfied the military law by entering as "aide-major" in the army of reserve or territorial army, have received a final warning from the Minister of War, that, failing such inscription, they will be incorporated as private soldiers in the various regiments on whose books their names are already entered.

COMPULSORY SERVICE OF MEDICAL CADETS.

A GOOD many French naval medical cadets (*aides médecins de la marine*) have, it seems, tendered their resignations after obtaining the degree of doctor, with a view of entering upon medical practice. This is contrary to an engagement which they sign on entering the navy, to serve for ten years after obtaining the degree of doctor. Admiral Montaignac has issued an order announcing that, in future, such resignations will not be accepted. It will be remembered that a late Board of Admiralty had prepared a similar scheme of naval medical cadetships for the English marine service, with a like view to insuring the bondage of naval medical officers during a fixed period, however unpalatable the service might be. The *BRITISH MEDICAL JOURNAL* obtained cognisance of this scheme, after its approval by the heads of the service, but just before its promulgation. The strength of our protests against such a scheme, and the result of our communications with the leading students in the Metropolitan medical schools, brought about a series of meetings in the schools, and raised such a storm of angry protests in anticipation, that the scheme was never officially promulgated, but was forthwith consigned to limbo, whence we trust it will never be disinterred. The French authorities will, we believe, find in the end that the best way to make their medical service efficient is to make it popular and attractive. Compulsory bondage is a very poor way of recruiting officers, and can never supply men of high character or having the *esprit de corps* and the ambition which are the soul of efficient service.

EUROPEAN SOLDIERS' CHILDREN IN INDIA.

A PORTION of the remarks on the excessive mortality of soldiers' children in India, and the means of reducing it, made in our leading article of the 18th ultimo, receives an apt and practical illustration from the subjoined extract, for which we are indebted to the *Madras Times*.

Bangalore is a large military station in the Madras Presidency, situated on a plateau three thousand feet above the level of the sea. Speaking generally, we are disposed to think that double this altitude would produce a race of recruits even superior to those referred to, and of whom Bangalore has so much just reason to be proud. But be this as it may, we are at one with our contemporary, in thinking that, as a matter of State policy, this question of rearing our soldiers' sons in healthy hill climates in India, with a view to their ultimate enlistment in

the army, has not received by any means the amount of attention it merits. It is fortunate that the obvious and proper mode of dealing with the subject of recruit-breeding, by the removal of the families to the mountain ranges, is identical with that which should, and we hope will be, adopted to prevent the enormous mortality by which our soldiers' children on the plains of India are now, one year with another, literally decimated. "Only the other day, we saw it stated that the 45th Regiment and Royal Artillery at Bangalore, had obtained several excellent recruits from among young men born and bred at that place; and there is certainly no reason to suppose that the sons of our soldiers, reared upon the Indian mountains, should not make as good and valuable soldiers as their sires, if duly cared for. Let the Government, we say, calculate the cost of a British soldier as he lands at Bombay from London, and then estimate the expense of rearing a soldier's Indian-born child on the Indian hills, and we are much mistaken if the one charge, all things considered, would not be much the same as the other. For the Indian boy, apprenticed as it were to the Government, would, at an early age, be taught some useful trade, and could be made to turn his labour to the Government advantage, as, for instance, in ordnance work, cartridge manufacture, and so on. Let the Government further take into consideration the difficulty of obtaining recruits at home, as well as the kindness it owes its soldiers, as a great employer of military labour; and we think it will be admitted that, although the State has done much, it has not done all it might do to cherish these poor little waifs for the service of the country in the future."

NAVAL MEDICAL APPOINTMENTS.

BIDDLEPH, Surgeon R. W., to the *Euphrates*.
HART, Staff-Surgeon Mark A., to the *St. Vincent*.
MASON, Fleet-Surgeon G., to the *Undaunted*.
MITCHELL, Fleet Surgeon John F., to the *Penelope*.
MOORE, Staff-Surgeon Francis H., to the *Newcastle*.
NEWLOCK, Surgeon Edward R., to the *Teaser*.
PULSEY, Surgeon W. H., to the Haulbowline Hospital.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, October 7th, 1875.

Boswell, Alexander, Disraeli Road, Putney
Johnstone, William, Seaford, Liverpool
Low, Frank Harrison, Aberdeen House, Blackheath

The following gentlemen also on the same day passed their primary professional examination.

Reeve, Henry, London Hospital
Roberts, Henry William, Guy's Hospital

At the Preliminary Examination in Arts, held at the Hall of the Society, on the 24th and 25th September, 1875—145 candidates presented themselves; of whom 32 were rejected, and the following 113 passed, and received certificates of proficiency in general education—viz., in the First Class, in order of merit:

1. F. S. Pridden. 2. C. Ellaby. 3. A. V. Bernays, F. C. B. Butler, J. F. Easmon, S. de Cardonnell, E. Elmsall, P. Garrard, C. J. Harper, W. L. Pruen, F. C. Selous, C. L. Stow, E. G. Williams, and G. J. Wilson.

In the Second Class, in alphabetical order:

C. D. Adams, J. B. Adams, R. A. Bazire, D. Bennett, E. J. Biden, R. A. Bilingual, A. Bosanquet, H. Bourcheier, J. L. Bousignac, P. Brown, C. G. Bunn, H. P. Butler, S. Butterworth, J. F. Caddy, J. A. Caldwell, G. H. Capes, H. W. Carr, W. J. Clarke, E. S. Cockell, W. S. C. Collins, C. A. R. A. Colmer, E. R. Cree, W. H. Crosse, H. W. T. Crow, B. H. Dale, E. Davies, J. D. Davies, W. J. S. Davis, P. H. Day, B. J. Dorrain, J. M. Douglas, J. B. Dreaper, H. W. Edis, F. W. Elliott, E. Evans, E. Farmer, S. Farmer, W. A. Fenton, J. W. Field, H. E. B. Flanagan, C. L. Gill, G. T. Girdler, P. Hall, J. Hammond, E. Hazel, N. Hildyard, F. Hitch, W. Holt, A. R. Jacobs, F. Jones, G. M. Jones, R. B. Knowles, T. L. Laxton, F. R. Le Cocq, A. Lee, J. J. Lewis, R. Lewis, J. P. Little, E. H. Locker, L. Mark, L. Matheson, G. McKee, E. J. Moberly, Peter Monti, H. Parsons, W. H. C. Payne, J. H. Powell, L. Prentice, F. W. Prideaux, J. D. Priest, T. Rhodes, J. T. Richards, J. M. Rogers, C. Rowley, R. F. Shaw, W. E. Sicard, G. E. Skinner, A. Slate, W. Slater, S. Smyth, A. Sharland, W. C. Steele, H. H. Sturge, C. A. A. Taylor, A. B. Thorald, F. F. Thorne, A. W. Veness, A. J. Verrall, J. E. Viney, J. Waldron, A. Ward, G. B. Waterhouse, F. S. Watson, J. G. Webb, W. S. Webb, J. Whitehouse, R. J. P. Wilson, O. Withers, and F. Woore.

MEDICAL VACANCIES.

The following vacancies are announced:—

ASTON UNION—Medical Officer for the Sutton Coldfield District.
BELLINGHAM UNION—Medical Officer for the Second District.
BLOOMSBURY DISPENSARY—Surgeon. Applications on or before the 20th instant.
BOARD OF WORKS, ST. GILES'S DISTRICT—Medical Officer of Health. Salary, £150 per annum. Applications on or before the 23rd instant.

BROOKWOOD ASYLUM, near Woking—Second Assistant Medical Officer.
CHARING CROSS HOSPITAL—Dispenser. Salary, £100 per annum, and luncheon. Applications on or before the 20th instant.
CHRISTCHURCH UNION—Medical Officer for the Eastern District. Salary, £100 per annum, and fees. Applications on or before November 6th.
COUNTY TIPPERARY INFIRMARY—Surgeon. Salary, £100 per annum. Applications on or before the 16th instant.
DENBIGHSHIRE INFIRMARY—House-Surgeon. Salary, £30 per annum, with board, lodging, and washing. Applications on or before the 14th instant.
DONCASTER INFIRMARY—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be made on or before the 18th instant.
DORSET COUNTY HOSPITAL—House-Surgeon. Salary, £70 per annum, with £10 additional as Secretary. Applications on or before the 20th instant.
EAST RETFORD UNION—Medical Officer and Public Vaccinator for the Leverton District. Salary, £30 per annum, and fees.
GLOUCESTER COUNTY ASYLUM—Junior Assistant Medical Officer. Salary, £80 per annum, with board, lodging, and washing. Applications on or before the 18th instant.
HASLINGDEN UNION—Medical Officer for the Accrington District. Salary, £90 per annum.
HOSPITAL FOR SICK CHILDREN, Great Ormond Street—Physician.—Assistant-Physician. Applications on or before the 28th instant.
HOSPITAL FOR SICK CHILDREN, Manchester—Assistant Physician. Applications on or before the 27th instant.
MIDDLESEX HOSPITAL—Two Resident Physicians' Assistants, and One Resident Obstetric Assistant. Applications on or before the 30th instant.
NEWCASTLE-UPON-TYNE UNION—Medical Officer for the First District. Salary, £50 per annum.
NORTH SHIELDS AND TYNEMOUTH DISPENSARY—House-Surgeon and Dispenser. Salary, £120 per annum, with furnished house, gas, coals, etc. Applications to be made on or before November 1st.
PEMBROKE UNION—Medical Officer for the First District.
RICHMOND INFIRMARY—House-Surgeon. Salary, £70 per annum, with board and lodging. Applications on or before the 25th instant.
ROYAL FREE HOSPITAL, Gray's Inn Road—Junior Resident Medical Officer. Applications to be made on or before the 27th instant.
ROYAL ISLE OF WIGHT INFIRMARY, Ryde—House-Surgeon and Secretary. Salary, £40 per annum, with board, lodging, and washing. Applications on or before the 25th instant.
ST. GEORGE, HANOVER SQUARE, PROVIDENT DISPENSARY—Physician-Accoucheur. Applications to be made on or before November 3rd.
ST. SAVIOUR'S UNION, Surrey—Dispenser at the Southern Dispensary. Salary, £120 per annum. Applications on or before the 18th instant.
SETTLE UNION—Medical Officer and Public Vaccinator for the Bentham District. Salary, £40 per annum, and fees. Applications on or before the 19th inst.
STOCKWELL FEVER HOSPITAL—Temporary Assistant Medical Officer. Salary, £3 per week, with board, lodging, and washing. Applications, with testimonials, to be made at 3 o'clock on the 22nd instant.
STROUD GENERAL HOSPITAL—House-Surgeon.
TIVERTON INFIRMARY and DISPENSARY—House-Surgeon and Dispenser. Salary, £100 per annum, with furnished apartments, coals, gas, and attendance.
TORRINGTON UNION—Medical Officer for the Peters Marland District. Salary, £4 3 per annum.
UNIVERSITY COLLEGE HOSPITAL, London—Surgical Registrar. Applications on or before the 19th instant.
WESTMINSTER HOSPITAL—House-Physician. Applications on or before the 26th instant.
WEST SUSSEX, EAST HANTS, and CHICHESTER GENERAL INFIRMARY and DISPENSARY—House-Surgeon. Salary, £80 per annum, and £20 per annum as Secretary, with board, lodging, and washing. Applications to be made on or before the 23rd inst.
WORCESTER GENERAL INFIRMARY—Physician. Applications on or before the 23rd instant.
WORKSOP DISPENSARY—Resident Surgeon. Salary, £120 per annum, with furnished apartments, coal, gas, and attendance.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BROWN, Walter, L.R.C.P., appointed House Surgeon to the Royal United Hospital, Bath, vice E. S. Greensl, M.R.C.S. Eng., whose appointment has expired.
*CASSAN, Theodore, L.R.C.P. Ed., appointed House-Surgeon to the Royal South Hants Infirmary, Southampton, vice F. C. Clark, M.R.C.S. Eng., resigned.
FOSTER, William, Esq., of Sidney Sussex College, Cambridge, elected to the Lectureship on Chemistry in the Middlesex Hospital Medical School.
HEALF, Alfred Lawson, M.R.C.S. Eng., appointed House Surgeon and Secretary to the Royal Hants County Hospital, Winchester, vice W. R. Smith, L.R.C.P. Ed., resigned.
PINK, Thomas, M.R.C.S. Eng., appointed Resident Surgeon to the Royal Seabathing Infirmary, Margate, vice O. R. Richmond, L.R.C.P., deceased.
PROCTER, Thomas, M.R.C.S. Eng., appointed Resident Medical Officer to the York Dispensary, vice W. A. Mawson, L.R.C.P., resigned.
RENNY, Archibald W., M.B., appointed Resident Medical Officer to the Royal Stirling Infirmary, vice A. Purves, M.B., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

MARRIAGES.

THOMSON—COX.—At Beechwood, Loches, on the 6th instant, by the Rev. A. B. Connel, M.A., William Thomson, M.D., of Peterborough, to Jessie Methven, only daughter of George Addison Cox, Esq., of Invertostrachs, Perthshire.
WOODMAN—ALLEN.—On October 7th, at St. Mark's Church, Torquay, by the Rev. John Sawyer, M.A., *John Woodman, F.R.C.S., of Exeter, to Catherine Louisa, second daughter of the late Rev. John Allen, M.A., Rector of North Huish, in the County of Devon.

OPERATION DAYS AT THE HOSPITALS.

MONDAY Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

TUESDAY Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY .. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.

THURSDAY ... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY ... St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Pathological Society of London, 8.30 P.M. Dr. Cayley; Hydatid Cyst of the Liver which burst into the Lung. Dr. Crisp; Fractured Bones of Gorilla. Dr. Crisp; Rickets in Young Pheasants. Dr. Peacock; Suprarenal Capsular Disease. Dr. Peacock; Ulcer of Stomach. Mr. Heath; Calculi of Cystic Oxide. Mr. Heath; Epithelioma of Tongue and Jaw. Dr. Dowse; Subarachnoid Hæmorrhage of Cord. Dr. Dowse; Thrombosis of Internal Carotids. Mr. Butlin; Uncommon Form of Carcinoma of Breast. Dr. Greenfield; Tumour of Anterior Cerebral Artery. Dr. Hilton Fagge; Carcinoma Lipomatousum of Kidney. Dr. Barlow; Tubercle of Pancreas.

FRIDAY.—Clinical Society of London, 8.30 P.M. Adjourned discussion on Mr. Callender's "Cases of Treatment of Wounds with Salicylic Acid", and Mr. Pick's "Case of Treatment of Wound of Knee-joint with Carbolic Acid"; Mr. T. Holmes, "On a Case of Ligature of Femoral Artery with Carbolic Catgut"; Mr. Haward, "Case of Lymphadenoma"; Dr. Murchison, "Case of Acute Cancer of the Liver, with Pyrexia, in a man aged 24"; and "Case of Abdominal (Hepatic?) Abscess without elevation of Temperature".—Quekett Microscopical Club (University College), 8 P.M.

NOTICES TO CORRESPONDENTS.

- CORRESPONDENTS** not answered, are requested to look to the Notices to Correspondents of the following week.
- PUBLIC HEALTH DEPARTMENT**.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with *Duplicate Copies*.
- AUTHORS** desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.
- CORRESPONDENTS**, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.
- WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.**
- COMMUNICATIONS** respecting editorial matters, should be addressed to the Editor; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.
- A PROVINCIAL STUDENT**.—The next primary and pass examinations for the diploma of membership of the College of Surgeons will take place respectively on the 6th and 12th of the ensuing month, and the first and second Fellowship examinations on the 19th and 25th respectively. See our advertising columns.

DEATH FROM CHLOROFORM.

SIR,—With reference to the case of death from chloroform commented upon in last week's JOURNAL, I beg to state that I am not the "Dr. Jones" that administered the chloroform, as I find several of my friends supposed. I feel called upon to remove any misapprehension on this point, as I have so very strongly condemned chloroform in the JOURNAL as an anæsthetic.—I am, etc., THOMAS JONES.
19, Chapel Street, Belgrave Square, S.W., October 12th, 1875.

RAPID DESTRUCTION OF THE LUNG.

SIR,—In reading Dr. Cowling's case of total destruction of the right lung, I was reminded of a similar one which occurred some time ago in the practice of a friend since deceased. The patient, a young woman, had been ailing, as she said, for some months previously to coming under my friend's care (about two weeks before her death), and had complained of pain in the right chest, with great lassitude and debility. An attack of acute pleurisy came on in a very few days after my friend saw her, and an amount of effusion quickly followed, as was for the first time diagnosed. She died suddenly from an overdose of morphia, given to her by the nurse. The case occurred in a public institution, and an inquest was held. We found, on making the *post mortem* examination, the lung entirely destroyed, and the space previously occupied by it filled with thickish pus. The left lung contained a few tubercles in its apex. The heart was apparently healthy. There had been no hæmorrhage, as far as could be ascertained, during her illness.—I am, sir, yours, etc.
EDW. COTTEW, L.R.C.P. Edin., etc.
Holloway Road, October 14th, 1875.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than *Thursday*, twelve o'clock.

TRACHEOTOMY IN CROUP AND DIPHTHERIA.

To show that the operation of tracheotomy is not always hopeless, even when the smaller bronchial tubes are affected by the diphtheritic membrane, I may mention that in one case which came under my care in December 1870, that of a young woman, aged 23, in whom loud diphtheritic stridor was audible throughout both lungs, and who was rapidly becoming livid, I performed tracheotomy, as a last resource, and the patient made a good recovery.—RIDGWAY LLOYD, St. Alban's.

GELSEMINUM SEMPERVIRENS AND HYDRASTIS CANADENSIS.

SIR,—If your correspondent Mr. C. S. Wills will apply to Messrs. Ferris and Co., Bristol, they can supply him with the tincture of gelsemium sempervirens, which is made from the yellow jacinth, and has for some time been in use as a homœopathic remedy. Permit me here to mention another substance lately introduced into this country—viz., hydrastis Canadensis—long known and used in America, and fully described in the United States *Dispensatory*. During the years 1850 and 1851, when in the United States service, several of the men under my charge contracted syphilis and gonorrhœa of a virulent character when at Sault St. Marie. The head of the medical department advised the use of an infusion (Suij ad Oj aq.) as an injection, and externally to sores, etc. The result was very satisfactory; and one advantage attending it, there was no pain or irritation caused by it. I have since prescribed it in this country with good effect. The "eclectic" preparation, "hydrastin", is said to be not as useful as the infusion, not containing the volatile and astringent principles, to which many think its curative action to be due. The root is to be used in making the infusion.—I am, etc.,
Stroud, October 5th, 1875. THOS. PARTRIDGE, L.K.Q.C.P.

SIR,—In answer to your correspondent Mr. Wills, in last week's JOURNAL, the gelsemium sempervirens can be procured of the General Apothecaries' Company, Berners Street, London, W.—Yours faithfully,
October 4th, 1875. HAMILTON CRAIGIE.

PERILS OF OBSTETRIC PRACTICE.

THERE is, we think, a tendency at present in the public mind to regard the occurrence of all cases of death in childbed with more than common suspicion, as though almost implying blame to the medical man. We find in the *Ulster Gazette* a notice of an inquest on such a case, in which the body was actually disinterred by coroner's order. A *post mortem* examination was made by Dr. Palmer of Armagh, and Dr. Gilmore of Castleblaney. It appeared from the evidence that the deceased had been confined, and was attended by a midwife. She was delivered of a child; but as she was likely to have twins, and as the old woman in attendance could not help the mother, a medical man was sent for. When he arrived, he saw that the woman would not live, so he obtained the services of a second doctor. The friends of the deceased alleged that the deceased was injured by the first doctor; but the evidence and the *post mortem* examination clearly showed that there was no ground for the charge, and the friends were sent home wiser than they came. The jury found an unanimous verdict of death from natural causes, and that the deceased was properly treated by the doctor. The medical man in this instance was called by "a red ticket". He has held his office as dispensary medical officer for more than thirty years, and bears a high professional character. The tendency to throw causeless blame on the practitioner in such cases greatly increases the responsibilities of obstetric practice.

MR. JOHNSON.—Messrs. Clark and Savory were both elected members of the Court of Examiners in 1870: the former gentleman is also a member of the Council of the College.

FOREIGN GRADUATES IN GREAT BRITAIN.

SIR,—After carefully reading all the letters which have appeared in your JOURNAL concerning the registration of foreign degrees, it appears to me clearly an injustice to foreign graduates in medicine that they may not register their degrees obtained after examination. Some of your readers will, no doubt, be surprised to hear that there are resident in the British isles at the present time no fewer than 228 foreign graduates who have obtained their degrees after undergoing examinations at their respective universities. Of this number, there are 38 of Heidelberg, 19 of Erlangen, 19 of Giessen, 18 of Paris, 17 of Berlin, 15 of New York; 23 of Brussels, 8 of Montreal, 6 of Würzburg, 6 of Pisa, 6 of Philadelphia, 4 of Pennsylvania, 4 of Göttingen, 4 of Toronto, 4 of Munich, 4 of Tübingen, 4 of Pavia, 3 of Leyden, 3 of Kingston, Canada; 3 of Leipzig, 2 of Bonn, 2 of Vienna, 2 of Jena, 2 of Strasbourg, 2 of Berne, 2 of Louvain, 2 of Liège, 1 of Zurich, 1 of Stuttgart; 1 of Königsberg, 1 of Padua, 1 of Hanover, 1 of Groningen, 1 of Drenthe, Holland; 1 of Ferrara, 1 of Rostock, 1 of Harvard University, 1 of Chicago, 1 of Geneva, U.S.; 1 of Halifax, Canada; 1 of Ohio, 1 of San Fernando, Lima; and 1 of San Marcos, Peru. None of these degrees have been obtained without examination. Would it not be well for a memorial to be presented to the Medical Council, begging them to reconsider their decision on this point; and suggesting that all foreign graduates may register their degrees, providing that they can produce sufficient testimony to satisfy the Council that they have obtained their degrees after examination; and providing, also, that they have besides at least one British qualification registered under the Medical Act. If this would not do, perhaps some of your readers may suggest a better plan. It is high time we were doing something, if we wish to see foreign degrees in the next *Register*.—I beg to remain, sir, yours truly,
M.D. GRESSEN.

* * The power of the Medical Council in the matter is limited by Act of Parliament. At present they cannot, even if they would, register any foreign degrees obtained after 1858. Our correspondent will probably have observed (see JOURNAL, July 10th, page 45) that the matter is likely to be taken into consideration by the Medical Council.

T. E. H. J. (Liverpool).—The subject of Marriages of Consanguinity has been much discussed by medical writers. The general conclusion appears to be, that where there is no hereditary taint of constitutional disease or weakness, the marriages of first cousins are not open to physiological objection; but that where there is any such taint, it is likely to be transmitted in a more intense degree. Dr. Gilbert Child and Dr. Bemiss are two prominent writers on the subject. Mr. G. H. Darwin recently read an able paper on the subject before the Statistical Society. In the *Sanitary Record* for March 27th, 1875, there is a brief abstract of it. Mr. Huth has lately published a volume, discussing the whole question elaborately; it is issued by Messrs. Longman and Co. The first article in the *Westminster Review* for the current quarter reviews the subject very ably.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

"PSYCHOLOGY AND THE NERVOUS SYSTEM."

SIR.—Why is the above article, published in your last issue, so puzzling? Is it so on account of the newness of the doctrine advanced, or on account of the newness of the mode of advancing it? As to the first, that "the function of the brain is the co-ordination of impressions and movements", there are said to be several kinds of evidence. "This evidence has recently been presented in a pamphlet, of which this article is in great part a summary." But in what part of the article does the evidence appear? After looking through it several times, forwards and backwards, nowhere is such evidence to be found, beyond a statement to the effect that the best reasons for belief in the doctrine "are the facts of the experiments of disease". (Would it be considered ingenious to speak of "the facts of the experiments of gravitation" in the exposition of a physical problem? or, indeed, to represent any inanimate agency, as disease mainly is, as an experimenter in its own department? It is also suggested that there would be a marvellous breach of the principle of continuity in the nervous system if the doctrine were not true; and it is twice asserted that "the anatomical substratum of a visual idea" (a particular instance of the doctrine) "is a nervous arrangement representing certain retinal impressions and particular ocular movements". But in what sense does this amount to a summary of evidence? Then, if the nature of the connection between mental states and physical states be, as we are several times told, irrelevant to this doctrine, and, worse than that, is in itself an insoluble problem, why is so much perplexing discussion devoted to it? Perplexing, indeed, it is to be told that "there is no *more* difficulty as to the connection between physical states and mental states, if the physical states are, as we affirm, nervous arrangements for the co-ordinations of movements and impressions; because the problem is an insoluble one, whatever the physical states may be". If one makes up one's mind that a problem is insoluble, does it therefore follow that all difficulty connected therewith is for ever abolished all the world over, as well as in our own cranium? But, having arrived at such a conclusion, how are we to account for the next proposition? "The nature of the connection between physical and mental states is not a problem either in psychology or in anatomy and physiology; it is a problem of metaphysics." Is this meant, then, as a *sly* *mnemote* for those who study what is insoluble—that is, the problems of metaphysics on the hill retired, or is it really a little confusion of thought that will sometimes, as in humbler productions, inweave itself even with leading articles? But why, when almost any view might be taken of the enigma, the connection namely in question, without any prejudice to the doctrine advanced, was it made so much of to the entire forgetfulness of the evidence that was to be summarised from the pamphlet?

Some of the very novel distinctions and definitions of very ordinary terms seem also in need of some further explanation. On what philological grounds or authority is it stated "that the unit of composition of speech is of words arranged so as to form a proposition"? The unit of the composition of sums is then, perhaps, of numbers arranged so as to form a lump sum; but, to our thinking, one word looks more an unit of speech than any such string of words as forms, on a given model, the least proposition, "The anatomical unit is a sensori-motor process". Is the word process to be understood in this connection in the same sense as in the expression "a bony process"? or, as it is used in the more familiar phrase, "a per os process"? I am, sir, yours faithfully,

CHAS. M. CROMBIE, M.B., C.M.

EARLY MENSTRUATION.

SIR.—I have now under my observation a girl aged two years, who has regularly menstruated for some time. She is in perfect health, and her courses, which are in every respect natural in colour, occur every month, causing her much discomfort and pain. I may also mention another curious case; my patient, a girl aged 8, had been subject to fits for two years when I first saw her. The regularity with which they recurred (about every four weeks), induced me to ascribe them to some uterine derangement, particularly as she complained at the same periods of intense pain over the pubes and sacrum. Upon examining her, I discovered the pubes covered with thick black hair, and a perfectly formed penis (excepting the absence of urethra), over two inches long, and capable of complete erection. Below the penis is a rather large urethra, and on each side a large and pendulous vulva, which has very much the appearance of testicles; so much so, that the parents always had their doubts as to the sex of their child, never having consulted a medical man previously. The symptoms from which she suffers every month are similar to what occurs before and during ordinary menstruation.—I am, etc.,

M.D.

SIR.—In the JOURNAL for October 2nd, a letter appears from Mr. Cathcart, giving an account of a case where a discharge, similar to that of menstruation, occurred in an infant five days old. I am inclined to think such cases are not very rare, although I cannot just now lay my hands on any published account of the subject; meantime, for the sake of eliciting further information, and in response to your correspondent's appeal, I beg to enclose the notes of two instances which I have met with in my own practice.—I remain, etc.,

CHAS. J. CULLINGWORTH.

CASE I.—Mrs. D., aged 26 (who had already been pregnant four times previously, and borne two children at term), was delivered of a healthy and well nourished little girl on November 23rd, 1871. On the 27th of the same month, a little dark bloody discharge began to issue from the child's vagina; every napkin was distinctly stained; and I made myself sure by inspection that the flow really took place from the genital organs. This continued for four days, being greatest on the 30th, and then gradually diminishing, until on the following afternoon it altogether ceased. There was nothing abnormal about the appearance of the genital organs, and the child's health did not seem at all disturbed. The mother was greatly distressed lest her infant should present an example of precocious menstruation: the discharge, however, did not reappear during the eighteen months which elapsed before the family left England.

CASE II.—On the 22nd May, 1875, Mrs. R., aged 33, was confined of her first child, an unusually healthy and well developed little girl. On the evening of the 27th of the same month, a little discharge of blood was noticed trickling from the infant's vagina; about midnight, the nappies were so decidedly stained that the nurse came to my house in considerable alarm. The discharge continued until the evening of the 29th, becoming gradually less during that day. The child's health remained unaffected, and up to the time of writing (October 4th, 1875) there has been no repetition of the phenomenon.

In this case, as in the former, I made an ocular examination on several occasions, in order to be satisfied that the discharge issued from the vagina.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

JALORANDI

SIR.—I am anxious to try the effect of "Jalorandi". Will any of your readers who have tried it, kindly inform me the ordinary dose and strength of the infusion, and whether they have found it an useful medicine?—Your obedient servant,
October 1875. A. D. P.

QUEKETT MEMORIAL MEDAL FUND

We see it stated in the *Medical Microscopical Journal*, that a large sum of money, which was subscribed some years ago to the Quekett Memorial Medal Fund, to provide a medal to be called the Quekett Medal, and to be given in the discretion of the Council, if possible annually, to such members of the society who, in the opinion of the Council, has best promoted the interest of microscopical science, has never been given.

DOSSAGE OF MEDICINES.

In the section on Posology, in his useful little handbook on the art of prescribing, Dr. Handell Griffiths says: "No greater service could be performed by the colleges or the great medical societies than the formation of a committee of competent men for the special investigation of the question of dosage; for it is a subject which is as yet only in its infancy, and the best knowledge which exists about it is undoubtedly confined to a very small section of the medical profession." The suggestion appears to us to be one of importance and interest.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Bristol Daily Post; The Evening News; The Sheffield Post; The Metropolitan; The Elyth Weekly News; The Edinburgh Daily Review; The Glasgow Herald; The Western Daily Press; The Merthyr Telegraph; The Leighton Buzzard Observer; The Bristol Daily Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Sunderland Daily Echo; The Co-operative and Financial Review; The South Wales Daily News; The Macclesfield Courier; The Melbourne Argus; The Southampton Times and Hampshire Express; The Jarrow Express; The Birmingham Daily Post; The League Journal; The Sheffield and Rotherham Independent; The Derbyshire High Peak News; The Liverpool Daily Courier; The National Food and Fuel Reformer; The Worcester Herald; The Norfolk News; The Worcester Chronicle; The North British Daily Mail; The Social Science Review; etc.

COMMUNICATIONS, LETTERS, &c., have been received from:—

Dr. Rutherford, Edinburgh; Dr. W. F. Wade, Birmingham; Dr. Robert Kirk, Glasgow; Dr. Newman, Stamford; Mr. R. Harrison, Dartmoor; Mr. Herbert J. Hardwicke, Sheffield; Mr. Ridgway Lloyd, St. Alban's; Mr. H. C. Bartlett, London; Dr. Spencer Cobbold, London; Mr. H. B. Spenser, London; Mr. F. Gordon Brown, London; Dr. E. Copeman, Norwich; Dr. Foster, Birmingham; Dr. William Wadham, London; Dr. H. M. Jones, Cork; Dr. J. McDiarmid, Murthly; Mr. John Aitken, Carlisle; Dr. K. N. Macdonald, Edinburgh; An Associate; Dr. Thomson, Bournemouth; Dr. Otis, New York; The Secretary of the Clinical Society; Dr. Edis, London; The Secretary of Apothecaries' Hall; Mr. Fustes, London; The Registrar-General, Ireland; Mr. F. M. Stone, London; The Registrar-General of England; The Secretary of the Quekett Microscopical Club; Mr. T. P. Pick, London; Mr. J. Dix, Hull; Dr. J. Moir, Bristol; Dr. Jukes Styrax, Shrewsbury; Dr. J. Hughlings Jackson, London; Dr. W. Fairlie Clarke, London; The Secretary of the Royal Medical and Chirurgical Society; Dr. J. Milner Fothergill, London; Mr. G. E. Stanger, Nottingham; Mr. R. Clement Lucas, London; Messrs. Arnold and Sons, London; Dr. A. Robertson, Glasgow; Mr. G. Brown, London; Mr. S. Cathcart, Wigan; Dr. Dowse, London; Mr. G. Rendle, Norwood; Mr. W. Johnson Smith, Greenwich; Mr. F. Toulmin, Clapton; Our Dublin Correspondent; Mr. J. E. Inghen, London; Mr. Harrison, Reading; Dr. Dudfield, London; Dr. S. Charles, Clifton; Mr. F. M. Pierce, Manchester; Dr. Webb, Wirksworth; Dr. Alexander D. Horne, Whitfield; Mr. Henry Sewill, London; Dr. T. H. Green, London; Mr. H. Burdett, Greenwich; Mr. H. K. Hitchcock, Greenwich; Mr. W. R. Smith, Winchester; Mr. Arthur D. Parsons, Dawlish; Mr. F. Farmer, Bridgwater; Dr. Gerald F. Yeo, London; Mr. Baker, Birmingham; Dr. Peters, New York; Our Birmingham Correspondent; Dr. Robert Bell, Glasgow; Dr. Sheen, Cardiff; Mr. S. William Hope, Petworth; Dr. Thomas Trollope, St. Leonard's-on-Sea; Dr. Thomas Jones, London; Dr. T. M. Lowndes, Egham; Dr. Henry Brown, London; Dr. John Whitmore, London; Dr. Cornelius Fox, Chelmsford; Dr. C. Theodore Williams, London; Mr. J. N. Wanklyn, London; Our Paris Correspondent; etc.

BOOKS, &c., RECEIVED.

Hutchison's Physiology and Hygiene. New York: Clark and Maynard. 1875.
The Public Health Act, 1875. By J. V. Vesey Fitzgerald, B.A. London: Longmans, Green, and Co. 1875.
The Functional Diseases of the Urinary and Reproductive Organs. By D. Campbell Black, M.D., F.R.C.S. London: J. and A. Churchill. 1875.
On Addison's Disease. By Ed. H. Greenhow, M.D., F.R.S. London: Longmans, Green, and Co. 1875.
Lectures and Essays on the Science and Practice of Surgery. By Robert McDonnell, M.D., F.R.S. Part II: The Physiology and Pathology of the Spinal Cord. Dublin: Fanning and Co. London: Longmans, Green, and Co. 1875.
Pollution of Rivers. By William Hope, V.C. London: 1875.
Food Manufacture versus River Pollution. By Wm. Hope, V.C. London: 1875.
A Treatise on the Fractures of the Lower End of the Radius, &c. By Alexander Gordon, M.D. London: 1875.

CLINICAL LECTURE ON SURGICAL DIAGNOSIS.

Delivered in University College Hospital,
On October 11th, 1875.

BY CHRISTOPHER HEATH, F.R.C.S.,
Holme Professor of Clinical Surgery.

GENTLEMEN,—As the Special Professor of Clinical Surgery, it is my special duty to instruct you to the best of my ability in the diagnosis and treatment of surgical disease and injury. Much of my teaching must necessarily be at the bedside; but the clinical lecture which I shall deliver each Monday in this theatre will give me the opportunity of commenting more freely upon the cases you will find in the wards, than would be convenient before the patients themselves. The weekly clinical examination of actual patients by yourselves, or, at least, by the seniors of the class in your presence, will also, I hope, help to train you in the diagnosis of surgical cases; and I propose to devote this lecture to giving you some practical hints on the subject.

Many surgical injuries and affections are so obvious that no great skill is required for their recognition; but, on the other hand, similar outward appearances may depend upon very different causes; and it is here that the skill in diagnosis of the surgeon gives him the advantage in prescribing appropriate treatment. Symptoms may be conveniently divided into "objective" and "subjective"; the former being those open to the observation of the surgeon, the latter those experienced only by the patient. It is to the objective symptoms of disease and injury that I propose to direct your attention to-day; for I do not mean, on this occasion, to bring a patient before you, but simply a living model with no special ailment, to illustrate some points in diagnosis.

It must be your great object to cultivate your eye, hand, and ear; and you cannot safely omit the use of any one of the three. Practically, one uses, as a rule, the ear first; because you are bound to hear something of the patient's own account of his ailment, in order to know to what part of his frame you are to direct your attention; though you must not put too much trust in a patient's own account, and still less in his diagnosis of his own malady. Thus, pain referred to the knee frequently depends upon disease of the hip, and pain in the loins from supposed kidney-disease, upon stricture of the urethra. The eye will take in many of the leading features of a case at a glance, such as the general aspect of the patient, his mode of walking or standing, etc.; and, when the affected part is exposed to view, it will in many cases, if sufficiently practised, complete the diagnosis. Let me warn you, however, against "jumping to conclusions" too rapidly; for those who are foolish enough to pride themselves on rapidity in diagnosis not unfrequently make mistakes, which a little more time would have enabled them to correct. You can no more afford to leave out steps when tracing the nature of a case by progressive induction, than you can venture to omit one or more tests when examining a complicated fluid in the chemical laboratory. Lastly comes the hand, which may require to be fitted with various instruments for special purposes; but which, in its simplicity, is the surgeon's most powerful ally if properly educated. The much-talked-of *tactus eruditus* is to be acquired by all who will take the trouble to practise their fingers in the manipulation of healthy and diseased subjects, and will, at the same time, use their mental powers. For, of course, no amount of examination of a patient will tell you what is the matter with him, unless you elaborate the facts thus ascertained in a mind which has been trained by previous study to comprehend the importance of the several symptoms; and this is the reason why, at first, beginners must be at a disadvantage, lacking the experience necessary for a clear appreciation of symptoms. You will find, however, that with a little help from the surgeon, you will soon begin to see the "why" and the "wherefore" of diagnosis and treatment; and let me beg of you not to be afraid of asking questions—so long, at least, as the questions are put for the purpose of increasing, and not of displaying, your own amount of information. One pitfall I must just allude to; and that is the tendency to over-elaboration of a diagnosis which besets some men, and seems to stick to them through life. They never can take the plain obvious facts of a case, and from them draw a conclusion; but must dig and delve so deeply that they sometimes get, so to speak, "out of their own depth", and never come up

again so far as any utility to the patient in question is concerned. Superficial carelessness is bad; but too great profundity is not much better.

And now I bring before you a man with no special deformity or ailment, in order that I may be able to show you a few noteworthy points which you can readily appreciate at a little distance, and which will assist you in studying disease and injury in the wards. With his back towards us, you have the opportunity of examining a healthy spine; and you may notice that, while the spinous processes are readily visible in the dorsal region (and particularly when the arms are folded), they are not so visible in the lumbar, and still less so in the cervical, region, where they are covered by muscles and ligaments, the seventh, or *vertebra prominens*, being the only one really seen or felt. Here, in a healthy adult, we have the average anterior and posterior curves in the lumbar and dorsal regions; but you must remember that, in young children, the spine is nearly straight, while in disease we may have great exaggeration of either curve. Thus, in the back, we find *cyphosis*, or angular curvature, the result of caries of the vertebræ; while in the loins we have *lordosis*, an exaggeration of the healthy curve, and generally connected with old hip-disease. Of the latter, I now place an example before you; and, of the former, there is an instance in No. 1 Ward, in a man whose foot I removed last week.

The model is now standing at "attention", with his knees straight; consequently the two sides of his pelvis are perfectly even; and you see that a tape carried between corresponding points on the two sides is horizontal. Let us now make him "stand at ease", with the left knee bent and foot slightly advanced, and you see that at once the left side of the pelvis is lowered. But this is not all. Corresponding with the obliquity of the pelvis, we have a lateral deviation of the spine to the left in the lumbar region; and if the man could sufficiently relax his muscles at the moment, we should have a curve in the opposite direction—to the right—in the dorsal region. By placing a book beneath the right heel, and thus increasing the obliquity of the pelvis, I exaggerate the lumbar curve; or, of course, by tilting the pelvis in the opposite direction, I could throw the spine over to the opposite side. Of course, the same thing holds good if the patient be seated instead of standing; for, by tilting his seat, we are able to produce a marked lumbar and a certain amount of dorsal curve at will. Fortunately, we have here to-day also a case of old hip-disease, in whom the obliquity of the pelvis is well-marked, and the resulting twist of the spine better seen than in the healthy subject. You see, then, how important it is in any case of lateral curvature to ascertain whether it depends upon some obliquity of the pelvis (from atrophy of one leg or old hip-disease), or upon other causes; and you also see what effect upon an existing curve may be produced, as has been well pointed out by Mr. Barwell, by raising the side of the pelvis by means of a thickened sole or a sloping seat.

Turning, now, to the neck and shoulder, I pass my finger along the clavicle, which is subcutaneous, and shows its curves well enough in a thin muscular subject. The notch between the clavicles is important in connection with aneurisms of the great vessels of the neck; but the inner end of the bone is very rarely dislocated, except by extreme violence. The outer end of the clavicle is continuous with the acromion process, and I now run the chalk along them; but it may be dislocated (as we have lately seen), and then the flattened end of the bone is readily felt beneath the skin. If I make the man swing his arm round, you will be able to appreciate better than you perhaps have hitherto done the great range of motion in the sterno-clavicular articulation, which, in fact, admits of "circumduction", and has a most important relation to the movements of the arm.

There is no joint, I suppose, about which more mistakes are made than about the shoulder. An "obscure injury about the shoulder" has often damaged a surgeon's reputation, because he has not sufficiently studied the anatomy of the part to be quite sure of his diagnosis and treatment. The chalk-line I have already made marks the bony arch formed by the clavicle and acromion; but you will notice that the head of the humerus projects beyond this in front, and gives the roundness to the healthy shoulder. There is a hollow immediately behind the head of the humerus and below the prominent acromion; and another in front, to the inner side of the head, in which the coracoid process can be more or less distinctly felt, according to the muscularity of the subject. In the healthy subject, there is just room to lay the finger between the coracoid process and the head of the bone. When the head of the humerus is *dislocated*, the roundness of the shoulder is lost, and the acromion stands out prominently beneath the skin, with a depression below it; while the head can be felt in some unnatural position, and out of its proper relation to the coracoid process. The direction of the whole limb is altered too; so that the patient cannot place his hand on the opposite shoulder with the elbow touching the chest-wall, as he can in health. In a *fracture* of the neck

of the humerus, the roundness of the shoulder is not lost; but there is a depression below the head, which does not move when the arm is rotated, unless, indeed, the fracture be impacted. The two accidents may be combined; but this is a rare complication.

When I turn the model with his back to you, and make him raise his arm, you will appreciate how important the movements of the scapula are. The deltoid alone can only raise the arm to a right angle with the trunk; and the subsequent elevation of the limb depends upon a rotation of the scapula on the ribs, so that the angle comes forward to the margin of the axilla. The scapula is held in its place by the muscles passing from the spine to its base, and by the serratus magnus. If these be paralysed, the scapula falls forward, and the power of the arm is greatly lost.

Let us pass on to the elbow. With the forearm bent, you see at once the prominent olecranon process of the ulna. When this is broken off by falls on the elbow, the fragment is drawn up by the triceps, and an interval can be felt between it and the bone, which, however, is rapidly filled up by the effusion immediately following any injury to the elbow-joint. A much more common result of a fall on the elbow, however, is an injury to the bursa which lies between the subcutaneous triangle of the olecranon and the skin. In health, this bursa cannot be recognised, except in individuals whose occupation has produced enlargement of it—*e. g.*, miners or sweeps; for though it is technically called the "student's bursa", I must confess to have never seen an enlargement of it due to long poring over medical treatises. When the bursa is inflamed, it causes a swelling over the olecranon, which is evidently quite superficial, and does not mask the general outline of the joint, as would be the case were the effusion in the articulation. You may remember that, last week, a patient with suppuration of this bursa was treated by an early and free incision in Ward I.

The condyles of the humerus are readily felt in this thin arm; and you will notice that the internal is the more prominent, and stands out beneath the skin. Immediately behind it is the groove in which the ulnar nerve lies, as you may ascertain for yourselves by "twanging" it; and then comes the olecranon, with only just space for the nerve between the bones. This close relation of these two prominent points of bone is of great service in the diagnosis of dislocation of the forearm; for, so long as they lie close together, the deformity cannot be caused by a dislocation of the ulna. The outer condyle is more rounded; and immediately below it is the head of the radius, which can be felt rotating when the forearm is pronated or supinated. It is not often dislocated, for it is firmly held by ligaments; but it is sometimes thrown forward, and then prevents complete flexion of the forearm, by coming against the front of the lower end of the humerus.

At the wrist, you may notice that the end of the radius is lower down than that of the ulna, and that the styloid processes of both bones are to be felt. Dislocation of the carpus from the radius is rare; but separation of the lower epiphysis of the radius is by no means uncommon in young persons, and is sometimes mistaken for dislocation. The triangular fibro-cartilage which binds the radius and ulna together at the wrist, sometimes becomes displaced in children who are dragged forcibly by the hand, and then the little patient cannot supinate the forearm and hand; but if you hold the hand firmly, and then supinate, you hear a slight click, and all is well. It is well always to bear in mind that, in supination, the bones of the forearm are parallel, and in pronation are across one another; so that supination in the posture in which fractured bones of the forearm should be set, although it is convenient, when the bones are firmly held by splints, to turn the thumb upwards—*i. e.*, to place the hand midway between pronation and supination.

In the hand, I need only point out that the superficial palmar arch does not correspond precisely to any one of the lines in the skin of the palm; but its convexity reaches generally to the middle one of the three, while the deep arch is much nearer the wrist. The bifurcation of the digital arteries is between the heads of the metacarpal bones, and about midway between the line to which I have referred and the web of the fingers; so that incisions should always be made in the line of the fingers, and not between them. As you may have, early in your career, to amputate a crushed finger, I would remind you, also, that the prominence of each knuckle is formed by the proximal bone of the articulation; and that the joint through which the knife must pass is below this in every case.

Descending to the groin, you see that the fold of the groin corresponds to Poupart's ligament; and an inguinal hernia is above, while a femoral hernia is below, this line—at least at first. Of course, a large inguinal hernia will descend into the scrotum, and a large femoral hernia may turn up over Poupart's ligament, and closely simulate the inguinal variety. But you ought to have little difficulty in distinguishing them if you will invaginate a piece of scrotum (or labium in the

female) on the forefinger, as you see me doing, so as to carry the finger into the external abdominal ring. This will enable you to settle at once whether the protrusion has taken place through the inguinal canal or not. Let me also remind you always to ascertain the presence of two testicles in the scrotum; for an undescended testis may closely resemble a hernia, especially if inflamed.

The pelvis is so firmly bound together that a dislocation of one of the innominate bones can only be produced by extreme violence; but disease of the sacro-iliac joint is by no means uncommon, though often overlooked; and one leading symptom is lameness, which is erroneously referred to the hip-joint. But if I make the man before us stand on one leg, you will see at once how the whole weight of the body falls upon the corresponding sacro-iliac joint while he is throwing the other leg forward; and it is this which gives rise to the pain, and prevents the walking of a sufferer from sacro-iliac disease. Taking this man, who has a healthy pelvis, I may compress his two innominate bones without giving any pain; but a woman who has recently had a severe labour, and has, perhaps, incipient sacro-iliac mischief, will cry out at any such rough treatment, though the steady support of a good pelvic belt would give her great comfort, and restore her powers of locomotion.

The hip-joint in health is freely movable in all directions, as you see, and independently of the pelvis; but, the moment the joint is inflamed, the muscles instinctively contract, and fix the joint to some extent; and then, when the limb is moved, it carries the pelvis with it. This man's back is naturally more curved than a child's; but even in him, if I make him lie flat on the table, you will see that the thigh can be fully extended without tilting up the pelvis, and so increasing the curve of the lumbar spine. In a child, whose back is naturally flat on the table, the effect of early hip-disease is readily seen (as I have frequently demonstrated to many of you); for the attempt to bring the thigh down, at once elevates the pelvis, and causes that curvature of the lumbar spine which, in old hip-disease, becomes permanent.

The prominence of the great trochanter will vary in different individuals, according to the muscularity of the buttock and the length of the neck of the femur; and it is important, therefore, to compare the two sides in every case of suspected disease or injury. The head of the femur can be indistinctly felt on deep pressure, either in front of or behind the trochanter; and, in health, the two move together; for if the trochanter can be freely moved by rotating the femur without affecting the head of the bone, it is clear that the neck must be broken. The length of the neck will very much affect the power of rotating the limb; thus, if the neck be shortened, either by an impacted fracture or the absorption of old age, the arc in which the upper part of the thigh moves will be found to be much smaller than in health. When I stretch a tape from the anterior superior spine of the ilium to the tuberosity of the ischium, you see that, in health, it touches the top of the greater trochanter; now, if the bone were dislocated or the neck broken, the trochanter would be above or below this line.

When the knee is extended, you see the patella forming a prominence in front of the femur; but, when the joint is flexed, it sinks into the hollow between the condyles. With the leg fully extended and the muscles relaxed, there is, as you can prove in your own limbs, considerable lateral movement of the patella possible in the healthy joint; and the mistake is sometimes made of attributing this mobility to the presence of synovial effusion. When fluid is poured into the knee-joint, however, not only does the patella float so as to be freely movable in any position of the limb, but the synovial pouches on each side of and above the patella are distended, and give the characteristic roundness to the knee. If one kneel down on a flat surface, and particularly if the body be bent forward, as in scrubbing a floor, the patella and the bursa between it and the skin are exposed to considerable pressure; and hence the chronic enlargement of that bursa, termed "housemaids' knee", which causes a globular swelling in front of the joint, altogether different from that of effusion. Kneelers on hassocks or foot-boards do not run any risk of the housemaids' fate; for the pressure in their case comes on the tubercle of the tibia, and the bursa between it and the *ligamentum patellæ* would suffer if the pressure were sufficiently prolonged—but I never met with such a case. In falling with the knee bent, the patella reaches the ground first, and receives the force of the impact, which may simply bruise or cut open the bursa; or, if very severe, may "star" the patella itself. The transverse fracture of the bone is produced through the effort of the patient to save himself, by which the great extensor muscles catch the bone across the condyles, and either break it or rupture the ligament; then the upper fragment is drawn up in front of the femur, and a space is left in which the condyles can be felt, as in a patient recently in the wards.

With the knee flexed, the rounded outlines of the condyles can be readily felt resting on the top of the tibia; and a little distance below

the outer condyle can be seen the head of the fibula—which bone, let me remind you, does not enter into the formation of the knee-joint. The existence of the semilunar fibro-cartilages between the femur and tibia is hardly appreciable in health; but their existence must not be forgotten, as occasionally, in violent wrenches of the knee, one of them becomes displaced, giving rise to extreme pain and inability to use the joint, which are most satisfactorily treated (as also are dislocations of the patella) by a little of that judicious violence for which “bone-setters” have a reputation.

At the ankle, we see at once the prominences of the two malleoli, between which the astragalus fits closely when the foot is at right angles to the leg, less so when the foot is pointed; so that, in this position, some amount of lateral movement of the foot is possible. The fibula is altogether posterior to the tibia, and its malleolus is longer than the internal. The lower third of the fibula is subcutaneous, and its fracture (Pott's fracture) is therefore readily recognised. The tendons of the various muscles surround the ankle-joint; but the only one to which I need call your attention is the *tendo Achillis* at the back, in which, when ruptured, the division is readily both felt and seen. When I flex the knee and point the toes, you can see how completely the muscles of the calf are relaxed; and this is an important point in the treatment of a divided tendon, or of a dislocation of the foot, or oblique fracture of the tibia.

The prominences of the foot are chiefly important as guides to the amputations; thus the tuberosity of the scaphoid on the inner side marks the transverse tarsal joint, or site of Chopart's amputation; whilst the base of the first metatarsal on the inner or prominent fifth metatarsal bone on the outer side, marks the position of Hey's amputation. The metatarso-phalangeal joint of the great toe is not unfrequently diseased through gout or the pressure of boots which have developed a bunion; and other toes are not unfrequently deformed from the same cause. The only surgical point with regard to the toes that I need mention is that the base of the first phalanx is more expanded and more deeply placed than young operators are apt to imagine.

I have thus run briefly through the more salient points on the living body which it is important for you to recognise thoroughly in health before attempting to treat disease; and, in future lectures, I shall have to direct your attention to matters regarding which the knowledge acquired to-day will be of service in enabling you to recognise deviations from the standard of health.

THE TREATMENT OF ANEURISM OF THE ARCH OF THE AORTA BY MEANS OF GALVANO-PUNCTURE.*

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I SHALL, in the first place, read the notes of two cases of aneurism of the arch of the aorta, in which galvano-puncture was employed with success, and afterwards refer shortly to the rules to be observed in carrying it into effect.

James Dunn, aged 36, clothlapper, was admitted into the Glasgow Royal Infirmary on December 19th, 1873, complaining of cough, pains in the shoulders and nape of the neck, and inability to swallow solid food. He had led a very irregular life, admitted having had gonorrhœa several times, and, for the last six years, he had been very intemperate in his habits. For three or four years, he had been more or less troubled with cough; and, for two years, he had complained of pain in the region of the heart, and of gradually increasing dyspnoea, but he never spat blood. About eight weeks prior to admission, as the result of a wetting he thought, the cough became more severe and was accompanied by sore-throat and pains in the shoulders and nape, especially on the left side. This was soon followed by gradually increasing difficulty in swallowing solid food, which was sure to return into his mouth unless it were thoroughly masticated; the seat of the obstruction he referred to the top of the sternum.

On admission, he was found to be a well formed and well-nourished man, but in his face were mirrored the ravages of his favourite vice. His tongue was coated with a white fur, his appetite was good, and his bowels regular, but he had great difficulty in swallowing solid food. The urine was normal. He was much troubled with cough, and bronchitic râles were audible throughout the chest, especially at the bases of the lungs. The air entered both lungs with equal freedom,

and the respirations were natural; his voice was unaffected, and the pupils natural.

On examination of the circulatory system, the heart was found to be somewhat depressed, and the left ventricle the seat of dilated hypertrophy, while a soft systolic, probably communicated, murmur was heard at the apex. At the upper part of the front of the chest, there was dulness on percussion, measuring three inches from above downwards, and extending from one inch to the right to one inch and a half to the left of the sternum. In the second left intercostal space close to the sternum, there were some fulness and pulsation, and, on auscultation, a soft systolic murmur was heard. There were also fulness and pulsation in the suprasternal notch, but no murmur was audible in that situation. The pulse was 74, regular, and of fair strength, and the pulses at the wrists and in the carotids were not unequal.

Shortly after admission, the symptoms became much more alarming, the fulness and pulsation in the second intercostal space became much more pronounced, and the dysphagia so great that he could not even swallow fluid food, and required to be supported by means of nutritive enemata. This was on January 2nd, 1874. On the 20th, it was noted that the difficulty of swallowing was not nearly so great, and he could then take fluid food as on admission. The fulness in the intercostal space, however, had so much increased, that there was a distinct appearance of tumour a couple of inches in breadth, and projecting three-quarters of an inch above the level of the surrounding chest-walls. This swelling was very soft, almost fluctuating indeed, and was the seat of expansion as well as pulsation; the murmur remained as on admission.

On January 12th, galvano-puncture was performed, an insulated needle connected with the positive pole of the battery being inserted into the most prominent part of the aneurism after the skin had been frozen with ether-spray, and a zinc plate connected with the negative being applied to the chest-wall in the vicinity of the tumour; a large piece of sponge moistened with salt water intervening, however, between the plate and the skin. The operation was continued for an hour; four cells of the battery being employed for the first half hour, and six for the second. The patient felt no inconvenience or pain during the operation, and, on removing the needle, there was no hæmorrhage. After the operation, however, there was pain in the tumour and increased uneasiness in the nape of the neck and left shoulder; this was speedily relieved by the application of iced cloths. On January 20th, the swelling was thought to be smaller and firmer, and the patient could swallow better.

On January 23rd, the operation was repeated as before, the needle being inserted a little higher up and nearer the sternum than on the first occasion, and again upon February 8th; but this time six cells were employed for the first half hour, and eight for the second, and, on removing the needle, there was a considerable jet of blood. No report seems to have been taken after the third operation until March 13th, when the swelling was stated to be much firmer, but the patient had been a little hoarse, and had been spitting a little blood.

On April 16th, galvano-puncture was repeated for the fourth and last time, and, in the beginning of May, being weary of the confinement and feeling pretty well, he insisted upon leaving the hospital, although strongly urged to remain. Before leaving, an examination showed that the aneurismal swelling, which was firm and hard, had fallen almost to the level of the surrounding surface. It still pulsated, but no murmur could be heard over it. He continued occasionally to spit a little blood, and still complained of pain in the shoulder and nape of the neck. The difficulty of swallowing had varied much latterly; sometimes he had a good deal of dysphagia, while at other times he could swallow almost anything.

From the history I have given, it will be seen that this was by no means a promising case for operation, and the improvement was all the more remarkable if we take into account his dissipated habits, and the fact that, during the treatment, through inadvertence, he frequently got up and walked about the ward for several hours.

Let me compare this case with a somewhat similar one, of which, however, I need only give a short outline, as I have already published it.

Mrs. H., aged 41, married, millworker, was admitted into the Glasgow Royal Infirmary, November 8th 1871. Two years and a half before this, she began to complain of a “violent beating at her breast”, and of hoarseness. This was followed by a feeling as if a heavy weight were pressing upon her chest, and she complained of lancinating pains between the shoulders, which extended down the left arm. Eighteen months previous to admission, she observed a swelling in the front of the chest about the size of a small hen's egg.

On inspection, the swelling was seen at the lower and inner part of the left infraclavicular space, and implicating also the upper sternal

* Read before the Medical Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

region. It was about three inches and a half in diameter, and its apex was about an inch and a half above the surface. Pulsation, expansion, purring tremor and dulness, and tenderness upon percussion, were well marked over it, while there was a distinct systolic murmur audible over a pretty extensive area, but most distinct in the situation of the tumour. The left ventricle was the seat of dilated hypertrophy, and the pulses in the radials and carotids were weaker on the left than on the right side of the body; but there was no alteration in the pupils, no dysphagia, no trace of spasm of the glottis although the voice was hoarse, and air entered both lungs pretty freely, although there was considerable dyspnoea.

During the month of March, the swelling gradually became more prominent and softer, and accordingly galvano-puncture was resorted to. The operation was performed four times, on the 4th, 9th, and 28th April; and, on the 27th August, in the same way as in the last case; and, on 26th October, the following was the report. "The symptoms of dilated hypertrophy of the left ventricle remain as at the period of admission; but, for some time, an apex systolic murmur has been audible, distinct from the basic one, and which was not present at an earlier date, or was obscured by the aneurismal one. The tumour is now only about a quarter of its size before galvano-puncture was resorted to; and it is for the most part very solid, even more so than the surrounding healthy parts of the chest. There is now no trace of purring tremor, and the pulsation is much diminished, especially in the central, softest part of the swelling; the systolic murmur, too, is much softer than formerly, but there is no change in the pulses. The patient feels in the most perfect health, and her only complaint is of a feeling of pulsation within the chest." She left the hospital at this time, but was seen again on the 4th March, 1873, six months after the last operation; and she was then in even better health than when the last report was taken.

Before leaving the hospital, she was warned to avoid everything in the shape of mental excitement or bodily exertion, and that she must consider herself an invalid for the rest of her life; and this is the way in which she carried out these instructions. On March 5th, she resumed work, her principal occupation consisting of carrying heavy loads of goods upon her shoulders. This she continued for four months and a half; during which time she not only worked all day, but also engaged in arduous household work at night. About the middle of September, most of her underclothing having been stolen, and having exposed herself, in consequence, without these garments, she was seized with a hard dry cough, and to this was soon added retching, which she encouraged by putting her finger into her throat. It is not, therefore, to be wondered at that she sank on January 7th, 1874, 498 days after the last operation.

On *post mortem* examination, the aneurism, which implicated the whole of the transverse and descending portions of the arch, was found to be completely filled with firm, pale, fibrous, and stratified clots; but, at the lowest part of the tumour, the blood had forced its way between the stratified clots and the walls of the aneurism, and penetrated into the left pleural cavity, on a level with the middle of the anterior edge of the compressed lung.

Notwithstanding the ultimate result, it must, I think, be admitted that this case is an illustration of as perfect a cure of aneurism as it is possible to expect from treatment. For, had the patient been so circumstanced as to be able to avoid bodily exertion, she might have continued in comparative comfort for an indefinite period of time.

With these cases for my text, let me refer shortly to the rules which, as far as my reading and experience go, it is desirable to observe in the treatment of aneurism by electrolysis.

1. *The kind of Electricity.*—The induced, as well as the continuous, current has been employed. A successful case of this kind has been recorded by Mr. Eyre. (*Lancet*, July 30th, 1853, p. 94.) The patient, a soldier, in the prime of life, had an aneurism of the left external iliac artery, about the size of a fowl's egg, which pulsed strongly, and was the seat of a murmur. There were œdema and much pain in the limb. Two long, fine needles were introduced an inch within the sac, each being connected with the wires of a galvano-magnetic machine. The operation, which was accompanied by pain in the groin and violent agitation of the whole body, was continued for twenty minutes. It was followed by severe inflammation, which threatened the patient's life; but, in three weeks, the threatening symptoms subsided, and the patient was cured. The successful result in this case was due to the setting up of adhesive inflammation, which filled the sac with lymph, and was fraught with much danger. Now, it is infinitely safer to attempt a cure by means of chemical than by means of inflammatory action; and, therefore, in every case, the continuous-current battery should be employed; although, even then, unless we are careful, the same result may follow.

2. *As to the kind of battery*, this is of less consequence, provided it is in good working order, and has large cells, so as to increase the chemical effects. I have always employed one of Stöhrer's large-celled batteries; and, in using it, it may be as well, with the view of intensifying the chemical effect, to add to the fluid in each cell, as recommended by Althaus, two drachms of a solution of chromic acid, sufficiently concentrated to impart to it the colour of claret. (*A Treatise on Medical Electricity*, by Julius Althaus, M.D., 3rd ed., p. 294.)

3. *The needles* should not be very thick, but very sharp, and should be oiled before being introduced; and, what is of the utmost importance, they should be insulated to within about half an inch of the point: for we must aim at acting upon the blood in the aneurism only, and not upon the walls of the sac, skin, and intervening tissues. This can be done, as recommended by my friend Dr. John Duncan of Edinburgh, a gentleman who has laboured earnestly and successfully to improve our knowledge of electrolysis as a means of treatment, by coating them with vulcanite. The unsuccessful result of a case upon which I operated in 1873 (reported in the *Lancet*, June 13th, 1874), I attribute in part to the use of needles which were not insulated. These were sent to me along with a Stöhrer's hospital battery; and, therefore, it is all the more important to give a warning against their employment. I have generally only used one needle; but there can be no harm in the introduction of two or more, especially if the aneurismal tumour be extensive.

A point of much moment, and with regard to which there is great difference of opinion, now is:

4. *Whether the Needles should be connected with the Positive or Negative, or both Poles.*—The balance of opinion seems to be in favour of connecting them with both poles. "I have no doubt whatever," says Althaus (*op. cit.*, p. 651), "that the most effective application of the current is that where both poles are inserted into the sac. This mode of application is also that one employed by Ciniselli and Dr. Duncan of Edinburgh. Both poles are useful in different ways; the positive produces a small firm clot, and the negative a large soft one. Where only one pole is in the sac, the resistance encountered by the electricity is so great that a much larger galvanic power has to be used to produce any effect at all; and, even then, the effect of that pole which remains outside is lost." And yet one of the most successful cases reported by Althaus in the volume from which I have quoted was one of the cases operated upon by me, in which the needle was connected with the positive pole, and in which a weak current was employed. For my part, I prefer connecting the needles with the positive pole only, because I have found it efficient in practice; because the clot which forms at the positive pole, though small, is firm and hard, while that which forms at the negative is soft and bulky; and because, on withdrawing the needles, hæmorrhage is much more apt to occur; thus showing that the clot is not of a satisfactory character. Hæmorrhage, too, is a disagreeable complication; it frightens the patient, and excites the circulation; and, besides, serious injury to the aneurism may result from the manipulations carried out with the view of arresting it.

5. There is much difference of opinion, also, as to the strength and duration of the current. For my part, I am clearly of opinion that it is often used far too strong. Thus, in a case operated upon by Althaus, and many equally striking ones have been published, he says: "I applied the current of from ten to twenty-five cells of Smec's battery; so that the positive and negative pole were alternately in contact with each needle, the changes being made every five minutes, so that the whole process lasted twenty-five minutes. The patient complained much of pain, particularly when the changes were made. For the first two days, the tumour decreased considerably in size, but afterwards it increased both in size and pulsation; redness and œdema extended around it in all directions, and the patient died. At the autopsy, the whole of the cellular tissue around the tumour was found loaded with lymph, and much indurated. This diffuse inflammation extended the whole way up the neck, rendering the dissection extremely difficult." (*Op. cit.*, p. 648.) I prefer, then, to use a weak current, and one which gives rise to little or no pain, and which does not excite serious inflammation; and, in the two cases just reported, I never employed more than eight cells of Stöhrer's large battery as a maximum, and never continued the operation for longer than an hour at a time. Now, it must not be forgotten that, in using a weak current, at all events, we do not aim at suddenly coagulating the whole of the blood in the sac, but desire the formation of a small firm clot, from which, as a centre, we hope to ensure the gradual deposition of successive layers of fibrin from the blood; so that, for the first few days after galvano-puncture is practised, those who are not alive to this circumstance may fancy that the operation has failed.

Lastly, the number of operations, and the length of the intervals between each, must depend upon the effect of those which preceded them.

The rules which I have ventured to suggest as applicable to the electrolytic treatment of aneurism are, of course, likely to require modification as our experience of it increases; but this, at all events, may be affirmed, that the dangers of the treatment are by no means serious if they are adhered to. Thus violent inflammation is not likely to occur if a weak continuous current of electricity be employed for a moderate space of time; while slight irritation is not an unmixt evil, and may be allayed by the application of iced cloths. It naturally occurs to one that clots produced by galvano-puncture, and which at first are soft and presumably easily detached, are likely to be swept into the general circulation, and to give rise to embolism; but, as far as our experience has hitherto gone, this happily seems to be rather a theoretical than a practical difficulty, and one which appears to me all the less likely to occur if the needles be connected with the positive pole alone. The gas which is generated during the operation, no doubt, in part, finds its way into the circulation; but this takes place so slowly and in such small quantity, that no danger is to be apprehended from it. The operation, then, need not cause us much anxiety from the above points of view; but it comes to be a question—and to this the attention of medical men practising galvano-puncture should be specially directed in the future—whether the consolidation of that portion of the aneurism in particular which approaches the surface may not, in some cases at least, favour the extension of the disease in other directions, and lead to internal pressure-symptoms, and to rupture into internal organs.

HYDATID DISEASE:

AS ILLUSTRATED BY SPECIMENS CONTAINED IN THE PATHOLOGICAL MUSEUMS OF THE METROPOLIS AND ELSEWHERE.

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I.

ALL who really desire to advance the healing art must by this time be well aware that so desirable an end can only be obtained by continuous labour, directed towards the perfecting of our knowledge of the origin, diagnosis, pathology, and mode of preventing the occurrence of the obscurer forms of disease.

As obtains in the case of hydatids, there are certain maladies affecting both man and beast which are so intimately related to one another that the physician, surgeon, scientific pathologist, and veterinary practitioner are all alike interested in their study; but in the prosecution of investigations of this kind it becomes more and more evident that the principle of division of labour requires to be exerted to the utmost. In the acquisition of the following data, I have been obliged to content myself with employing only such intermittent hours of leisure as I could gather or steal from other occupations at varying intervals during the last ten years.

The pathological collections in the metropolis abound in rare and remarkable illustrations of hydatid disease; most of the preparations being practically known only to such few members of the medical profession as have been at some time or other officially connected with the museums. Not without justice, curators often complain that their work is turned to little account; therefore, in the matter of parasites, I have resolved to utilise their labours without reserve. My past connection with the Edinburgh University Anatomical Museum, and subsequently with the collection of the Middlesex Hospital Medical College, has convinced me that few persons are aware how much solid information may be gathered by a patient study of the contents of these great store-houses of the results of disease. Valuable as the catalogues are, it is often necessary to make a close inspection of the preparation in order to arrive at a correct interpretation of the facts presented.

Although the entozoal preparations in the museum attached to St. Bartholomew's Hospital are, comparatively speaking, few in number, there are some choice specimens of hydatid disease. There is a remarkable case in which hydatids invaded the right half of the bones of the pelvis; death resulting from suppurative inflammation of the cysts. This patient, a woman, had also another hydatid cyst which was connected with the ovary. Amongst the series contributed by Dr. Farre, there is a case represented where a large cyst containing numerous hydatids "occupied the pelvis of an infant and produced retention of urine", which ultimately proved fatal. There are also several fine examples of hydatids from the omentum (Dr. Farre's case); besides a good specimen of acephalocysts connected with the vesiculæ seminales. There are two other cases in which these larval entozoa were passed with the urine. At the time when I made my inspection, the entire series re-

presented twenty-five separate cases, of which only one appeared to have been published in detail (Mr. Evans's case, *Medico-Chirurgical Transactions*, 1832). In addition to the above, I must not omit to particularise also two instructive preparations illustrative of a case in which an hydatid was lodged in the right half of the cerebrum. This was from a girl in whom head-symptoms showed themselves a year before death, and in whom there was partial hemiplegia of the left side. I may add that there is also in the series a doubtfully genuine example of hydatids of the breast.

The collection in connection with the Westminster Hospital contains several highly interesting specimens of entozoa (one of which I believe to be altogether unique), but it is by no means rich in the matter of hydatids. Out of a score of preparations of parasites of various kinds, only four (apparently representing the same number of cases) are hydatids, all of which appear to have been connected with the liver. Two are certainly so; one of the latter (Mr. Holthouse's case) showing calcareous degeneration.

The museum connected with St. Mary's Hospital Medical School, in addition to several liver cases, contains one interesting example of hydatids of the lung (Dr. Chambers's case); and also three valuable preparations illustrating Mr. Coulson's remarkable case of hydatids affecting the tibia. One of the preparations shows the bone itself, which was eventually removed at the joint, the operation having been performed by Mr. Spencer Wells.

Here, perhaps, it will not be out of place to mention as a fact of special clinical interest that I have encountered records of no fewer than nine other similar cases where hydatids have chosen to take up their abode in the tibia; generally selecting the head or upper part of the bone. Some of my notes have been mislaid; but, speaking from recollection, one of the choicest specimens which I have examined is contained in the pathological museum connected with the Nottingham Hospital.

When I first went over the collection of the Middlesex Hospital Museum, I found it to contain fifty-four preparations of entozoa, of which some fourteen only were true hydatids, representing as many separate cases. There are now upwards of a score of preparations of hydatids; several of the cases having already had ample justice done to them by Dr. Murchison in his well known memoir (*Edin. Med. Jour.*, Dec. 1875). Amongst the most interesting preparations, I would especially call attention to two fine and genuine specimens from the kidney, another very large example of an hydatid situated between the bladder and rectum, a simple acephalocyst removed from the orbit (Mr. Hulke's case), and the hydatid removed from the axilla by the late Mr. Charles Moore. There is a jar containing hundreds of hydatids that were taken from the thoracic cavity of a dissecting-room subject, who was reported to have died of phthisis; and there is another preparation of an hydatid of the heart, which also proved fatal, without there having been the slightest suspicion entertained as to the true nature of the disease. For this fine preparation, the museum stands indebted to Dr. Moxon of Guy's Hospital. Several of the liver cases have a special interest of their own; but, for the present, I will only further call attention to the small bottle full of minute hydatid vesicles, all of which were removed from the interior of the tibia. The history of this case has been lost; and, unfortunately, the bone from which the parasites were taken does not appear to have been preserved.

SIX MONTHS AMONG THE BASUTOS OF SOUTH AFRICA.

By E. B. HARTLEY, M.R.C.S. Eng., District Surgeon, British Basuto Land.

I VENTURE to think that a short sketch of six months' practice among the Basutos of South Africa may not be altogether uninteresting. The Basutos belong to the Bechuana tribe, and reside along the western side of the Malutis, which range of mountains separates their country from Natal, about latitude 30 deg. S. Their doctors appear to be aware of the existence and therapeutic value of many roots and herbs growing in the country, but at this early date of my settlement in it, and on account of the secrecy observed in the collection and uses of these medicines, I am at present unable to give any information. In the setting of fractures they display much skill; but as regards the removal of tumours, necrosed bone, and severe surgical diseases, they are entirely ignorant. I was called a short ago to see a fracture of the shaft of the radius which had been put in the correct position of mid pronation and supination with the arm lying in a small mat of reeds, which, from its comfort, easiness of adaptation, and lightness, appeared to be an apparatus worthy of being copied by more civilised nations.

From the simple lives and sobriety of the people, medical diseases of a severe nature are uncommon, and, for this reason, it is easier for me to say what there are not, than what there are.

Among a large number of patients, I have only encountered two cases of phthisis, and I think I am able to trace its origin to the subjects of it having suddenly resumed their native costume of a blanket and nothing, after wearing European costume for some time. This leads one to the question as to the desirability of this part of South Africa for consumptive patients. The experience of the just passed summer, with its daily thunderstorms, and consequent dampness of the ground, leads me to consider Basuto Land itself unsuitable for such cases, but I hear Bloengontein and its neighbourhood extolled on all sides.

Rheumatism of a chronic nature is very common, which may be attributed to the native villages being situated among the rocks and on the sides of mountains. In very many cases, the present generation of Basutos has spent its youth in caves to escape the attacks of their many enemies. The disease appears to yield readily to alkalis. Dysentery and diarrhoea are constantly met with, especially among infants.

The most rapidly fatal among surgical diseases I have encountered is a species of diffuse cellular inflammation, occurring generally in the arm, which appears to arise idiopathically in old people. The symptoms consist of a hard brawny swelling of the hand and forearm which rapidly spreads, and, in about forty-eight hours, proves fatal. The disease does not appear to run on to sloughing, nor have I been able to trace any cause for its appearance, such as a bite from a snake, or poisoned wound. Neither can I give the *post mortem* appearances, on account of the repugnance of the natives to any interference with their dead. Fatty tumours flourish in large numbers; and here the surgeon has a fine field for the employment of his knife. The native doctor is entirely baulked in this department, and satisfies himself with numerous small scarifications, with a result which can be easily foreseen. Thanks to the vigorous constitutions of the Basutos, the after-treatment is wonderfully successful; union by direct contiguity or by first intention taking place in almost every case.

I will now proceed to relate two interesting cases which have been under my observation within the last few weeks. Their uncommonness must be my excuse for sending this communication.

CASE I. A Mosuto, aged about forty, presented himself with the history of having received a bullet-wound in the left groin seven years ago in the Dutch war. When he received the shot, he was on horseback, and leaning over the horse's neck, with the hope of shielding himself from the enemy. He had ever since been troubled with a slight discharge from the wound and intense pain on walking in the buttocks, where he felt sure he could occasionally feel the bullet. Nine medicine-men of his country had endeavoured to remove the foreign body, but their attempts did not seem to go further than scarifications of the gluteal region, which was absolutely covered with innumerable small cuts. An European surgeon had also made explorations, without any definite result. On examination, a small opening appeared exactly midway between the symphysis pubis and the anterior superior spinous process of the ilium in front, from which a little pus escaped on pressure, and behind, just level with the posterior superior spinous process, was a prominence such as one might expect to find as the point of exit of a bullet. In this latter, was a small opening which admitted a probe, and as the tissues around were much hardened and thickened, I hoped here to find the bullet encysted. But my probe passed obliquely downwards along a canal into the substance of the glutei muscles; and, as I found it too short, I desisted for a couple of days until I could procure something longer. In the interim, my patient discovered a hard substance, four inches lower down deeply in the muscles. On a second examination, to my delight, I hit upon a hard substance at the depth of about a forefinger and a half, and on cutting directly upon it, by the aid of a bullet-forceps I extracted what must once have been a conical bullet, indented and bent all over. I concluded its wandering course must have been directed in this curious way by the crest of the ilium, which it must have skirted, and have lodged for a time in the superficial position before mentioned, to work its way, gradually, by the force of its own gravity, to the depth where it was finally discovered.

CASE II appears to my mind of a nature not frequently met with, and one which gives the surgeon warning not to be over hasty in his diagnosis, and still less so in performing severe operations. A Basuto woman presented herself with a large tumour of the face, causing her appearance to be even more repugnant than nature had intended. The tumour was extremely hard, and apparently adherent to the bone. The patient stated it had been coming for three years, and caused her considerable pain; latterly, it had much increased in size. It entirely blocked up the right nostril, causing great distension of the cheek of the same side, pushed up the nose, and extended about half way across

the upper lip and along the alveolar process of the upper jaw, the gums being much distended. Two of the incisor teeth were loose, and protruded from their sockets. I considered the growth too low down for it to have any connection with the antrum, and, from the history, I feared the superior maxillary bone would require removal. Being unwilling to undertake so severe an operation without due caution, I ordered the woman to return to her village for a couple of months, and to visit me again. On her second appearance, the tumour had much increased in size, and the pain was worse than ever. The hardness had, however, given place to a distinct feeling of fluctuation, and, having consulted Druitt's *Surgery*, where there is a very similar case of Sir Wm. Fergusson's recorded, I considered my case to be one of dropsy of the antrum. On extracting the canine tooth, a large quantity of coffee-coloured viscid fluid poured away, and with it disappeared our quondam tumour. After a daily probing of the antrum, and the application of pads to restore the original appearance of the features, the patient returned to her friends in a few days, delighted at the loss of her horrible deformity, and wonderstruck at the simplicity of the cure.

AGES AT DEATH FROM THREE ERUPTIVE FEVERS.*

By JOHN W. TRIPE, M.D.,
Medical Officer of Health for Hackney

THE tables on which this paper are based have been compiled to show what are the ages at which small-pox, measles, and scarlet fever are most fatal, and consequently to furnish information as to the chances of attack from either of these diseases at the ages mentioned in the tables. I have also added the necessary percentages for comparison of the deaths at all ages for the same years as those for which the zymotic deaths have been taken. The deaths from all causes during these years, 1868-72, in all England amounted to 2,516,468; those from small-pox to 48,435; from measles to 47,341, and from scarlet fever to 112,412. The death-rate from measles was, therefore, 188, from small-pox 192, and from scarlet fever (the most fatal) 447 per 10,000 deaths from all causes. It must also be remembered that these years include the greatest epidemic of small-pox which we have had since our modern system of registering deaths was begun, and that, therefore, the death-rate from small-pox, as given above, is in excess of the average of thirty years. I have not included fever, because I am convinced that many deaths are registered as being caused by it which should have been attributed to some other diseases, such as hydrocephalus, cerebritis, etc.

Per Million of Deaths at different ages in England, 1868-72.

Ages.	1	2	3	4	5	Total under 5	15 and upward.	All ages.
Small-pox	149	53	48	4	18	272	208	177
Measles	200	176	199	141	97	773	4	1
Scarlatina	45	147	105	147	120	564	316	22
All causes	246	80	38	25	15	405	130	148
Number living,	27	27	26	25	25	135	226	140

The deaths from small-pox during the first year of life were much more numerous than I should have expected, and show the necessity for early and efficient vaccination. The proportions of deaths from small-pox at different ages under 5 were as follows: under 1 year, 149; between 1 and 2 years, 53; between 2 and 3 years, 48; between 3 and 4 years, 49; and between 4 and 5 years, 51; making a total of 350 deaths per 1,000 under 5 years of age. Between 5 and 15, there occurred 208 deaths per 1,000; between 15 and 25, 177 deaths; between 25 and 45, 207 deaths; between 45 and 65, 54 deaths; and above 65, only 4 deaths in each 1,000 deaths from small-pox in England. On comparing the mortality from small-pox with that from "all causes", we see that the death-rate during the first year of life is higher from both than in any other, although in a much less proportion from small-pox than from "all causes", and a somewhat similar ratio is obtained for the next year of life. Between 2 and 5 years, the proportion of deaths from small-pox remained nearly the same as for the age of 1 and 2, having been 53 for the second year of life, and 48, 49, and 51 per 1,000 for each of the other years, whilst for deaths from "all causes" the numbers were respectively 80, 38, 25, and 18 per 1,000 deaths. The totals under 5 are 350 per 1,000 from small-pox, and 407

* Read before the Public Medicine Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

from all causes. Between 5 and 15, the ratio of deaths from small-pox was more than three times as great as the ratio from "all causes", as, out of each 1,000 deaths from small-pox there were 208, and only 62 per 1,000 from "all causes". At 15-25 and 25-45, there were respectively 208 and 177 per 1,000 deaths from this disease; whilst from "all causes" the ratios were 57 and 130. Above 45, small-pox was less fatal in proportion to other diseases, as only 58 out of each 1,000 deaths from small-pox occurred in persons who were 45 years or older, whilst 344 deaths out of each 1,000 from "all causes" were registered amongst persons aged 45 and upwards. I certainly was not prepared to find that so large a proportion as 35 per cent. of all the deaths from small-pox happened in children under five years old; which indeed shows either that vaccination is not properly performed, or else that it is not done at all on a considerable proportion of the population. A comparison between the death-rates at different ages from measles and scarlatina points rather to imperfect vaccination than to non-vaccination as the causes of the large early mortality. We find that only 8 per 1,000 of the deaths from measles happened amongst persons above 15, and 992 amongst those who were below that age; whilst there were only 38 per 1,000 deaths from scarlet fever in persons above, and 962 in those below 15 years. On the other hand, there were no fewer than 442 in each 1,000 deaths from small-pox amongst persons above 15, against 558 in those who were below that age. These figures prove, I think, that the protection by vaccination is nothing like so perfect as that afforded by an attack of small-pox, otherwise the death-rate above 15 would have corresponded more closely with those of the other eruptive fevers. The table also shows that the death-rate from measles in children under 5 years old is more than double the proportion of deaths from "all causes", as 920 deaths from measles out of each 1,000 died under that age, against 407 per 1,000 from all causes. The most fatal age for measles is between 1 and 2 years, as no fewer than 376 per 1,000 deaths from this disease were registered in children who were above 1 and below 2 years of age. There were 200 under 1 year, 190 between 2 and 3, 101 between 3 and 4, 53 between 4 and 5, and 72 only between 5 and 15 years of age.

These data are rather important as regards a question sometimes asked by anxious mothers, viz., What are the chances that a child will have the measles? By referring to the tables, we have some information to guide us. It is certainly to be regretted that a corresponding paper has not been written on the ages at which attacks from the diseases occur, as we could then have ascertained whether or not the mortality at these early ages arise from the severity or the frequency of the attacks.

The ages at death from scarlet fever differ materially from those of measles and small-pox. During the first year of life, only 65 out of each 1,000 deaths occurred, against 200 from measles and 149 from small-pox. In the next year of life, between 1 and 2 years of age, it is more fatal, as 147 deaths were registered in each 1,000 from scarlet fever; but, between 2 and 3, this disease produced its largest mortality; viz., 165 per 1,000, and the next largest between 3 and 4 years of age; viz., 149 per 1,000. Between 4 and 5 years, the mortality was at the rate of 120 per 1,000, making a total of 646 per 1,000 under 5 years of age; between 5 and 15 years of age, the number of deaths from scarlet fever was very large; viz., 316 per 1,000, against 208 from small-pox, 72 from measles, and only 62 per 1,000 deaths from all causes. Above 15 years of age, the number of deaths from scarlet fever are comparatively few, as only 38 deaths per 1,000 from this disease were registered at these ages, against 531 per 1,000 from all causes.

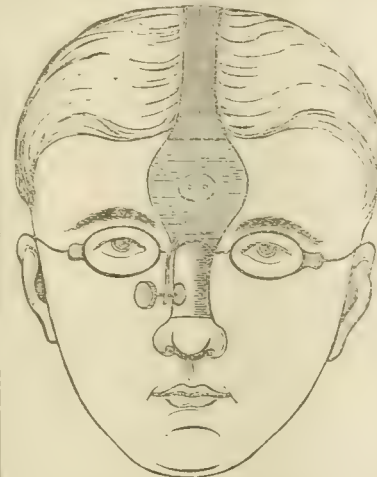
I have appended the number of living at each age in 1,000 inhabitants of England for comparison with the mortality at each age. We see that there were 135 children under 5 years of age alive in each 1,000 persons of all ages, and that there were consequently 865 persons per 1,000 alive at all ages above 5 years old, or nearly six and a half times as many. It is, therefore, evident that the 350 deaths which occurred from small-pox, the 920 from measles, and the 646 from scarlet fever out of each 1,000 deaths from these causes, took place in less than one-sixth part of the whole population. As so large a proportion of persons died from scarlet fever between 5 and 15 years of age, I calculated the numbers at 5-10 and 10-15, and find that 26.0 per cent. occurred at the former, and only 5.6 per cent. at the latter. It is, of course, impossible to ascertain how many persons per cent. have suffered during their lifetime from measles and scarlet fever, and who have been vaccinated or suffered from small-pox; but it would be very interesting to obtain some statistics in the matter. At present, we are accustomed to say that such a person has had scarlet fever, small-pox, or measles, and is not likely to have it again; but, as regards measles especially, the immense proportion of deaths under 5 years of age points to a diminishing liability to the disease as age increases, as well

as to an immunity acquired by an attack in childhood. The extremely small mortality from scarlet fever in persons above 15 years of age probably points in the same direction, although my experience is certainly in favour of a larger proportion of the population under 15 having suffered from scarlet fever than from measles. Be that as it may, the age of attaining comparative immunity from an attack of measles, either by the protection afforded by a previous attack, or from age, appears to be 5 years, whilst from scarlet fever it is about 15, and small-pox about 40 years of age. If the table should impress forcibly on the medical mind these facts, that, after 5 years of age, only a very small proportion of deaths take place from measles; that less than 10 per cent. of the deaths from scarlet fever occur after 10 years of age; whilst similar immunity from small-pox is not reached until about 40 years of age,—this brief paper will not have been written in vain.

ON FRACTURE OF THE NASAL BONES: A CLINICAL NOTE.

By **SAMPSON GAMGEE, F.R.S.E.,**
Surgeon to the Queen's Hospital, Birmingham.

MY attendance was requested on the 29th August ult., to a gentleman



who, in an assault, had sustained a fracture of the nasal bones just below their union to the frontal. The blow, which had been given on the right side, had bruised the whole cheek, and driven the nose to the left, so as to produce very perceptible deformity, in spite of the care taken to prevent it by appropriate plugging. Pressure with the finger on the left side of the nose readily restored its symmetry; and, with a view to the construction of an apparatus to maintain graduated pressure, I sought the assistance of Messrs. T. P. Salt and Son, our local surgical mechanicians. The annexed woodcut represents the instrument which they devised

and constructed. Its use has proved perfectly satisfactory, and no lateral deviation is now perceptible.

The instrument consists of three parts: viz., a spectacle-frame, from which the glasses have been removed; a nose-saddle, with forehead piece made of gutta percha, accurately modelled to the contour of the parts; and a screw with cushion.* The spectacle-frame is attached to the saddle by a metal loop, in which it moves freely in a horizontal plane, the free ends of the spectacle-frame being fastened at the occiput by a ceinture of ribbon; from the forehead piece, which is a continuation of the saddle, proceeds a padded band, passing over the head, and fixed to the ribbon aforesaid, so as to prevent, in conjunction with the spectacle-frame, both lateral and vertical movement. An oval aperture is cut in the saddle, as shown by the engraving; and a steel spring is fastened to the forehead piece or mask, passing in a direction nearly parallel with the nose, and exerting its force in a line opposite to that which the distortion has taken; through the spring, a screw works, having at its extremity a small padded cushion, so disposed as to press on the fractured bones with any degree of force which the surgeon may think desirable. The arrangement of this instrument allows the pressure to be nicely graduated, and, at the same time, prevents the instrument from being displaced—an accident which will, under other conditions, easily happen.

* In the sketch, the screw is shown on the right side. It was on the left in the particular case for which this instrument was devised.

DR. TRENDELENBURG, known as the inventor of the plan for plugging the trachea in cases of operation on the mouth, has been appointed Professor of Surgery in the University of Rostock; and the vacancy consequently made in the office of director of the surgical department of the hospital at Berlin has been filled by the appointment of Dr. Max Schede of Halle.

OBSTETRIC MEMORANDA.

THE USE OF PERCHLORIDE OF IRON IN POST PARTUM HÆMORRHAGE.

I HAVE read with much interest the instructive case of death from the injection of perchloride of iron for *post partum* hæmorrhage, which was published with praiseworthy candour by Mr. Boddy in the last number of the JOURNAL. As it does not appear that there was any *post mortem* examination, it is difficult to pronounce with certainty as to the cause of death, but I have little doubt myself that the fatal result was due to the escape of some of the fluid through the Fallopian tubes into the peritoneal cavity; and this case points out a danger that may very possibly attend the use of this valuable remedy. According to Mr. Boddy's account, the first result of the injection was to stop the hæmorrhage and cause firm contraction of the uterus. The severe pain and other alarming symptoms came on "during the last two or three strokes of the enema-syringe". "The uterus was firmly contracted round the injection-tube, and even little force being required for its removal." We can easily understand how, when the escape of any fluid from the os uteri was thus prevented, and also when the cavity of the uterus was so reduced by the same contraction as to be incapable of holding sixteen ounces of fluid, the increasing pressure might force some of the solution through the Fallopian tubes. To guard against such a danger, I would suggest the use of a double tube, so as to provide for the ready egress of the fluid from the os uteri; for it is a great pity that so valuable a remedy should be discredited for want of some simple precaution of this kind. JOSEPH GRIFFITHS SWAYNE, M.D., Clifton, Bristol.

CLINICAL MEMORANDA.

DIABETES MELLITUS IN A CHILD FOUR YEARS OF AGE.

As cases of diabetes mellitus in children are very rare, the following report may be deemed of interest.

J. L., aged 4, was brought to the surgery on the evening of December 1st, 1874. Until recently, the boy's health had been good, as had been that of the parents; but, about three weeks previously, the father's attention was drawn to an unusual thirst, and frequent calls to micturate on the part of the child. The boy complained of no pain, but appeared listless and disinclined to make any exertion whatever. The skin felt singularly dry and harsh, and the tongue was thickly coated with dry brownish fur. Nothing was prescribed at this time beyond careful diet, and a sample of urine was directed to be forwarded. On December 3rd, the appearance of the child had changed remarkably, the loss of flesh having been very marked since last date. The amount of urine passed during twenty-four hours had been exactly three quarts. It was light coloured, clear, except for slight mucous clouds, and of specific gravity 1035. On being tested for sugar, it gave evidence of a very large proportion. The diet of the child was directed to consist chiefly of milk, and light animal diet, with brown bread. A mixture, containing bicarbonate of soda and tincture of hyoscyamus, was ordered, together with an opiate at bedtime. On December 4th, the patient's appearance was unchanged. The quantity of urine passed had much diminished, but the exact amount was not ascertained, in consequence of the boy having passed some in bed. Its specific gravity was 1032. On December 5th, the boy was much worse. Emaciation had progressed with wonderful rapidity. There was great difficulty in persuading him to eat anything. The urine was kindly examined quantitatively by Mr. Baker, and the amount of sugar was found to be twenty-eight grains in the fluid-ounce. On December 6th, he died. No autopsy was made. JOHN BENSON, Sheffield.

FRACTURE OF THE NECK OF THE FEMUR IN AN OLD WOMAN.

At the end of July 1869, a lady, sixty-eight years of age, accidentally stepped off the platform at one of the Metropolitan Railway Stations, and fell into the roadway. She was conveyed to her home in the neighbourhood, where her medical attendant diagnosed fracture of the neck of the right femur. When I saw her, on the third day after the accident, I found the right limb considerably shortened, everted, and quite useless. There were also considerable swelling and contusion over the hip. The pain experienced by the patient when we attempted to move the limb precluded our forming a definite diagnosis as to the fracture being within or with-

out the capsular ligament. The limb was brought into its proper position, and there maintained by a long splint and a perineal band. The patient bore her confinement exceedingly well, and before two months were passed was lying on her sofa with the limb in excellent position. For the last three or four years she has been walking about without the aid of a stick, and with but slight lameness. At the end of last June she died of chronic liver-disease, when I was fortunate enough to obtain permission to examine the seat of the old injury.

POST MORTEM EXAMINATION.—The body was much wasted. The great trochanter of the right side was more prominent than the other; but this prominence was more apparent than real, on account of the wasting of the muscles just below the right iliac crest. Careful inspection of the two limbs showed that the right had undergone a shortening of exactly one-third of an inch. For the sake of comparison, the upper end of each thigh-bone was removed. (The two specimens were to be seen in the museum of the Association at Edinburgh during the late meeting.) The neck of the right bone was slightly shortened, and its base thickened. There had evidently been extracapsular fracture, with firm bony union. The first effect of the fall was, I take it, to break off the neck just below the anterior intertrochanteric line; the continuance of the shock brought the base of the neck into violent contact with the inner side of the great trochanter, which was then splintered off. The pieces have become so firmly united, that the exact lines of fracture can scarcely be indicated with certainty. And, which is worthy of remark, there is not the least trace of that redundancy of new bone which is generally described as being characteristic of the union of the pieces in this variety of fracture. Indeed, were it not possible to compare the two bones, it is probable that a sceptical examiner might ascribe the changes in the broken bone to chronic rheumatic disease, more especially as there is some erosion of the articular cartilage.

REMARKS.—In an aged person, the neck of the femur will more likely give way on the inside of the capsular ligament than on the outside, and from a slight injury, such as a trip or stumble. But, as is well known to be the case, a heavy fall, or a severe blow upon the outside of the great trochanter, will give rise to a fracture outside the capsule. By the light of short comparative tables, such as may be found in most works on this subject, a diagnosis as to the exact position of the line of fracture as regards the capsular ligament should, at any rate on paper, be simple and sure enough. But in some, I might say in many, cases, the diagnosis must be uncertain. Following the advice of Sir Astley Cooper, many surgeons will not attempt to keep in confinement a patient in whose case they have diagnosed intracapsular fracture; whilst, should the seat of fracture be supposed to exist outside the capsule, the patient would have to submit to the treatment by the long splint. What becomes of the cases where the diagnosis is uncertain? I am of opinion that all cases of fracture of the neck of the femur should be treated as if the surgeon anticipated a bony union. If the patient cannot bear the confinement in bed, nor the weariness of the extension of the limb, then, whatever be the seat of the fracture, he must be liberated, at any rate for a time. This plan of treatment will in any case give the patient the best chance of a good result as regards union. Suppose the fracture to have been within the capsule, no harm can have been done with due care. On the other hand, supposing that an extracapsular fracture be diagnosed as intracapsular, and no apparatus applied, the patient will have a comparatively useless limb all his days, and we have done him an irretrievable wrong.

EDMUND OWEN, F.R.C.S.

A RARE CASE OF SPINA BIFIDA.

THE following are the particulars of an interesting case of spina bifida which recently came under my notice. A. G. M., a male, was born on September 19th, 1875, and died on the 29th of that month. There was nothing to remark in the birth except a slight gush of fluid after the shoulders had passed over the perineum, the cause of which was discovered as soon as the child was separated from the mother. At the lower part of the back, and over the lumbo-sacral region of the spine, was found a loose cap of integument, thick below and of a purplish mottled appearance, but thin and membranous above, where it was perforated by a round hole, into which I could easily insert the tip of my index finger—evidently the ruptured sac of a spina bifida. The sac was covered with a layer of cotton-wool, and supported by a broad flannel roller. On the third day, the dressing was changed, as it was soiled with a greenish yellow gummy secretion, smelling rather offensively, and lint dipped in a solution of carbo-glycerine (subsequently changed for carbolic oil) was applied. There was a slight puckering round the hole above mentioned, which was now almost closed, and the sac was gradually filling out. Two days later, Sept.

23rd, the sac was much fuller, and presented the appearance of a large tomato. The following are the measurements taken at this date by a tape carried over the surface of the swelling: oblique (right to left), 3¾ inches; transverse, 3¼ inches; vertical (in the median line), 3 inches. After having dressed the case as usual, I left, and the nurse informed me, on my visit the following day, that, on applying the flannel roller rather firmly, the sac burst, and a little water and blood oozed out. Her statement was borne out by the appearance of the sac, which was again flattened and collapsed, though there was no orifice to be seen. From the 25th to the 27th, the sac rapidly filled; there being now no puckering. The tension from the contained fluid (which I estimate at between five and six ounces), together with the straining from a smart attack of diarrhoea, again threatened rupture of the sac. Although the child was convulsed during this period, and up to the time of its death, the spasmodic movements had little effect upon the swelling. Below a line drawn round the body at the level of the umbilicus, the muscles were much dwindled, and there was scarcely any motor power, but more on the left side than on the right. Sensory power was lost altogether, as pinching and pricking did not make the child cry or wince in the least. On the 27th, the measurements of the tumour were as follows: oblique (right to left), 5¼ inches; transverse, 5½ inches; vertical, 5 inches. The circumference at the base was 7½ inches. An opportunity was afforded of opening the sac after death. It was found to be filled with a turbid blood-coloured fluid, on draining which off, the cauda equina, surrounded by a fibrous clot, was seen traversing the bed of the tumour; three large nerve-cores were exposed on each side—the last breaking up into a leash of nerves. There was congestion of the spinal cord and upper part of the membranes of the sac.

WM. FRANCIS HAZEL, M.R.C.S.E.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

ST. THOMAS'S HOSPITAL.

CASE OF ACUTE TETANUS AFTER CRUSHED FINGERS: TREATMENT BY NITRITE OF AMYL: DEATH.

(Under the care of Mr. WAGSTAFFE.)

WE are indebted to Mr. Campbell, the dresser of the case, for the following notes.

Samuel O., aged 10, was admitted into Leopold Ward on Tuesday, August 10th, 1875. The boy came to the hospital on Tuesday, August 3rd, at 11.15 A.M., with his right middle and ring fingers severely lacerated on their palmar surface, the middle finger being in by far the worst condition. His mother stated that he had been run over by a cart. The ring finger was strapped; but the middle finger required also three sutures. Warm water dressing was applied over both, and the hand rested on a splint. He came to the hospital the two following days. On Friday, he did not come; and on Saturday his middle finger was found to be much swollen, the redness and swelling extending over all the dorsal surface. The sutures were, therefore, taken out; but, in doing this, the wound was torn open; besides, it was offensive; and a lotion of chlorinated soda was ordered to be used, instead of warm water dressing. He came on the following Monday, and the middle finger then looked very bad, but the ring finger was improving. On Tuesday, August 10th, he attended with tetanic symptoms. He could hardly open his mouth; his neck was rigid; he cried on being spoken to. His mother stated that he had some difficulty in opening his mouth in the morning, and that his neck was very stiff; but, from the boy's own account to the sister, it would seem that the difficulty in swallowing had begun the previous evening. He was at once admitted into St. Thomas's Hospital, and was ordered an ounce of castor-oil in milk, and twelve grains of hydrate of chloral every three hours. During the afternoon after admission, the most marked peculiarity was his grin and the stiffness of his jaws, neck, and abdomen. The nurse of the ward stated that, on the evening of the same day, at about seven o'clock, and again about nine, he had tetanic spasms twice; his back was arched; he stretched out his hands convulsively; his legs and his abdomen also were very rigid, and he could hardly swallow, a teaspoonful of milk taking at least a minute to go down. The night-nurse stated that, while she was on duty, he had great difficulty in swallowing. His arms were very rigid; the abdomen was slightly so; and the

legs were *not at all so*. He swallowed a quarter of a pint of milk from the time of admission to nine the next morning.

August 11th, 9 A.M.—The patient suddenly became worse; he swallowed with greater distress than before, clenched his teeth, foamed at the mouth slightly, and clutched tightly the sister's hand. Mr. Wagstaffe decided that the fingers ought to be amputated. The chloral was stopped, and nitrite of amyl, to be taken every half-hour, was ordered.—11 o'clock. The fingers were amputated by Mr. Potter, the house-surgeon, a V-shaped incision being made on the back of the hand. The wound was washed with a weak solution of chloral-hydrate. The patient could swallow milk much more easily. The nitrite of amyl was increased to two minims every half-hour.—12.30. A most violent spasm came on about this time; the patient's jaws were firmly clenched; his tongue was severely bitten; his breathing seemed to have ceased, and his pupils were contracted. The jaws were forced open; Mr. Potter was sent for, and the boy's life was saved for the time by means of artificial respiration. Mr. Wagstaffe, being sent for, ordered two minims of amyl-nitrite every quarter of an hour. The patient was still able to swallow milk from time to time.—2 o'clock. Slight spasms had occasionally occurred since the last severe one at 12.30. Respirations, 54; pulse, 120. The patient had been since 11 A.M. in a profuse perspiration about the head and face.—2.30. Slight spasms occurred at various intervals.—3 o'clock. One minim of nitrite of amyl was ordered every half-hour, instead of two minims every quarter of an hour. About this time, he was observed to look much bluer.—4 o'clock. The patient looked decidedly bluer than at 2.30. The cheeks were blanched. There was still no difficulty in swallowing small quantities of milk from time to time.—5 o'clock. Brandy and milk were swallowed without any special difficulty.—5.20. A severe spasm occurred. The jaws were forced open; Mr. Potter and Mr. Wagstaffe were sent for, and artificial respiration was tried, but without avail. The patient had swallowed half a pint of milk since 9. Some time previous to his death, the sterno-mastoids became very rigid; his abdomen was hard throughout; the intercostal muscles were slightly rigid for some time. The temperature at the time of death was, in the axilla, 99.6 deg.; in the groin, 103.4 deg.

At the *post mortem* examination, which was made by Dr. Greenfield, the special morbid features were found in the lungs and brain. The lungs were of a dark colour, especially behind, where there were several spots of subpleural ecchymosis. All except the front borders appeared imperfectly expanded, and presented small spots of lobular collapse, which, on section of the lung, were found most abundant in the upper lobe and at the superficial parts of the lower lobe. The pulmonary veins contained dark fluid blood, and the bronchi a blood-stained frothy mucus. The spinal cord presented no special features to the naked eye, and was not abnormally vascular. On the brain, the veins were very much congested, and the same venous congestion was noticeable in the grey and the white substance; but there was no sign of active hyperæmia or inflammation. The lateral ventricles were full of blood-stained serum.

REMARKS.—The symptoms in this case were very acute, and it was evident that only temporary relief was given by the treatment. Still the effect of the nitrite of amyl is worthy of record. The most distressing symptom from the first was the difficulty of swallowing, and this, together with the spasm of different muscles, was not in the least relieved by chloral; but it was evident that the influence of the amyl-nitrite was for a time beneficial. One minim was administered by the mouth, at first every half-hour, with the effect of diminishing the spasms, so that he was able to swallow with comfort. The dose was increased after two hours to two minims, and then to two minims every quarter of an hour, sometimes inhaled and sometimes swallowed, and, after about two hours, was reduced to one minim every half-hour. During all this time, the spasms had almost disappeared; but very marked lividity came on with a spasm, which carried him off. It is difficult to say to what extent the amyl induced this lividity, or whether the cause of death was simply referable to the disease; for, as is well known, cases of tetanus frequently terminate with the symptoms which here existed. But it appeared as if the drug greatly diminished the most distressing symptoms. The *post mortem* appearances did not throw much light upon the question.

CORK DISTRICT LUNATIC ASYLUM.

CASE OF MICROCEPHALIC IDIOCY.

(Under the care of Dr. J. A. EAMES, Resident Medical Superintendent.)
FOR the following report, we are indebted to Dr. Ringrose Atkins, Assistant Medical Officer.

In connection with the two interesting cases of "Microcephalic Idiocy" brought forward by Dr. Shuttleworth, and published in the

JOURNAL for October 9th, the following case, as a further illustration of the amount of intelligence compatible with a brain deficient in size, may be worthy of record.

The subject, Denis S., a male patient, aged 32, was admitted into this asylum, for the second time, in February 1860. Beyond the facts that his father was dead and his mother blind, that he had no brothers or sisters, and that no relative had been insane, his history had not been obtained. Previously to his second admission, the lad, it appears, had endeavoured to earn a livelihood as a labourer. He now stands 58 inches high, and weighs 7 stones 1 lb. The measurements of the head, taken with a tape, are as follows: Circumference, 18 inches; from root of nose to occipital protuberance, 10 inches; from ear to ear transversely, 9½ inches; from middle of forehead to middle of ear, 5 inches; from middle of ear to occipital protuberance, 4 inches. The abnormality in configuration exists chiefly at the vertex and occiput, both of which are flattened; more especially the occiput, which is on a level with the back of the neck. The face is large in proportion to the cranium proper, which gives the entire a peculiar appearance. The forehead is somewhat receding, though not markedly so; the malar bones are prominent; the chin is narrow, and the lower lip slightly protruding. The mouth is small, and there is no arching of the palate. The ears are diminutive; and the growth of hair on the head and face is scant. The neck is small and well formed. The shoulders are broad, and the bony points prominent. The girth of the chest is thirty inches; and the length of the arm from the acromion to the tip of the second finger is twenty-six inches. The sexual organs are largely developed. The legs are slightly bowed, the feet small and well formed. His muscular development is fair, and he walks firmly and well. His respiratory, circulatory, digestive, and urinary systems are healthy; and he eats well and sleeps fairly. His sight and hearing are tolerably good; the colour green, however, appears to predominate in his chromatic range of vision; as, when shewn any object, he almost invariably says that its colour is green. His power of taste, also, appears to be somewhat defective, as he does not apparently distinguish between solutions of salt and of sugar.

Mental Condition.—When called by name, he comes readily, and answers questions regarding himself rationally. He cannot, however, sustain a conversation; as, after a few minutes, his attention wanders, and he goes off into a medley of English and Irish words wholly unintelligible. His power of memory is remarkable; he recollects his parents' Christian names, and appears pleased when he mentions that of his mother, as if the recalling her name to his mind was attended with pleasurable recollections. It is difficult, however, to draw him out on this subject. He can correctly name and explain the use of almost any article shown him—those which he rarely or never sees in his daily life now, equally well with those ordinarily in use around him; failing, generally, only in the colour of the object presented. This he can evidently only do by recalling to his memory past experiences which he gained previously to his being brought to the asylum. His disposition is gentle; he is quiet and inoffensive, and not easily angered; he is apparently happy and contented, and is cleanly in his habits and person. From inquiries, I find that, during his fifteen years' residence in the asylum, he has sensibly improved both in his habits and intelligence; and, as he now is, his mental capacity is much greater than that of many of his class around him, whose heads are of normal size and configuration.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.

A FIFTH YEAR'S CASES OF LITHOTOMY.

(Under the care of Mr. VINCENT JACKSON, Mr. KOUGH, and Mr. NEWMHAM.)

OF the examples of stone in the bladder admitted into the hospital during the year 1874, the following eight cases were operated upon by lateral lithotomy. The publication of this series gives, with the reported cases of the four previous years, a total of forty-eight lithotomies, all (excepting two) being successful. The age of the youngest patient operated on was two years; and that of the oldest, seventy-one years.

CASE I. John Rock, aged 71, was admitted January 7th, under Mr. Vincent Jackson. The symptoms, which had lasted five or six years, were very severe, and had severely tried the man's constitution; and, in addition, he was suffering from an atheromatous condition of the aorta and other vessels, the heart's action being also very feeble. On February 19th, lateral lithotomy was performed, the stone being removed with the forceps. Its weight was 565 grains; its composition uric acid. On February 28th, he died of bronchitis and exhaustion.

CASE II. Thomas Williams, aged 12, was admitted March 3rd, under Mr. Vincent Jackson. The duration of symptoms was five years. On

March 12th, lateral lithotomy was performed, the stone being removed with the forceps. It weighed 640 grains, and was composed of oxalate of lime. On May 26th, he was discharged cured.

CASE III. Samuel Grainger, aged 50, was admitted March 24th, under Mr. Vincent Jackson. The duration of symptoms was two years. On April 9th, lateral lithotomy was performed, the stone being removed with the forceps. Its weight was 200 grains; its composition uric acid. On May 26th, he was discharged cured.

CASE IV. James Crutchley, aged 3, was admitted April 11th, under Mr. Vincent Jackson. The duration of symptoms was twelve months. On April 23rd, lateral lithotomy was performed, the stone being removed with the forceps. It weighed 87 grains; and consisted of uric acid. On June 2nd, he was discharged cured.

CASE V. Joseph Beckett, aged 11, was admitted April 11th, under Mr. Newnham. The duration of symptoms was uncertain; said to be twelve months. On April 23rd, lateral lithotomy was performed, the stone being removed with the forceps. On September 21st, he was discharged cured.

CASE VI. James Wordesley, aged 4, was admitted May 25th, under Mr. Newnham. The duration of the symptoms was uncertain. On June 4th, lateral lithotomy was performed, the stone being removed with the scoop. It weighed 55 grains; and was composed of uric acid. On July 21st, he was discharged cured.

CASE VII. George Lyton, aged 19, was admitted July 3rd, under Mr. Kough. The duration of symptoms was two years. On July 9th, lateral lithotomy was performed, the stone being removed with the forceps. Its weight was 352 grains; and its composition oxalate of lime, with a coating of phosphates. On October 13th, he was discharged cured.

CASE VIII. Ernest Marshall, aged 5, was admitted August 14th, under Mr. Kough. On August 20th, lateral lithotomy was performed, and two small stones were removed with the scoop. The weight was 28 grains: the composition uric acid, with a shell of phosphates. On October 13th, he was discharged cured.

REVIEWS AND NOTICES.

ESSAYS AND PAPERS ON SOME FALLACIES OF STATISTICS CONCERNING LIFE AND DEATH, HEALTH AND DISEASE; with Suggestions towards an Improved System of Registration. By HENRY W. RUMSEY, M.D., F.R.S., etc. London: Smith, Elder and Co. 1875.

THIS collection of essays and papers, which were originally published or read at different times during the past twenty years, forms a welcome and important contribution to the history and progress of State Medicine and of sanitation during that period. For more than a quarter of a century, the name and talents and energy of Dr. HENRY W. RUMSEY have been almost continuously identified with sanitary progress, and with the crusade against the ignorance and apathy which, like a spell, seemed to neutralise all efforts to raise the standard of health among the people. Like most reformers, Dr. Rumsey has probably suffered disappointments of two kinds: disappointment at the slow rate of sanitary progress, and disappointment because the progress attained has not always taken the exact form which he would have wished and which he had advocated. It is true that many of the reforms for which Dr. Rumsey has consistently laboured are still postponed to a future date, and of these we may specially mention the registration of diseases and of still-births, and a complete certification of the causes of death; but the passing of the Public Health Act of 1872 marked the commencement of a new era in hygiene, and laid the foundation of a national sanitary organisation. The creation of responsible sanitary authorities throughout the country, with medical officers of health as professional advisers, has effected many of the results which Dr. Rumsey hoped to attain by the appointment of medical superintendents.

The Births and Deaths Registration Act of 1874, moreover, although falling far short of what ardent sanitary reformers like Dr. Rumsey could have wished, still made some concessions in the direction of their aspirations. The registration of births was rendered compulsory; and, although no provision was made for the registration of still-births, it imposed some restrictions upon the burial of still-born children, especially with a view to check the burial of deceased children as still-born. On the other hand, not only those who wish to increase the accuracy of mortality statistics, but those who put the highest value upon the security of human life, must sympathise with Dr. Rumsey in

his disappointment, that no provision was made in this Act for securing the services of a "skilled certifier" in all cases of death in which a certificate of the cause of death cannot be obtained. In this particular, the system of registration of deaths in England is still inferior to that in operation in many parts of the continent and in the United States. Here a legally qualified informant may go to the local registrar and register the death of any person, and, by stating that there was no medical practitioner in attendance on the deceased, can complete the registration, assign the cause of death as convulsions, consumption, apoplexy, or old age, according to his fancy or inclination, and get a certificate or authority for burial. That all such cases will eventually be made the subject of "medico-legal" inquiries is the deliberate conviction of all sanitary reformers; and, in many of the essays before us, this subject was handled nearly twenty years ago in a manner which is still full of freshness and point.

The first part of this volume of *Essays* consists principally of those which deal with what may be called the machinery of registration, and especially with Dr. Rumsey's scheme for the "scientific superintendence of mortuary registration". These papers abound with suggestions which have in part been adopted, in part superseded by reforms of a different character having the same object in view, and are in part still the subject of agitation and discussion. It is matter for regret, that the state of Dr. Rumsey's health at present prevents him from affording to the sanitary progressist party the continuance of his invaluable assistance.

The second part of the volume has for a heading "Essays on the Fallacies of Vital and Sanitary Statistics". The general scope of these essays appears to be, to point out the various sources of error and inaccuracy which militate against the trustworthiness of vital statistics in general, and especially of death-rates taken as a test of sanitary condition. The first paper in the volume opens with the following sentence. "All who are interested in the cause and progress of sanitary science are aware of the invaluable aid it has received from the publications of the Registrar-General. They are in fact our first text-books in the study of hygiene—the very accidence of our grammar." This opinion, however, Dr. Rumsey has apparently seen occasion to modify. In the second part of the volume the author insists on the deficiencies and imperfections on which the statistics published in the weekly, quarterly, and annual reports of the Registrar-General are constructed. Without determining the limit of error arising from these imperfections, or showing that actual mischief has resulted from the publication of the Registrar-General's figures, Dr. Rumsey urges that "the indiscriminate appeals so often made to the rates of mortality threaten to become a public nuisance"; and, in another place, speaking of populations differently constituted as to "ages, classes, industries, habits, and closeness of aggregation", declares "comparison of their temporary death-rates, for practical objects, a mischievous absurdity". As these and other similarly expressed opinions appear throughout Dr. Rumsey's papers that are especially devoted to what he calls the "Fallacies of Statistics", and as these opinions have been extensively quoted, it may be useful briefly to notice the grounds of his attack upon the value of death-rates.

The rapid progress which has recently been made in enlisting public interest and sympathy in sanitary matters is in great measure due to the easy comprehension of the numerical test of sanitary condition which has been afforded by the published "death-rates" of the Registrar-General; that is, the calculated ratio of deaths to population. That this numerical test has been incalculably useful in bringing home to popular conviction the vast waste of life in towns as compared with rural districts, and in such towns as Liverpool and Manchester, compared with London and Bristol, it is impossible to deny. Further, it is evident that if this numerical test were to be surrendered, and no other could be found to take its place, the cause of sanitary progress would receive a severe check; for it is to the emulation between different communities to reduce their death-rates that the improved sanitary condition of many of our large towns is mainly due. It appears somewhat paradoxical to find so earnest a sanitary reformer as Dr. Rumsey urging that what he calls the "indiscriminate" use of death-rates should be discontinued. Let us enumerate a few of the grounds on which this course is recommended.

Our census enumerations, it is said, are imperfect. Certainly they are, and, although they probably become more correct at each enumeration, it is Utopian to expect that so gigantic a work, which requires an army of 30,000 men to perform the preliminary work, will ever be free from imperfections, although a great step in the right direction would be made if the enumerations were held every five instead of every ten years. It is true that our birth and death registers are susceptible of improvement, and that our 3,000 registration-officers are not all animated with an intelligent appreciation of the sanitary value of

their labour. Dr. Rumsey and his disciples appear to lose sight of the fact that, when civil registration was established, its value from a sanitary and statistical point of view was scarcely dreamed of, and that the few pounds a year earned as registration-fees by so large a proportion of our local registrars will not in all cases secure intelligence, much less zeal and public spirit.

Another ground for disapproving of the death-returns is, that the causes of death are often carelessly and loosely returned, and in a certain considerable proportion not certified, either by medical practitioner or by coroner. This again is true; and yet, while our returns of the causes of death are year by year improving, would it be wise to cease all efforts to turn these causes of death to useful account? Then the proportion of deaths to population as a numerical test of sanitary condition has been pronounced "mischievously delusive", because it takes no account of the varying proportion of the sexes, of the proportion of the persons living at the different ages, of the influence of class and occupation, and of migrations of population.

All these charges of imperfection, both in the sources of information from which our vital statistics are derived, and also in the scientific accuracy of the calculated rates of mortality, are sufficiently well founded, and they must be frankly acknowledged to exist. The really important question, however, is, whether the actual effect of any of these sources of imperfection, or the combined effect of them all, is sufficient to destroy the value of this convenient and useful numerical test, the death-rate. The extreme limit of error from these various sources of imperfection has recently been proved to be very small. The influence of sex has scarcely an appreciable effect on the death-rate of populations showing the extreme variation in the proportion of the sexes found in any aggregations of population. The age-distribution of town populations, in their extreme variations, has also been shown to produce an utmost effect of from 1 to 2 per 1,000 in the annual rate of mortality, which, so long as town death-rates range from below 20 to more than 35 per 1,000, is insufficient to destroy the value of these rates for comparative purposes. The same result has attended the effort to show the effect upon the general death-rate of the continuous migration of healthy lives into towns. This is scarcely appreciable in the general rate at all ages, although its influence is great upon the rate of mortality at those ages at which the migration takes place. The effect of class and occupation upon calculated death-rates may also be disposed of. The Registrar-General, we will suppose, points out that the death-rate in St. James's is 15 per 1,000, and in St. Giles's 30 per 1,000; and draws the obvious conclusion that the sanitary condition of the former is far better than that of the latter; and further, that much sanitary work is called for in St. Giles's. Is this the less true, or in any way "mischievously absurd", because the class and occupations of the two populations differ so widely? The fact remains, that the costermonger and his family in St. Giles's die at double the rate of the denizens of St. James's. The main object of sanitary effort is to reduce this disparity in death-rates and sanitary condition; and the decrease of death-rates in improved dwellings for the working classes is an answer to such assertions as that all the world cannot live in St. James's, and that, therefore, it is useless to compare the death-rates of well-to-do communities with those of the working classes.

While strongly recommending the perusal of these essays of Dr. Rumsey's to all students of vital statistics, and to those generally interested in sanitary subjects, we have pointed out the reasons which lead us to hesitate in agreeing with his objections against the publication and acceptance of death-rates as trustworthy, though broad, indications of sanitary condition. In the future, when the present wide variations in death-rates shall have yielded to the effect of sanitary progress, it may be necessary to invent some more accurate numerical test than the general death-rate; at present, no such more accurate test has been suggested.

In conclusion, we are bound to call attention to one or two assertions in Dr. Rumsey's essays which have frequently been mischievously applied. The first that calls for notice is the theory, that a high birth-rate in a population, and the consequent large proportion of infants and young children, produces and explains the fact of a high death-rate in that population. This theory has recommended itself so strongly to the sanitary authorities of large towns, where both birth- and death-rates are almost invariably high, that it is tenaciously upheld, although its fallacy has been conclusively exposed. The simple fact is that, even under present conditions, the rate of mortality among children under five years of age is about the same as that among persons aged sixty years and upwards; and that the death-rate of a population depends as much upon the proportion of elderly persons as upon that of young children; moreover, that the proportions living at these extremes of life have a compensating tendency. For instance, the proportion of elderly persons is almost invari-

ably low when that of children is high, and *vice versa*: this has the effect of contracting the influence of age-distribution upon the general death-rate within very narrow limits. It has been shown, moreover, that this disturbing influence, so far as it goes, is of an exactly opposite character to that imagined and propounded by Dr. Rumsey and his disciples. The normal death-rate, calculated according to the English Life-Table, for all populations in which a high birth-rate prevails, with accurate allowance for its age-distribution, is invariably lower than is the normal death-rate in populations with a low birth-rate, calculated in the same way. The large proportion of infants and children in the high-birth-rate populations is more than compensated by the large proportion of young adults at those ages when the rate of mortality is very low, and by the small proportion of elderly people.

The objection which is made in these essays to the use of annual rates of mortality in the Registrar-General's Weekly and Quarterly Returns, if tenable, would be a severe blow to the utility of these publications. The substitution of weekly rates and quarterly rates would render the rates wellnigh useless to the public, who would not easily learn to comprehend and appreciate at their proper value half a dozen standards for measuring mortality. It is also very certain that if mere facts, without any calculated rates, were given to the public in these Returns, the influence of public opinion and interest in sanitary matters would be incalculably weakened.

Dr. Rumsey says: "A diminution in the rate of mortality will be found to coexist generally with an augmentation of the rate of sickness. The very triumphs of advancing medical art are probably attended by an average prolongation of the helpless and infirm conditions of life." Again, as the result of "improvements in domestic management and medical treatment", we are told that "Chronic diseases, or at least functional disorders, have increased. Vital force is lowered. Man's work is arrested; his duties are unperformed; his objects fail, though he still lives. Weakly diseased children are now mercifully helped, as they never were in the olden time, to grow into weakly ailing adults, who, in their turn, propagate an abnormal fecundity an unsound progeny. Is this true sanitary progress? Does it deserve the ostentatious parade of a decreasing death-rate?"

This theory of the evils and dangers which may be feared from a declining death-rate appears to us to be as fallacious as it would be disastrous if true. It savours of a fatalism which is inherently antagonistic, not only to sanitary progress, but to the best interests of the medical profession.

Dr. Rumsey's republished *Essays* are a welcome addition to sanitary literature; and, although we do not agree with the assertion that the publication of general death-rates can ever degenerate into a public nuisance, a perusal of the work cannot fail to be useful to those whose duty it is to elaborate and explain the causes of the wide variation in local death-rates. We trust, moreover, that ere long we may be able to welcome the reappearance of Dr. Rumsey in the active division of our foremost sanitary reformers. Although much has been achieved in recent years, we have not yet arrived at that stage in the affairs of sanitation when we can afford to "rest and be thankful", and we can ill afford permanently to lose the services of Dr. Rumsey in the sanitary arena.

NEW BOOKS AND NEW EDITIONS.

AMONG the new books of the season which we desire at once to welcome, are the first fasciculi of two important illustrated works, of which Messrs. J. and A. Churchill commence this month the publication.

Mr. JONATHAN HUTCHINSON has long been known to have exercised uncommon industry and zeal in the collection of a vast amount of clinical surgical material, including a rich series of drawings and photographs of notable cases, and especially of such as exemplify important or doubtful points of diagnosis or treatment. From this accumulation of varied and interesting matter he now produces selected examples, and commences what will be, we doubt not, a classic work in British surgery, under the title of *Illustrations of Clinical Surgery*, consisting of plates, photographs, woodcuts, diagrams, etc., illustrating surgical diseases, symptoms, and accidents; also operative and other methods of treatment; with descriptive letterpress. Each fasciculus contains four large plates. The present fasciculus gives admirable plates of Frontal Encephalocele, including three portraits from different subjects; a most interesting and instructive plate of Ivory Exostosis of the Orbit, with a good and suggestive history; a plate with three fine coloured illustrations of Rosket Ulcer, a subject which

Hutchinson, Hulke, Moore, and Arnott have done most to elucidate; and three capital and instructive illustrations of different varieties of Chancre. Mr. Hutchinson promises a quarterly fasciculus. The price at which these plates are issued is very moderate indeed. We trust that Mr. Hutchinson will continue his publication regularly, and that it may meet with the great popularity which it deserves. It is long since an undertaking more creditable to British surgery has been commenced.

The *Atlas of Skin-Diseases*, edited by Dr. THURLEY FOX, is also a very welcome addition to our medical literature. The plates are partly the well known and admirable coloured drawings of Willan and Bateman retouched and improved, and partly new plates designed to complete their scheme and to correct some of the deficiencies of their portraiture of skin-disease. Part I leaves nothing to be desired: and at the publishing price, which is less than half of that at which the original issue of Bateman and Willan was made, these excellent plates will no doubt be highly acceptable to a large number of practitioners and teachers. Dr. Fox's letterpress is concise, clear, and accurately written. He is, of course, a thorough master of the subject.

WAGSTAFFE'S *Manual of Osteology*, just issued by the same publishers, has many of the qualities likely to be most appreciated by students. It is excellently illustrated, and the descriptions are short and untechnical. If modern examiners are satisfied with the kind of descriptions here given, we have nothing to say; but they are so brief and scanty, that this book, attractive as it is, by no means fulfils the desiderata which we recently indicated; and it does not, in our opinion, supersede the necessity for a fresh edition of Ward's *Osteology*, the only good descriptive book on the bones which has, in our opinion, yet appeared.

The *Medicinal Plants: being Descriptions, with original Figures, of the Principal Plants employed in Medicine; and an Account of their Properties and Uses*. By ROBERT BENTLEY, F.L.S.; and H. FLEMING, M.B. London: J. and A. Churchill.—Professor Bentley and Dr. Trimen are two of our best botanical authorities, and both are well acquainted with the wants of students and practitioners. Forty years have elapsed since any work devoted to the illustration and description of the pharmacopœial plants has appeared. This profusely illustrated work, which appears in parts, will fill in a void in medical literature. The illustrations are by David Blair, and are beautifully executed; they are worthy of the text, and that is high praise.

MR. ISAMBARD OWEN'S *Tables of Materia Medica* (Churchill, London) is an useful little compilation, showing in a very condensed form the *Pharmacopœial* preparations, and the methods employed in making them; the processes of extraction of alkaloids and organic principles commonly employed in medicine; a tabular statement of doses; the contents of compound preparations; and the proportion of active ingredients in some of the principal preparations. It will be useful as an *aide-memoire* to students and practitioners.

DR. ATTFIELD'S admirable *Manual of Chemistry, General, Medical, and Pharmaceutical*, appears in its sixth edition. The numerous additions and corrections, and the introduction of a valuable series of illustrations in this edition, show that Dr. Attfield is by no means content with resting on his laurels. Himself a practical and successful teacher, each edition bears marks of the determination to make this book in all respects respond to the needs of students. It is an excellent class-book.

SELECTIONS FROM JOURNALS.

THERAPEUTICS.

HYGENTIC PROPERTIES OF LACTATE OF SODA.—W. Preyer of Jena, in a communication to the *Centralblatt für die Medicinischen Wissenschaften* for August 7th, states that numerous experiments and observations have shown him that a feeling of weariness and sleepiness, and even a condition very closely resembling or identical with natural sleep is produced, when a concentrated watery solution of lactate of soda is injected subcutaneously or introduced in large quantity into the empty stomach, provided that strong irritation of the senses be avoided. In many cases, also, sleep was produced when the lactate of soda was not given as such, but the materials were afforded for its abundant formation in the digestive canal; as after drinking highly concentrated solutions of sugar, and after the abundant use of fresh, and especially of sour, milk, and of sour or sweet whey. There were great differences in regard to the time, duration, and intensity of the sleep. It appeared to occur more readily in young than in old animals; in animals having

high than in those having low reflex excitability; more readily in mice, cats, pigeons, and frogs, than in rabbits and guinea-pigs; more readily in small than in large animals, and in a low temperature than in a high one. In man, also, considerable individual differences were observed. While one would be seized with almost invincible drowsiness soon after the use of a quart of coagulated milk or a glass of highly concentrated solution of sugar, or after taking into the empty stomach a solution of 12 grammes (3 drachms) of lactate of soda in 120 grammes of water, this effect was not produced in another. In order to obtain data for an investigation of the causes of this varying action, Preyer invites practitioners, in cases where it has hitherto been the practice to procure sleep by means of opium or chloral, to inject subcutaneously concentrated solutions of lactate of soda, or to give as drink large quantities of solution of sugar, or milk-serum, or condensed milk, and to communicate the result either in published papers or by letter. He remarks, also, that the lactate of soda deserves investigation as an antipyretic, and also as a calmative in mania and in certain forms of convulsive disease, on account of its property of speedily inducing weariness during muscular action. In all cases where sleep was produced by lactate of soda, Preyer found the respiration deepened and reduced in frequency, the reflex irritability diminished, and, in warm-blooded animals, the temperature lowered—especially when large doses were given. Larger doses of the lactate than were necessary to produce sleep were borne without the least injury. The sleep produced cannot be distinguished from natural sleep. When the animals awake, they do so in the natural way, become lively in a few moments, readily take food and drink; and, if left to themselves, readily fall asleep again, to awake quite lively. Lactates of potash, magnesia, and lime cannot be recommended as substitutes for lactate of soda.

EXTERNAL USE OF CARBOLIC ACID IN CERTAIN SKIN-DISEASES.—Berndgen (*Allgem. Medicin. Centralzeitung*, No. 20, 1875) uses with good effect in chronic eczema a solution of 5 parts of crystallised carbolic acid in 10 parts of diluted spirit and 120 of water. The solution is applied to the diseased parts every morning by a camel's-hair pencil. In cases of shorter duration, he uses a 20 per cent. watery or oily solution as a lotion or embrocation. In acute eczema, carbolic acid is injurious. The solution in water and spirit is very successful in psoriasis. In psoriasis inveterata he uses a solution of 2.5 parts of carbolic acid in 10 each of spirit and distilled water; here, however, the application must be omitted after three or four days, on account of the irritation which it produces. In prurigo, a 5 per cent. solution is recommended.

PHYSIOLOGICAL AND THERAPEUTIC ACTION OF NITRITE OF AMYL.—In his experiments on nitrite of amyl, Berger (*Allgem. Medicin. Centralzeitung*, 1874) found that, in non-curarised dogs, whose vagi nerves were divided, the division of the cervical spinal cord below the atlas was followed by a lowering of the blood-pressure when the vapour of nitrite of amyl was introduced into their lungs by artificial respiration. The lowering of the blood-pressure by nitrite of amyl is, therefore, not dependent on the vaso-motor centre in the medulla oblongata. The frequency of the pulse in warm-blooded animals was always increased; the respiration retarded by fatal doses. With regard to the therapeutic action of the nitrite, Berger used it in hemicrania, only in the spasmodic form, and not in all cases of this. In epilepsy, it has some effect even in cases with a vaso-motor aura; but it has no influence on the disease itself. He found it beneficial in some cases of angina pectoris, and without effect in bronchial asthma, hysterical convulsions, and tetany. Berger used it with success in two cases of acute cerebral anæmia with severe fainting. The preparation must be pure, and at least should not have an acid reaction. The dose usually given was 2, 5, or 10 drops.

SALICYLIC ACID IN DIABETES MELLITUS.—The *Boston Medical and Surgical Journal* for September states that an opportunity has recently been afforded in the Columbia Hospital Dispensary, of testing the efficacy of salicylic acid in diabetes mellitus. The disease manifested itself in a coloured woman, past middle age, and had existed three years when the patient was put under medical treatment. The symptoms were characteristic: cataracts in both eyes, and at least fourteen per cent. of sugar in the urine, by Fehling's test. The patient had been under various forms of treatment without avail. About a year ago, the carbolic-acid treatment was instituted with marked general improvement, and the reduction of the amount of sugar in the urine to seven per cent. The diet, of course, was regulated as far as possible. Four months ago, when salicylic acid first began to attract the attention of the profession, it was substituted for the carbolic acid; it was given finally, as experience proved it to be well borne by the sys-

tem, in ten-grain doses (in pill) three times daily. The urine for several weeks past had been registered as containing 0.3 to 0.5 per cent. of sugar, and the quantity had at last fallen to traces not sufficient to be registered by Fehling's test. The amount of urine passed in twenty-four hours was reduced to the normal quantity. All the symptoms had been correspondingly relieved, and the diet had been made more liberal in starchy substances.

SUBCUTANEOUS INJECTION OF NITRATE OF STRYCHNIA IN NERVOUS DEAFNESS AND IN DISTURBANCE OF INNERVATION OF THE INTRINSIC MUSCLES OF THE EAR.—Dr. R. Hagen of Leipzig writes in the *Centralblatt für die Medicin. Wissenschaften*, August 11th, that he first began to use subcutaneous injection of strychnia in nervous deafness in the autumn of last year. After having become acquainted with the results obtained by Dr. Nagel of Tübingen from the same remedy in amaurosis and amblyopia, he has employed the treatment in a considerable number of cases with unmistakable effect and long continued good result. He generally uses a one per cent. aqueous solution of nitrate of strychnia, injecting it twice weekly into the integument over the mastoid process, for the most part using no other remedies. The injections are of no use in subjective noises in the ear.

COLUMN FOR THE CURIOUS.

ST. BARTHOLOMEW'S HOSPITAL.—1729, July 12th. Thursday, at a meeting of the Governors of St. Bartholomew's Hospital, Robert Gay, Esq., Representative in Parliament for the city of Bath, resigned his place of surgeon to the said hospital.—1730, January 24th. Thursday morning, a General Court was held by the Governors of St. Bartholomew's Hospital, when was present the Right Honourable the Lord Mayor, the President, and several others the governors; at which time, Samuel Palmer, Esq., a very eminent surgeon, was unanimously elected treasurer of the said hospital, in the room of Robert Williams, Esq., deceased; he was proposed by Sir John Williams, Knight, one of the present sheriffs, who, in a very eloquent speech, recommended him as very worthy of so considerable a trust.—1729, September 13th. On Saturday last, one of the patients in St. Bartholomew's Hospital, being it is supposed in a disordered state of his senses, violently assaulted Dr. Tyson, one of the head physicians, as he was talking to another patient in the ward; but help immediately coming, the fellow was secured. In the scuffle, the doctor fell against the locker of a bed by which the cap of the knee was put out, and his arms were very much bruised.—1729, August 23rd. Dead, Dr. John Radcliffe, formerly of St. John's College in Oxford, and Fellow of the College of Physicians, Physician to St. Bartholomew's Hospital. A gentleman of excellent parts and sound learning; whose only crime was his singular modesty, which hindered him from being an ornament to his profession.

BARBAROUS PUNISHMENT: A SURGEON'S OCCUPATION.—1720, March 29th. On Wednesday, Thomas Hayes, formerly the commander of a merchantman, stood in the pillory at Charing Cross, for the hour of twelve to one, when a surgeon, attended by the prison officers, got upon the pillory, when Mr. Hayes sat down in a chair placed for that purpose, and then the surgeon with a dressing-knife cut his left ear entirely off, delivered it into his own hands, and then the officer took it from him and betwixt his finger and thumb held it up to the view of the spectators, pursuant to his sentence at the Court of King's Bench, for forging a bond of £560, upon Mr. Edward Longbotham, also formerly the commander of a merchantman. He was a plain elderly man with grey hair, and was not pelted by the populace, which was very numerous.—1728, February 22nd. On Tuesday, came on before the Lord Chief Justice Raymond, at Westminster, the trial of Japhet Crook, alias Sir Peter Stranger, upon an indictment for forging two deeds of conveyance to himself, of an estate in Essex belonging to Mr. Joseph Garbutt, and afterwards for mortgaging the estate as his own for £2,500. After a hearing of about four hours, the jury brought him in guilty of the indictment; which being grounded on a statute of Elizabeth, he is to be put into the pillory, to have both his ears cut off by a surgeon, then his nostrils to be slit, and to suffer perpetual imprisonment.

INOCULATION DANGERS.—1732, April 15th. The nephews of the Honourable Sir Thomas Lyttleton, one of the Lords of the Admiralty, were lately inoculated for the small-pox, the eldest of whom, aged twenty years, died. The other is in a fair way of recovery, the pox having broken out in a more kindly way.

H. W. DIAMOND, Twickenham.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W. C.

BRITISH MEDICAL JOURNAL.

SATURDAY, OCTOBER 23RD, 1875.

REPORTS OF THE SCIENTIFIC GRANTS COMMITTEE OF
THE BRITISH MEDICAL ASSOCIATION.

In this number, we commence the publication of an important report on the effects of certain cathartic medicines on the biliary secretion of the dog. This research, which is a fit successor to the report of the Edinburgh Committee of the Association on the Action of Mercury, Podophyllin, and Taraxacum, on the Biliary Secretion, is the first of the new series to be carried out under the auspices of the Scientific Grants Committee of the British Medical Association. Dr. Rutherford details a series of experiments which he performed in the Physiological Laboratory of the University of Edinburgh, with the assistance of M. Vignal. The value of such investigations in the hands of so skilled and careful a worker can scarcely be overestimated, as it goes straight to the root of our daily practice. There is perhaps no branch of medical science which is at present making more rapid strides, or undergoing more radical changes, than pharmacology; and new light is daily being shed upon the action of our most important drugs by experiment in the physiological laboratory. In these researches, one is often struck with the close agreement between the teaching of modern physiology and clinical views which originated in mere empiric speculation. At times, however, we find that the desired object is attained in a manner hitherto quite uncomprehended, and only explicable by the most recent physiological knowledge; and it but too often happens that we discover that some of our remedies are as far from accomplishing the exact end for which we administer them, as were the many specifics which were reluctantly abandoned by our ancestors, and of which we now read with a smile of pity and contempt.

It is quite time that we should cease to assume, and that we should commence to ascertain, the mode of action of medicines; that we should examine what we believe, together with the grounds of our belief. In these days of accurate physiological research, we should no longer be content with the ancient dogmas upon which many physicians still act, less from conviction than from habit; but we should rather investigate the *modus operandi* of therapeutic and toxic agents with all the precision and care which our improved methods admit.

It is obvious, that the more we know of the exact action of a medicine, the less chance we have of abusing it, as we restrict it to those cases in which we know there is a certain object to be attained which we can attain in a certain manner. In thus restricting the internal use of drugs, we confer a boon upon mankind; for it must be admitted that, even at the present time—which we think so enlightened—there are many physicians who employ powerful drugs on the theory that they must do something; and thus, from mere habit, they make the *prima vie* of their patients a thoroughfare for useless, if not pernicious, medicines.

These experiments require to be prominently brought forward, be-

cause practical men oftentimes care but little for such physiological research, and they do not reflect upon the fact that, each time they give a dose of medicine, they perform an experiment which may lead to most important results, if its administration be followed by careful clinical observation of its effects.

The slowness with which experimental results influence general practice is well exemplified by the very subject of this report. Twenty years ago, Kölliker and Müller tried the effect of calomel on dogs with biliary fistula, and they found that the amount of bile secreted was more often diminished than increased by the action of that drug. Two years afterwards, Scott and Mosler found that, in all cases, large doses of calomel caused diminution of both the fluid and the solid constituents of the bile, and they failed to find the mineral in the secretion. However, any discredit which was subsequently thrown on mercury depended rather on its clinical failure than upon these experiments, and few seriously doubted its efficacy as a cholagogue, even after the report of the Committee of the Medical Association which was published under the experienced guidance of Dr. Bennett in 1868. From this report, it appeared that the several preparations of mercury have no influence whatever upon the liver, except to reduce the amount of bile secreted, as was also seen to be the case in purgation by means of podophylline. These views met with but little favour from the practical members of the Association, and appear to have had no material effect on the frequency with which the drug was administered. It seems but natural that physicians should not be inclined to accept the results of experiments on animals as a satisfactory proof of the exact mode of action of medicines upon man. The physiological evidence of the similarity of the effect of many drugs on man and the lower animals becomes, however, daily more and more convincing, while not a single fact of weight has been put forward by clinical observers to shake the belief of the physiologist that mercury and the cholagogues have exactly the same action on dogs and many other animals as on man.

The question remained *in statu quo* until the year 1873, when Röhrig published an account of a series of experiments which he had performed with the object of finding out what circumstances influenced the biliary secretion. He came to the conclusion that the amount of bile formed depended more upon the character and amount of blood circulating in the intestinal vessels than upon the tension of the hepatic capillaries. During his extensive investigation, he tried the effect of various purgative medicines on fasting dogs, and the results he obtained are most interesting, as they form a striking contrast with those obtained by Dr. Bennett's committee. Röhrig did not use exactly the same medicines; but he found that several purgatives—viz., croton-oil, colocynth, jalap, aloes, rhubarb, senna, and sulphate of magnesia—acted more or less powerfully on the liver, increasing the flow of bile, and recalling its secretion after it had ceased. His experience of calomel did not materially differ from that of the Committee of the Association. Thus, while there was no actual contradiction concerning any special drug in the two results, the Committee found that, in dogs kept on a regular diet, the amount of bile was always diminished by purgation. Röhrig found that in fasting dogs the biliary secretion was notably increased by the same means. Can both these statements be correct? This is the question to be answered by the investigation now reported. Feeling confident of the accuracy of the method used by the Committee, of which he was himself an active member, Dr. Rutherford now checks the results arrived at by Röhrig by repeating his experiments with a somewhat altered and improved mode of procedure. He records the amount secreted every fifteen minutes, and the variations which occur are represented in the form of a curve. He also made frequent analyses, by which an accurate idea of the solid constituents of the bile could be formed; while the alimentary canal was carefully examined *post mortem*, and the amount of intestinal irritation noted.

Tested by this method, croton oil did not appear to deserve so high

a place as a hepatic stimulant as is stated by Röhrig, and there was evidence of so much intestinal irritation, that its use was abandoned. Podophylline increased greatly the amount of biliary secretion, and was found to act much more energetically when previously mixed with bile, which acted as a solvent. The marked increase in the amount of bile, attributed by Röhrig to the action of aloes, was in all respects confirmed by three experiments. Rhubarb proved a much more powerful hepatic stimulant than Röhrig's experiments led him to suppose; repeated doses causing renewed increase in secretion, and analysis demonstrating that, notwithstanding the great increase in quantity, the solid constituents were present in the same proportion as in the normal bile. Senna somewhat increased the amount of secretion, and at the same time rendered the bile more watery. Colchicum was found to act decidedly as a cholagogue, the rapidity of secretion being much increased. Scammony and taraxacum had also a cholagogue action, but in a less marked degree.

On the other hand, calomel failed to produce any increase in the biliary secretion, a decided diminution occurring in all but one case, and in every one the bile was rendered more watery. Gamboge and castor-oil had not a marked effect, while the secretion was diminished after alcohol had been injected into the stomach.

From these results, it would appear that certain medicines given in proper doses to fasting dogs do cause an increase in the secretion of bile; but it is certain that mercury is not one of these agents.

The reporter believes that energetic purgation tends to hinder the secretion of bile, and thinks that the diminution which was found by Dr. Bennett's committee to follow the administration of podophylline probably depended upon the fact that its severe purgative action impeded the absorption of food, and thus lessened the amount of bile formed. He conceives that the administration of any remedy which acts both as a hepatic and an intestinal stimulant to an animal before the process of digestion is complete has two distinct effects: first, to increase the amount of bile; and, secondly, to diminish the absorption of food and bile from the small intestine.

The precise mode of action of these cholagogue medicines the author does not pretend to have definitely settled, the chief object of the investigation being merely to ascertain the facts of the case. Some reasons are, however, adduced for believing that the agents are absorbed into the portal circulation, and act on the liver directly in passing through that organ.

The reporter disclaims any intention of reopening the old discussion as to the cholagogue effect of mercury on the human subject, and he distinctly points out that the present researches are to be regarded simply as a contribution to comparative physiological pharmacology. At the same time, he invites clinical investigators to compare the results he has obtained by experiment with those which may be observed in human pathology and therapeutics. It is to be hoped that this report may enlist into the ranks of precise clinical observers some of those physicians who are in the habit of giving their five grains of blue pill, with equal confidence in its efficacy and indifference as to its mode of action.

We publish this report in a form which renders it suitable for separate binding in a volume; and various reports to the Scientific Grants Committee by other investigators, which we shall publish *seriatim*, will be issued in a similar form. Thus these reports may be bound so as to form a distinct and accessory volume to the JOURNAL, which will, we trust, have a great permanent value. This will serve to give a distinct place in the medical library to labours of a kind eminently calculated to widen and render more secure the bases of the progressive art and science of medicine. It is too much the tendency of the day to divorce pure physiological study from medicine. It is our aim to maintain them in an indissoluble connection equally profitable to both.

PROVIDENT INSTITUTIONS AND HOSPITALS.

VI. CIRCUMSTANCES OF PATIENTS.

IT must be manifest that our comments upon this large subject would be incomplete, unless we devoted one article at least to the consideration of the circumstances of the patients who frequent our hospitals and dispensaries. It is interesting to note the great advance which Hospital Reform has made during the last five years. In 1870, the mind of most hospital managers was a blank so far as the great questions of (a) who were and who were not fit objects of charity; (b) how many patients ought to be seen by each honorary officer in a given time; (c) were the hospitals frequented by many of the well-to-do classes; and (d) ought any steps to be taken by the committees of management to obtain definite knowledge on one or all of these points, or did their duties begin and end in providing the means whereby the honorary medical staff were enabled to minister to the wants of all applicants sent to them with a governor's letter? It cannot be denied that the old custom of leaving it to the provident habits and independent feeling of the working and lower middle classes to abstain from using the hospitals, except when compelled to do so by long illness or other equally necessitous causes, had a strong hold upon many of the older practitioners and laymen who formed the majority of the managers of these charitable institutions. These were loath to believe that the high wages, full work, and general prosperity of a class would tend rather to lessen than increase that honourable feeling of independence and determination to avoid, if possible, the acceptance of anything which seemed to bear the mark of a charitable gift, which they had been accustomed to regard as one of the most admirable traits in the character of the respectable portion of the lower orders of Englishmen. Nor can we help sympathising with these gentlemen in their anxiety to put the best face on the matter, and to stave off inquiry as long as possible; for they were fearful lest our hospitals, by a too rigid system of inquiry into the circumstances of the applicants for relief, should fall into a greater evil, by causing the really deserving poor to suffer by the delay which might ensue before the patients obtained the relief which their cases required, and by thus lessening the very aim which the founders had in view, viz., to afford instant medical relief of the best kind obtainable to that large class of deserving recipients who inhabited the poorer districts in the immediate neighbourhood of the hospitals. However, the small band of reformers worked quietly on, and the gradual growth of their opinions is clearly indicated in the proceedings of the committees of management of the large London hospitals. In 1872, St. George's Hospital commenced an inquiry into the circumstances of the out-patients; at the London Hospital, the house-committee, in the following year, devoted much time and attention to the same subject; and their example was immediately followed by the authorities of University College, Charing Cross, and the Westminster Hospitals. Each hospital, of course, took a different means of pursuing the object they all had in view; thus, St. George's Hospital accepted the proffered aid of the Charity Organisation Society; the London issued a series of questions to each member of the honorary medical staff; whilst University College and Westminster appointed special committees to examine and report upon the whole question; and the council of Charing Cross Hospital referred it to the medical committee of the hospital. During the present year, the Royal Free Hospital, the Westminster Hospital (the recommendations of the earlier committees not being considered satisfactory), the Children's Hospital in Great Ormond Street, the Great Northern Hospital, St. Mary's, and King's College Hospitals, have all taken up this subject, and, with the exception of the two last named, at which the inquiries are not completed, all have introduced considerable modifications into their respective systems. No inquiry has been undertaken at either of the three largely endowed hospitals, viz., Guy's, St. Bartholomew's, and St. Thomas's.

One provincial hospital, the Queen's, Birmingham, in the latter part of 1873, instituted an inquiry with the aid of the Charity Organisation

and Mendicity Society; and the Manchester Infirmary, as we explained in a former article, has adopted the provident scheme in connection with its out-patient system.

Before we proceed to analyse the result of these various inquiries, we wish, very briefly, to deal with an objection raised against all of them by many people, and notably by Mr. J. C. Wordsworth (*vide* JOURNAL, vol. i for 1875, page 761), on the ground "that a large proportion of those who write on, or inquire into the cause of, hospital abuse, seem to ignore that form of the abuse which concerns the in-patients of our hospitals, and treat only of out-patients". The reason—for we admit the general truth of this assertion—is not far to seek. All who have had experience in hospital administration will readily admit that the peculiar conditions which attach to all in-patients, are quite absent when we have to deal with the large number of persons who flock to the out-patient departments for temporary relief. When a patient is admitted into the wards of a hospital, he is placed under a *constant* supervision of the honorary medical staff and the authorities. His circumstances can soon be ascertained from his habits, the friends who visit him, and the inquiries which are made from time to time as to his welfare.

We have had frequent opportunities of testing the efficiency of this check upon the admission and retention of improper cases; and we are convinced that, where abuse has taken place, it has been, as a rule, with the knowledge and tacit consent of the honorary medical officer under whose care the patient happened to be. This gentleman has argued, no doubt, that, although the patient in question could pay a reasonable fee for his or her attendance, still the fee would not remunerate him for the constant additional care which the case would require if it remained at home, and were attended to by the anxious but indifferent nursing which friends are always willing to afford. He doubtless consoled himself, in these cases, with the reflection that the severity of the case and the clinical interest attaching to it justified him in admitting it to the wards of a general hospital. We have merely mentioned the worst kind of abuse to which the in-patient departments of hospitals are liable, because we are convinced, from the watchful eye which the managers keep upon the circumstances of the in-patients, that the abuse practised by this class of patients is very small indeed. In proof of this, we may quote the result of an inquiry by the Charity Organisation Society into the circumstances of the in-patients found on a given day in the wards of the Queen's Hospital, Birmingham. Eighty-eight cases were examined; and it was found that only two cases—exclusive of the accident ward, which, from the nature of the cases, it would not be fair to include—were unsuitable. The real reason why writers upon this subject refer so little to the in-patients is, because their experience in hospital administration teaches them that the ease with which an improper case can be at once detected and expelled renders it comparatively easy for the managers to prevent entirely the admission into, or at any rate the retention of improper cases in, the hospital wards.

We must now examine the results arrived at and the conclusions formed by the managers of the various hospitals at which inquiries have been instituted. We would here state, that our own observations lead us to the conclusion that the patients to be found in the out-patient waiting rooms of the London hospitals are, as a rule, in much poorer circumstances than those usually met with in the provinces. It seems to us, after close observation, that the London hospitals are abused in a totally different way from the provincial hospitals. For, whereas a large number of paupers, or of people on the verge of pauperism, are found in attendance at the London hospitals—and it is by offering facilities to this class, which properly belongs to the Poor-law medical officers, that abuse creeps in—in provincial towns, on the other hand, the out-patients, as a rule, are drawn in the main from the well-to-do working and lower middle or small shopkeeper classes. If this be borne in mind, it will throw much light upon the result of some of the conclusions come to by the London managers. The St. George's authorities found that they were justified in rejecting the following cases for the reasons assigned: 31 parish cases, 22 able to pay, 8 left on hearing of inquiry, 5 soldiers' wives, and 1 soldier, 1 police constable, 1 pensioner of Chelsea Hospital; making

a total of 69, who, for various reasons, were not received as out-patients. Of 24 other cases referred to the Charity Organisation Society, 11 were found suitable, 6 were refused, and 7 did not return. This inquiry cannot be regarded as in any way a complete one, if we except the last 24 cases; because only a few out of the whole number of out-patients (9,797) were really sifted thoroughly. Nevertheless, it is obvious that considerable abuse did exist in 1872, and, we have no doubt, does now exist at St. George's Hospital.

The London Hospital, situated as it is amongst one of the poorest populations of the metropolitan district, has, doubtless, many of the pauper classes daily attending the out-patient department. We regard the report of the House-Committee as one of the most curious pieces of hospital literature which has ever been issued. It is evident from the first that the more influential portion of the Committee felt convinced that very little, if any, abuse prevailed at their institution. The report states (a) that—out of a total of 43,808 *genuine* out-patients, 24,754, for various reasons—all accidents, minor casualties and accidents; in-patients requiring further treatment as out-patients; patients of special departments, dental and maternity cases—hardly came within the scope of the inquiry; thus leaving, after deducting 2,960 renewals, 16,094 ticket cases, "which alone admit of any sifting to shut out improper applicants"; (b) that a large number of these cases were sent by the clergy in poor and populous east end districts, who, they consider, "may be presumed to have the best acquaintance with the wants of the surrounding poor"; (c) that "many persons in receipt of parish relief doubtless obtain assistance"; and "that many in addition would receive additional benefit if provided with food and clothing, as well as medicine" (many of these also belong to the pauper class); (d) that "improper cases do apply, and do receive gratuitously medical aid, which they ought to obtain for payment elsewhere"; and the Committee proceed to report that, having every confidence in the careful inquiries made by the governors and clergy, who mainly distribute the out-patient tickets, "they believe that by far the larger proportion of the London Hospital out-patients are (as stated by the majority of the staff) suitable recipients of hospital charity". We regret we cannot quote at greater length from a report which so ably represents the views and conclusions of those who believe that no great abuse attaches to the present out-patient system. It is universally admitted that this hospital is well managed, and that it is governed by some of the ablest administrators of the present day; still we cannot but regret that the House-Committee did not see the importance of testing the accuracy of the conclusions which they formed on hearsay evidence—or, more correctly speaking, on the impressions of the majority of the medical staff who have already too much to occupy their attention, without troubling themselves about the circumstances of the patients they have to attend—by calling in the aid of the Charity Organisation Society, and giving them an opportunity of investigating the first thousand or so cases which presented themselves for treatment. Again, they rely too much upon the care exercised by the governors and the clergy in the distribution of the tickets; for it has been shown, over and over again—to instance one case by Dr. Heslop of Birmingham, only recently—that practically the ticket system is no check whatever upon hospital abuse. Will the authorities of the London give the Society an opportunity of testing the class of patients they treat? We hope they will; because if they can show that no abuse exists at their hospital, having probably the largest out-patient department in London, either by the treatment of the well-to-do, or, of what we suspect to be far more likely, of pauper cases, they will have proved, we are bound to admit, that little real abuse exists, at any rate, in London; but if they fail to do so, we are convinced they, and all the other managers of London hospitals, will soon put a stop to abuse of this kind by decided and united action. There is, we fear, too great a love of permissive legislation in this matter; too strong a desire to let well alone; too much taken upon trust, and far too little decisive action.

The authorities at St. Mary's, at University College, and at Charing Cross, have all arrived at nearly the same conclusions as the London Hospital: viz., that little, if any, abuse takes place at their respective

EXPERIMENTS ON THE BILIARY SECRETION OF THE DOG.

BY WILLIAM RUTHERFORD, M.D., F.R.S.E.,

Professor of the Institutes of Medicine in the University of Edinburgh; and

M. VIGNAL.

INTRODUCTION.

THE influence of mercury, podophylline, and taraxacum upon the biliary secretion of the dog was some years ago investigated by a committee, of which Professor Hughes Bennett was chairman and reporter. Dr. Arthur Gamgee and Dr. Rutherford were the two junior members of the committee, upon whom devolved the task of performing the experiments. On the recommendation of the committee, they resorted to the method of establishing permanent biliary fistule in dogs: they then gave the animals a fixed diet, and analysed the bile secreted daily before and after the administration of various substances, and they observed that "spontaneous diarrhœa, dysentery, and purgation produced by pilula hydrargyri, calomel, corrosive sublimate, and podophylline, always diminished the solid constituents of the bile, and, with one exception, the fluid portion of the bile also" (*British Association Reports*, 1868, p. 229). The observations were made with such laborious carefulness, that the truth of these facts need not be called in question. It is not intended to reopen here the controversy raised by opinions expressed regarding the interpretation of these and other facts, it being the object of the present report to give the results of experiments performed by a different method.

Two years ago, Röhrig ("Experimentelle Untersuchungen über die Physiologie der Gallenabsonderungen"—Stricker's *Jahrbücher*, 1873, p. 240) performed a number of experiments on the effect of various substances on the biliary secretion. He observed the rate of the biliary flow from temporary fistulæ in fasting curarised animals before and after the injection of purgative agents into the stomach and intestine. He found that large doses of croton oil greatly increased the secretion of bile, and that a similar effect, though to a less extent, was produced by colocynth, jalap, aloes, rhubarb, and senna, and sulphate of magnesia—the potency of these agents as hepatic stimulants being in the order mentioned. He found, moreover, that castor-oil had little effect, and that calomel, while it seldom recalled the biliary secretion after it had ceased, nevertheless somewhat augmented it when it was taking place slowly.

Röhrig's statement with regard to calomel does not much differ from that made by Hughes Bennett's committee, and he made no experiments with podophylline and taraxacum; nevertheless, he did find that certain purgative agents, when given to animals that are *fasting*, increased the biliary secretion, while the committee found that in *non-fasting* animals, purgative action induced by podophylline, calomel, etc., diminished the amount of water and solids of the bile secreted in the twenty-four hours.

It appeared to the reporter that the subject should not be allowed to remain in its present position: accordingly, he undertook the following research, and invited the co-operation of Monsieur Vignal, who had come to do some work in the physiological laboratory of the University of Edinburgh.

METHOD OF EXPERIMENT.

All our experiments were performed on dogs that had in nearly every instance fasted about eighteen hours. After paralysing the animal with curara, and establishing artificial respiration, we opened the abdomen in the linea alba, and tied a glass cannula in the common bile-duct, near its junction with the duodenum. To the end of the cannula which projected from the abdomen we attached a short India-rubber tube, and to the end of this again a short tube of glass, drawn to a narrow aperture, so that the bile might drop from it. The gall-bladder was then compressed, in order to fill the whole tubing with bile, and the cystic duct was clamped to prevent the return of the bile to the gall-bladder, and so compel all the bile secreted by the liver to flow through the cannula. The wound in the abdominal wall was then carefully closed; and in all our later experiments the animal was thoroughly covered with cotton-wool, in order to quickly restore it to its normal temperature.

Röhrig estimated the velocity of the biliary secretion by counting the seconds that elapse between the fall of the drops from the orifice of the tube. A single trial convinced us that this method is extremely laborious, and by no means accurate, seeing that it does not permit continuous observation for any length of time. Moreover, we saw that the degree of viscosity of the bile caused a variation in the size of the drops, and, therefore, in the intervals between their fall. We therefore abandoned this for the more accurate method of allowing the bile to flow into a fine cubic centimeter measure, and recording the quantity secreted every quarter of an hour. In addition to constant collection of the bile, this method has the great advantage of permitting a graphic representation of the results. We, moreover, took the trouble to analyse the bile in many cases, and to make *post mortem* examinations of the alimentary canal; points entirely omitted by Röhrig, but which, nevertheless, have yielded valuable results.

Until it is attempted, one might suppose that this mode of experiment is extremely simple, but it is by no means so simple as it appears. It is needful to manipulate the abdominal viscera with great care, and to avoid all dragging at the bile-duct, otherwise the secretion of bile becomes so irregular that the experiment may be useless. The cannula must be very carefully retained in a position which will permit its moving with the diaphragm, but will prevent it from twisting the duct, and thus impeding the exit of the bile by forming a valve at its orifice.

The respiration requires to be maintained with great regularity, otherwise the biliary flow is rendered unequal by irregular diaphragmatic compression of the liver. Moreover, if the respiration be deficient, the secretion of bile is always diminished (Röhrig). In the cases indicating the biliary secretion in these experiments, some of the oscillations are probably owing to varia-

tions in the respiration, especially to variations in the amount of diaphragmatic compression of the liver; for we were obliged to have the respiration kept up by the hand, and this is never so regular as a machine. Notwithstanding this, however, the main results of the experiments are perfectly clear.

As is well known, curara is of great value in such experiments, for, by paralysing voluntary movement, it prevents the irregular outflow of the bile, which certainly follows irregular contraction of the abdominal muscles; and if care be taken to give doses just sufficient to produce this paralysis, the biliary secretion is not apparently affected; but if too much be given, the heart is rendered weak and irregular, and the secretion of bile diminishes.

Lastly, it is essential that the fall of temperature which follows the opening of the abdominal cavity be speedily recovered, otherwise the biliary secretion may be abnormally low at the outset of the experiment.

SECRETION OF BILE IN A CURARISED FASTING DOG.

In all the illustrations, the numbers under the horizontal line indicate the hours during which the secretion of bile was observed, while those to the left of the vertical line indicate in cubic centimeters the amount of bile which flowed from the cannula; the dots in the curve indicate the quantities of bile collected every quarter of an hour. The vertical dotted lines that cross the curves in the illustrations indicate that something was given to the animal. In all such experiments the amount of bile first collected is usually much greater than that at subsequent periods. This apparently results from the sudden diminution in the resistance to the exit of the bile which follows the opening of the duct. The first one or two collections are therefore not reliable indices of secretion, and they are consequently omitted from some of the curves altogether.

The solution of curara employed in all the experiments was a filtered aqueous solution, every minim of which contained one milligramme of the poison. The solution was always injected into the jugular vein.

Experiment 1. Dog weighing 7.6 kilogrammes.*—Twenty milligrammes of curara were injected into the jugular vein at *a*, (Fig. 1). The abdomen was then opened, and the cannula placed in the common bile-duct, as above indicated. The wound in the abdomen was closed, the animal enveloped in cotton-wadding, and the bile collected. As the experiment proceeded, the effect of the curara gradually wore off, owing to its elimination, and it was necessary to inject from two to four milligrammes from time to time (*b, c, d, e, f, g*, Fig. 1). If the curve be examined, it will be observed that these doses had no apparent effect on the biliary secretion. Large doses weaken the heart, and diminish the secretion possibly on that account; but doses so small as those given in these experiments have apparently no effect, and therefore their administration is not indicated in subsequent curves.

The secretion of bile in this case was fairly regular. After falling until the middle of the third hour, it increased for a time and then fell somewhat. At the eighth hour it was slightly below what it had been at the close of the first.

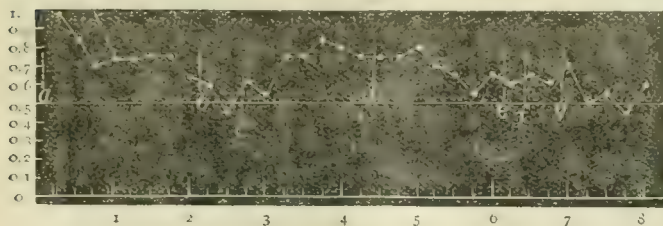


Fig. 1.

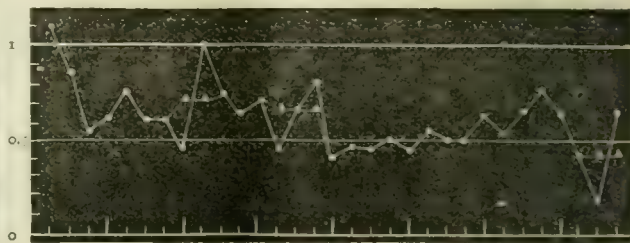


Fig. 2.

Fig. 1.—Secretion of bile in a dog that had fasted eighteen hours. Curara only given. *a*, 20 milligrammes; *b*, 2 mill.; *c* and *d*, 4 mill.; *e, f, g*, 3 mill. of curara injected into vein.

Fig. 2.—Secretion of bile in a dog that had fasted nineteen hours. Curara only given. The unbroken curve joins the readings of the bile that were actually taken every quarter of an hour. The broken line and triangles indicate what was probably the real secretion of bile when the outflow was irregular. (See text.)

Experiment 2. Dog weighing 15 kilogrammes.—In this experiment the secretion of bile with doses of curara similar to the above was again observed. The biliary flow was not so regular in this case. It will be noticed (Fig. 2) that a high and a low reading succeed each other more than once. It is just possible that this may have been owing to a variation in the facility of exit of the bile, owing, perhaps, to some slight shifting of the cannula. The real amount of biliary secretion in such cases would probably be more nearly represented by taking the mean of the high and the low reading, as indicated by the dotted line and triangles.

Composition of Bile in a Fasting Dog. Analyses were made of the bile secreted by the second dog during the first, fourth, and last hours of the experiment. The following are the results.

TABLE I.—Composition of Bile secreted by a Dog paralysed by Curara after fasting eighteen hours.

Experiment 2.	Bile secreted during		
	First Hour.	Fourth Hour.	Last Hour.
Water	89.53	89.58	89.55
Bile-acids, pigments, cholesterin, fats	8.73	8.68	8.71
Mucus	0.71	0.72	0.72
Ash	1.03	1.02	1.02
Total	100.00	100.00	100.00

* A kilogramme is 2.2 pounds.

It therefore appears that in the progress of the experiment the composition of the bile remained almost precisely the same. This is remarkable, seeing that the animal had been deprived of water for so long a time, and, moreover, seeing that the entrance of the bile into the intestine had been cut off. It should be mentioned that in taking the bile secreted near the beginning of such experiments for analysis, we were always careful to eliminate that which had been expressed from the gall-bladder into the cannula.

ACTION OF CROTON-OIL.

Röhrig has placed croton-oil at the head of his list of hepatic stimulants, with the statement that in doses from eighteen drops to a "teaspoonful" it has an exciting effect on the biliary secretion even under the most unfavourable circumstances (*lib. cit.*, p. 250). This substance was therefore made the subject of our first experiments with cholagogues.

Experiment 3. Dog weighing 7.3 kilogrammes.—Considering the small size of this dog, the secretion of bile was unusually great. This probably resulted from digestion being incomplete; for, although the animal was fed seventeen hours before the experiment, at death a quantity of elastic tissue, and a greyish fluid resembling chyme, were found in the stomach. After the secretion had fallen very low, fifteen grains (about thirty drops) of croton-oil, in sixty minims of almond-oil, were injected directly into the duodenum (at *c*, Fig. 3). The dose was a large one, but not so large nor yet so small as the quantities given by Röhrig. After half-an-hour, the fall in the bile-secretion was arrested, and a slight rise took place. Towards the close of the experiment, the pulse became extremely weak.

AUTOPSY.*—The mucous membrane of the upper three-fourths of the small intestine was intensely red, especially in the duodenum, the colour of which resembled that of claret. There was evidence of impending purgation in the small intestine. The weak pulse at the close of this experiment, together with the violent intestinal irritation, suggested that the collapse had been occasioned by the drug, and that a smaller dose should be given in the next experiment.

Experiment 4. Dog weighing 5.9 kilogrammes.—This animal had refused almost all food for nearly two days. Six grains of croton-oil in sixty minims of almond oil were injected into the duodenum (*c*, Fig. 4). No increase of the biliary secretion followed. The pulse became so weak that the experiment was ended two hours and a half after the oil was given.

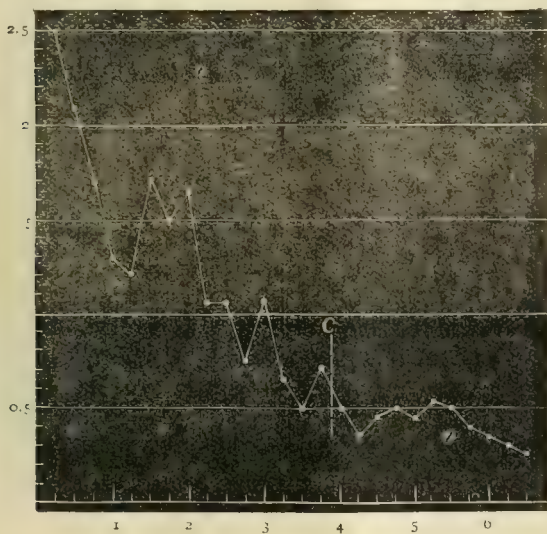


Fig. 3.

Fig. 3.—Secretion of bile in a dog. Digestion incomplete. Fifteen grains of croton-oil injected into duodenum at *c*.

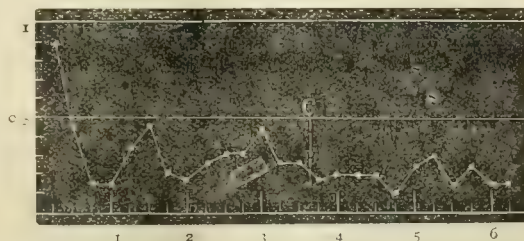


Fig. 4.

Fig. 4.—Secretion of bile in a fasting dog. Six grains of croton-oil injected into duodenum at *c*.

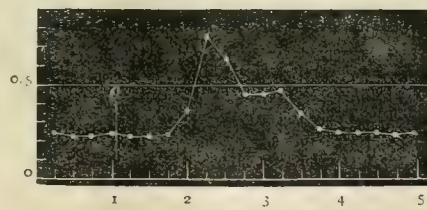


Fig. 5.

Fig. 5.—Secretion of bile in a dog that had fasted eighteen hours. Three grains of croton-oil injected into duodenum at *c*.

AUTOPSY.—The oil had found its way into the stomach. The gastric mucous membrane was of a claret colour. There was slight redness of the duodenum, but no evidence of purgative action.

Experiment 5. Dog weighing 3.1 kilogrammes.—In this experiment, only three grains of croton-oil in sixty minims of almond-oil were injected into the duodenum. A decided increase in the biliary secretion began within an hour after the injection. The secretion soon reached a maximum, and then fell in the course of two hours to the same level as before the injection. (Fig. 5.)

AUTOPSY.—A portion of the oil was found in the stomach, and another portion half way down the small intestine. The gastric mucous membrane was intensely red. There were patches of slight redness here and there in the duodenum. No evidence of purgative action.

These experiments led us to doubt the great potency of croton-oil as a cholagogue; and, seeing that probably no one would think of giving this irritant for the purpose of stimulating the liver, we laid it aside.

* In all cases, unless otherwise stated, the autopsy was performed immediately at the close of the experiment.

ACTION OF PODOPHYLLINE.

Experiment 6. Dog weighing 15.3 kilogrammes.—The secretion of bile fell very gradually (Fig. 6). Ten cubic centimeters of water were injected into the duodenum at *w*. There being no apparent effect, 100 cc. were injected at *w'*. The slight rise in secretion that ensued at the end of an hour may have been owing to this; but it is not likely, seeing that water is absorbed with rapidity. At *p*, ten grains of podophylline, suspended in 10 cc. water, were injected into the duodenum; and it is probable that the rise in secretion two hours afterwards was due to the podophylline.

AUTOPSY.—The mucous membrane of the duodenum, and to a slight extent below it, was very vascular, and this part of the intestine contained a considerable quantity of a slightly brown fluid, thereby affording evidence of a purgative effect.

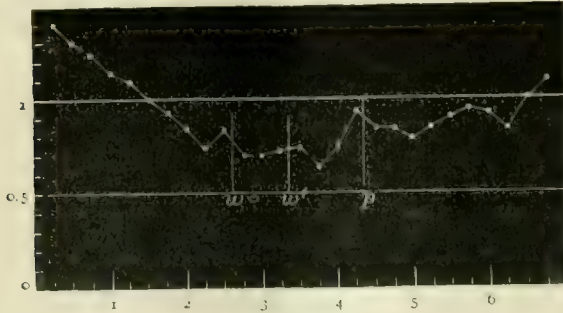


Fig. 6.

Fig. 6.—Secretion of bile in a dog that had fasted nineteen hours. *w*, 16 cc. of water; *w'*, 100 cc. of water; *p*, ten grains of resina podophyllina in 10 cc. of water injected into duodenum.

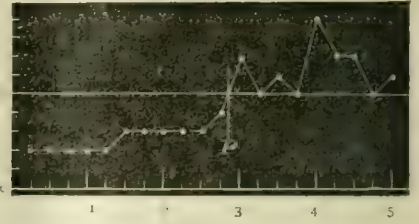


Fig. 7.

Fig. 7.—Secretion of bile in a fasting dog before and after injection into the duodenum of eight grains of podophylline in 10 cc. of water at *p*.

Experiment 7. Small Dog.—Eight grains of podophylline in 10 cc. of water were injected into the duodenum (*p*, Fig. 7). Before this, the bile-secretion was low, and remarkably regular. The distinct rise in the secretion an hour after the injection was probably owing to the podophylline, but the experiment was not continued sufficiently long to show the full effect. At death, there was increased redness of the duodenal mucous membrane, but no distinct evidence of purgative action.

Experiment 8. Small Dog.—Eight grains of podophylline in 25 cc. of water were injected into the duodenum (*p*, Fig. 8). The subsequent increase in the biliary secretion was most marked about four hours after administration, but by the end of the sixth hour the effect had greatly diminished.

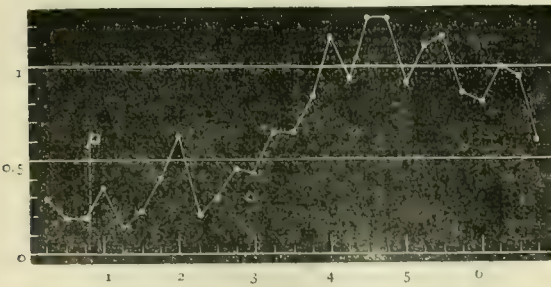


Fig. 8.

Fig. 8.—Secretion of bile in a dog that had fasted nineteen hours. Eight grains of podophylline in 25 cc. of water injected into duodenum at *p*.

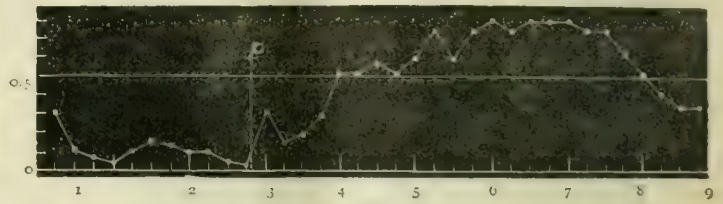


Fig. 9.

Fig. 9.—Secretion of bile in a dog that had fasted eighteen hours. Six grains of podophylline in 9 cc. of water injected into duodenum at *p*.

AUTOPSY.—The upper part of the small intestine contained a viscous brownish fluid. As the small quantity of water injected had probably been absorbed, the intestinal contents were regarded as distinct, though not abundant, evidence of purgative action. The mucous membrane, to the extent of about eighteen inches below the pylorus, was extremely vascular. The remainder of the intestine was pale. A small quantity of mucus was found in the stomach, the mucous membrane of which was pale.

Experiment 9. Dog weighing 6.6 kilogrammes.—Six grains of podophylline in 9 cc. of water injected into the duodenum (*p*, Fig. 9). The subsequent rise in the bile-secretion is very evident. The secretion attained its maximum between three and four hours after the administration of the podophylline. As in the previous case, the effect on the liver had very greatly diminished by the end of the sixth hour after administration.

AUTOPSY.—There was distinct, though not abundant, evidence of purgative action in the small intestine, and decidedly increased vascularity of the mucous membrane in its upper two-thirds; nothing remarkable in the stomach or large intestine.

Probably every one will be struck by the slowness and the small extent of the purgative action in these experiments, notwithstanding the large doses of podophylline. That this was owing to the insolubility of podophylline in water is probable, from the two following experiments. Zwicke, Hagentorn, and Köhler having shown (Fraser's Report, *Journal of Anatomy and Physiology*, v, p. 393) that convolvulin, elaterin, and some other substances have no purgative action unless they come in contact with bile—which, therefore, appears to be a solvent for them—it occurred to us that the tardy action of the podophylline might be owing to the non-entrance of the bile into the intestine. Accordingly, in the next experiment the podophylline was suspended in bile.

institutions; and yet not one of them has ventured to institute a searching examination into the circumstances of their patients, but has simply relied upon the impressions of those who they consider best capable of giving an opinion. The truth of the matter is that, for some reason or other, the lay-committees are inclined to avoid their legitimate work by throwing too much responsibility upon the honorary medical staff, who are already overworked, and who have neither time nor inclination to fill the rôle of amateur detectives.

We shall not refer at length to the reports of the special committees of the Royal Free, the Children's in Great Ormond Street, the Great Northern, and the last report of the Westminster Hospital because they have all recently appeared in the JOURNAL. Let it suffice to say that the Westminster authorities will find, we fear, that the medical staff will be unable to perform all the work they have placed upon them; and that the plan adopted (so recently as June 25th) at the Children's Hospital, of prescribing for no patient a second time, unless the hospital letter have been stamped by the Committee of the Charity Organisation Society for the district in which the patient lives, is worthy of the close attention of all hospital managers.

The Royal Free Hospital, and the Queen's Hospital, Birmingham, are the only two institutions where the authorities have had the courage to put this matter into the hands of an independent body familiar with the work of accurate investigation and the impartial weighing of evidence. In each case, the aid of the Charity Organisation Society has been invoked, which has investigated, at the former, 641, all free, and, at the latter, 366, all ticket, out-patient cases.

The following table shows the result.

	ROYAL FREE.	QUEEN'S.	Total.
	Free Cases.	Ticket Cases	
1. Number who could afford to pay a Private Practitioner	12	64	76
2. Number who can afford to pay to Provident Dispensary	231	Not stated	231
3. Proper Applicants	169	260	429
4. Parish Cases	57	6	63
5. False Addresses	103	34	137
6. Information refused	69	2	71
	641	366	1007

We have here reliable data upon which to ground an opinion. It will be seen that, out of 1,000 cases, less than one half (429) are declared to be fit applicants for relief; and this number would be considerably smaller if those of the Birmingham cases who could afford to pay something to a provident institution had been deducted from the 260 who are declared, in the absence of such provision, to be proper applicants. Again, this table clearly shows the truth of our assertion that provincial hospitals are chiefly abused by the well-to-do classes; for, whereas the London hospitals do a large share of the Poor-law medical officers' work, the pauper cases in London being five times more numerous than at Birmingham, the well-to-do, on the other hand, were ten times greater at the latter than at the former institution.

It is worthy of remark that the abuse is equally great under the ticket as under the free system. In the face of the facts here brought clearly before hospital managers, we appeal to them most earnestly to give the system of investigation as pursued at the Royal Free and Queen's Hospitals a fair and impartial trial, in the interests alike of the philanthropic public who support these institutions, and of the really deserving poor, who, under the present system, are often debarred from obtaining that amount of attention which their cases so urgently require.

THE death of M. Marbœuf, the originator of *crèches*, or infant nurseries, is announced.

THE French Institute has awarded the 'ecennial prize of 20,000 francs (£800) for 1875 to M. Paul Bert work on the effects of barometric pressure.

DR. JÜNGKEN, the Senior Professor of the Faculty of Medicine in the University of Berlin, died on September 8th, at the age of eighty-two.

THE order of the Red Eagle, of the third class, has been conferred on Dr. Litzmann, the well-known Professor of Obstetric Medicine in the University of Kiel.

TWO new medical journals have appeared in Paris, already well provided in that respect. The new aspirants to professional favour are *Le Paris Médical*, edited by M. Fort; and *Le Journal d'Hygiène*, edited by M. Pietra Santa.

A NEW school of anthropology has been founded in Paris. Courses of lectures on the various branches of the science have been arranged, and are to be delivered at the École Pratique by MM. Broca, Dally, Mortillet, Hovelacque, Topinard, and Bertillon.

THE Royal Commission to inquire into the practice of subjecting live animals to experiments for scientific purposes, met at 13, Delahay Street, on Tuesday and Wednesday. There were present—Viscount Cardwell, Mr. W. E. Forster, Sir John B. Karslake, Mr. T. H. Huxley, Mr. J. Eric Erichsen, Mr. R. H. Hutton, and the Secretary, Mr. N. Baker.

A LETTER published in the *New York Medical Record*, states that Professor Gross's *Manual of Military Surgery* has been translated into Japanese. The Surgeon-General-in-Chief of the Sanitary Service of the Japanese gave orders for the translation to be made, and has forwarded a copy to Dr. Gross, with a very complimentary letter.

THE first meeting of the Pathological Society for the season, under the presidency of Mr. Pollock, was very well attended. The papers, too, were of considerable interest. For want of discussion, however, the meeting flagged; and, although the sight of the very good specimens shown, and the brief and accurate accounts given, well repaid the trouble of attendance, there was a want of animation in both speakers and audience which must, in the end, affect the popularity of the Society. For this state of things, various remedies may be found. In the first place, speakers at the Pathological Society may with advantage, as a correspondent suggests, whose half-jocose criticism we print next page, take a little more trouble in preparing their notes. There is a middle course between oratorical display which is out of place here, and studied neglect of all the graces of speech and manner which make even plain narratives acceptable; and young gentlemen fresh from the last number of Virchow's *Archives* or Stricker's *Yearbook* need not superciliously flourish the last long word or the newest fragment of a view under the noses of their seniors without deigning to explain what they mean, or why they have "thought this specimen perhaps of some interest". The Society is very grateful to those who will take the trouble to clothe their thoughts in neat and pointed phraseology, and to avoid the manner of "throwing bones to a dog" which has come to be fashionable among a certain section of young pathologists. The meekness, patience, and bewilderment with which some of the less learned members of the Society sit out these displays are worthy of more compassionate consideration. The cheerful surprise and timid applause which greeted some attempts of Dr. Greenfield to tell his story with something of point, finish, and scholarly grace, may encourage others to follow his example. But nothing could move the Society to discuss; and so the meeting, though instructive, was decidedly dull.

WE are very glad to hear that a well conceived effort will probably be made by the Council of the Pathological Society, at the instance, we believe, of Dr. Green, one of the secretaries, to elicit some organised attempt at encouraging comment by classifying specimens. Thus a night might be set apart for specimens of syphilitic pathology, a night for specimens of cancerous disease, or of vascular disease, etc. Specimens would be got together in greater numbers, and experts would be en-

couraged to take an active interest in discussing collections of specimens which specially touch their labours. This seems to us a practical and fruitful suggestion.

"AN Old Man from the Country" writes to us:—"I was last night again at the Pathological Society. It was very warm, very crowded, and, I suppose, very successful. But, as even success will bear to be enhanced, I should like permission to make a few ill-natured remarks, such as my age, ignorance, and condition suggest, and as their possible usefulness will perhaps excuse. As an old man, I am perhaps inclined to resent the advantage which 'the boys' have over us oldsters at the Pathological Society. They have it all their own way, and do nearly all the talking and all the applause. I should not mind it so much—for I see my betters frequently sitting mum for a whole session at the feet of very young Gamaliels—if the boys bore their blushing honours more gracefully or attractively. But there has gradually stolen over the Pathological Society a mortal dulness and a cynical puritanism which make the meetings a very different sort of thing now from what they used to be. At half a dozen meetings which I have attended during the last year, I have been painfully affected by the solemn gloom of the proceedings. Deadly liveliness is perhaps the natural characteristic of these scientific funereal rites over *post mortem* specimens. But even the manner of the undertaker varies, and not all his men are mutes. The approved oratorical method which has gained favour at the Pathological Society of late years is a sort of bald and lingering stutter. There is no attempt to give completeness or point to the description, nor any effort to please, interest, or animate the audience by such attention to manner, diction, and method as may clothe the dry bones of a *post mortem* note with busy interest. The discussions which follow—if discussions they can be called, in which nothing is discussed—are commonly intervals of painful silence, in which the President slowly peruses the faces of the uneasy persons before him with an ever-deepening expression of sadness, until the despairing conviction that nobody has anything to say on the last mooted 'subject of interest' overpowers him, when he whispers solemnly to the secretary, and proceeds with the announcement that, 'as no gentleman has any observation to make, we shall pass on to the next specimen'. It does, however, in my experience sometimes happen that a gentleman rises precipitately from a back bench at the last moment, and, from a safe corner, asks 'whether in the last case (one of broken ribs) the speaker examined the urine', or if it were a case of, say, intestinal obstruction, 'whether he used the ophthalmoscope during life'. The answer is sometimes a triumphant affirmative, and sometimes a disconcerted negative, on receiving which the querist subsides without further comment. I am, for my part, however, obliged to him for having broken the spell. His success generally induces some one else, at a later stage, to ask 'whether Mr. A. has looked through the *Transactions* of the Society for the last twenty years before bringing forward his specimen; if he had, he would have found that he (Mr. B.), fifteen years ago, described a specimen which, in various particulars, did not greatly differ from that which Mr. A. has to-night shown'. I do not know whether this style of discussion is as agreeable to all the other members of the Society as it is to me; but I often think that, although the sight of the preparations has been very instructive to me, it hardly repays me for the mental torture which I have suffered from the *gaucherie*, coldness, and mismanagement which often make perhaps the most valuable of our London societies one of the least attractive."

ACONITE.

FROM an elaborate series of observations (*St. Thomas's Hospital Reports*, New Series, vol. v), Dr. John Harley reports conclusions which indicate that, if it be conceded that aconite ameliorates the febrile condition, it does not much control it; and that it cannot in any degree anticipate or cut short the pyrexial stage in a disease (relapsing fever) against which, if it did possess the febrifuge properties ascribed to it, its influence ought to be most marked.

THE CLINICAL SOCIETY.

IN addition to the subjects advertised last week in the *BRITISH MEDICAL JOURNAL* for discussion at the meeting of the Clinical Society to-night (Friday), Mr. Hutchinson will exhibit an infant with a very curious tumour of the skull; and a patient with a peculiar sore upon the tongue, of probably malignant nature.

COVENTRY AND WARWICKSHIRE HOSPITAL.

ON Tuesday evening, a deputation from the "working men" met the general committee for the purpose of handing over the receipts from the Hospital Saturday collection, a sum of £219 : 12 : 5. This is the second year the working men have come forward to assist the funds of a hospital which has been hitherto considerably in debt, and the amount collected on the present occasion shows an increase of £50 on the results of last year's Hospital Saturday, while the expenses of collecting have been only £6 : 10 : 6. One great element of success has been the system of instituting periodical collections in the various manufactories and workshops, either weekly, monthly, or quarterly; and it is hoped, as this idea becomes more ventilated and more earnestly worked, a considerable income will be derived from this source. The working men are represented on the managing committee of the hospital, four being elected annually, so that they may have a voice in the disposal of funds which they have collected.

RECENT URBAN MORTALITY.

DURING last week, 5,323 births and 3,489 deaths were registered in London and twenty other large towns of the United Kingdom. The annual average rate of mortality was 24 per 1,000 persons living; and varied as follows: in Portsmouth it was 17; Edinburgh and Glasgow, 21; London, Birmingham, and Sheffield, 22; Leicester and Wolverhampton, 23; Newcastle-upon-Tyne, 24; Norwich, 25; Sunderland and Manchester, 26; Dublin, Leeds, Liverpool and Hull, 27; Bristol, Bradford, and Nottingham, 28; Oldham, 30; and Salford, 31. The annual zymotic death-rate in the 18 English towns ranged from 2.5 and 2.9 in Norwich and Wolverhampton, to 9.0 and 9.2 in Oldham and Salford. The fatality of scarlet-fever continues to increase, and was greatest in Bristol, Bradford, Oldham, Nottingham, and Salford. Enteric fever is somewhat prevalent in Portsmouth. In London, 2,325 births, and 1,442 deaths were registered. The births exceeded by 24, and the deaths by 41, the average numbers of the week. The 1,442 deaths included one from small-pox, 23 from measles, 122 from scarlet-fever, 9 from diphtheria, 37 from whooping-cough, 29 from different forms of fever, and 78 from diarrhoea; in all, 299 deaths. Scarlet-fever was least fatal in the central, and most so in the south, groups of districts; the fatal cases were especially numerous in Haggerston, Rotherhithe, Peckham, and Deptford. Different forms of violence caused 44 deaths. The Asylum District Fever and Small-pox Hospitals at Homerton and Stockwell contained 320 patients on the 16th instant, of which 53 were under treatment for fever, 250 for scarlet-fever, and one for small-pox. In outer London, 460 births and 228 deaths were registered; and the general death-rate and zymotic death-rate were 15.6 and 3.5 per 1,000 respectively, against 21.8 and 4.5 in inner London. At Greenwich, the mean reading of the barometer was 29.29 inches; the mean temperature of the air was 45.8 deg., or 4.9 deg. below the average of the week; the mean degree of humidity of the air was 82; the direction of the wind was variable; the horizontal movement of the air averaged 10.3 miles per hour; and rain fell on five days, to the amount of .48 of an inch.

GERMAN ASSOCIATION OF NATURALISTS AND PHYSICIANS.

THE forty-eighth annual meeting of the German Association of Naturalists and Physicians was held in Gratz from September 18th to 24th. The session was opened with an address by Professor Rollett; after which the Association was welcomed by the Statthalter of Styria, the Burgomaster of Gratz, and the Governor-General (*Landeshauptmann*) of the province. It was announced that considerable sums had been contributed towards defraying the expenses of the meeting by the Em-

peror of Austria, the *landtag* of Styria, and the municipal authority of Gratz. A letter was read from Herr Stremayr, Minister of Instruction, expressing his regret that his official duties prevented him from accepting the invitation to be present which had been offered to him. There were no fewer than twenty Sections, among which the following were of medical interest:—Section 7. Anatomy and Physiology: President, Professor Stilling. Section 9. Internal Medicine and Dermatopathology: President, Professor Korner. Section 10. Surgery: President, Professor Gurlt. Section 11. Ophthalmology and Otology: President, Professor Blodig. Section 12. Gynæcology and Obstetrics: President, Professor R. von Helly. Section 13. Psychology: President, Professor von Krafft-Ebing. Section 14. State Medicine, including Hygiene and Veterinary Medicine: President, Professor A. Schauenstein. Section 15. Military Medicine: President, Professor Mundy. Section 20. Diseases of Children: President, Dr. Steffen. It was decided to hold the next meeting in Hamburg. The Vienna medical papers, in giving a summary of the proceedings, comment on the somewhat defective character of the arrangements; pointing out especially that the sittings of the medical sections are so timed as to clash with one another, and that sufficient information as to the place and time of meeting, and of the subjects, is not given; and that the "daily journal" is devoted to relating what *has been done* instead of—what is rightly regarded as of more importance—giving notice of what *is to be done*. We shall endeavour to give a notice of some of the papers read in the sections.

THE MEDICAL SOCIETY OF LONDON.

THIS Society opened its session on Monday in its rooms in Chandos Street. There was a strong muster of the members of Council and of Fellows, with an unusually large number of visitors. The consequence was that the ventilating arrangements of the room were severely taxed. Since the last session, Tobin's patent tubes have been applied, but the current of cold air so supplied was quite inadequate to the requirements of the audience. The escape of foul air is met by the shaft of the star burner, but that will not secure a sufficient supply of fresh air. The necessary supply of fresh air into the highly heated apartment was wanting in the new arrangement, which might not be in efficient working order. One of the speakers alluded to the warm reception given to the Fellows, but the oppression was too pronounced to permit the *double entendre* to be accepted as a joke. After the exhibition of a case of cleft-palate, the President, Dr. Routh, gave an address on the interesting subject of Surgical Hyperpyrexia. The subject matter was furnished by five cases which had recently occurred under his care. In several of the cases, the sharp uprise of sudden hyperpyrexia was well shown. The treatment adopted was that of the iced-water bath, and in every case the cold bath was followed by a decided and immediate fall of the temperature, which in one or two instances did not rise again to the same height. In several cases, the difference of temperature in the vagina and axilla was well marked, and several degrees of difference were found at times; the vaginal temperature being invariably above that of the axilla. In one case, the new apyretic agent jaborandi was given with marked effects. The different points touched upon in the paper gave room for a discussion, in which many present took part. From a copy of the bye-laws, with proposed amendments, being hung up for the inspection of the Fellows, it appears that extensive changes are to be made in them.

POISONING BY GOAT'S MILK.

ACCORDING to recent German journals, several cases of poisoning by goat's milk have occurred in Rome. The cases, which all occurred in one locality (Borgo Rione), had the character of cholera, and some of them that of well marked cholera. In some of the cases, recovery took place in twenty-four hours; but most of the patients were ill four or five days. The severity of the symptoms was in direct relation to the quantity of milk used. On veterinary examination, the goats were found to be in perfectly good condition. In their pasture, however,

were found four poisonous plants; viz., *Conium maculatum*, *Clematis vitalba*, *Colchicum autumnale*, and *Plumbago Europæa*. On making a chemical examination of the milk and also of the vomited matters, Professor Ratti found in both colchicin, the passage of which into the milk was thus most probably the cause of the poisoning. It is well known that goats can eat with impunity hemlock and tobacco; but that they also eat colchicum, which acts as an intense poison on cows and other animals, was hitherto unknown. It has been suggested with reference to these cases, that *Momordica elaterium* may have played a part in them as well as colchicum; but Professor Ratti has shown that the elaterium is avoided by goats when they meet with it in their pasture.

NEWS OF LOUISE LATEAU.

A LETTER from Dr. H. Boëns of Charleroi to M. Festaerts, editor of the *Scalpel*, gives some details of the actual state of Louise Lateau, "the mystic of Bois d'Haine". During an illness which lasted about a month, the "stigmatic" bleeding stopped, and the "ecstasies" were replaced by hysterical faintings. Afterwards, the former state of things recurred. M. Boëns, who has set a watch on the family, declares that he is in a position to affirm and prove that Louise Lateau eats and drinks copiously, and performs all the ordinary functions of nature. He adds that "she frequently rubs and scratches with her nails and with a rough cloth, especially during the night, the places where the blood flows; and keeps up on these spots, even mechanically during sleep, pressure with her fingers, so as to maintain a condition of local congestion". Dr. Bourneville, in a recent monograph (*Science et Miracle*), describes a hysterical patient of M. Charcot, who likewise suffers from bleeding of the skin, preceded by pain and convulsive phenomena, with religious hallucinations. The bleedings here also frequently occur at the "stigmatic" localities.

RAT-EATERS.

A SOCIETY has recently been formed at Gembloux, in Belgium, of rat-eaters (*rato-phages*). The members meet once a week: each meeting ends with a grand repast, in which the rat occupies the principal place. This society, following the example of the *Société Hippophagique*, wishes to destroy the prejudice attaching to the flesh of these little animals. With this object, a Belgian *savant* relates that the ancient Romans ate grey mice, seasoned with acorns and chestnuts. Buffon tells that the inhabitants of Martinique take pleasure in eating mice, and hold the musk-rat in esteem as an article of diet. Climbing rats form one of the staples of food in Cuba and Jamaica. Rat's flesh, however, counts its enemies as well as its friends. A mediæval Arab writer, Eby-Bachthar, declared that eating rat's flesh produced great *intellectual weakness*.

THE LATE DR. EDWARD JOHNSON.

WE have this week to record the death of Dr. Edward Johnson, aged 60, who died on Saturday, the 16th instant, at his residence, 19, Cavendish Place, where he had been in practice for fifteen years. Dr. Johnson was well known in professional circles as an able practitioner and an accomplished gentleman; these qualities, together with his amiable disposition and high character, endeared him to a large circle of friends, by whom his loss will be deeply felt. He was a graduate of Edinburgh, but had also studied in Dublin and Paris, and in his earlier years had served in the navy as assistant-surgeon; but the humiliating treatment to which in those days assistant-surgeons were subjected induced him to leave the service. He commenced practice in London in the neighbourhood of his late residence, and rapidly succeeded. For many years, his practice was large, and chiefly amongst the middle and upper classes. His patients were personally attached to him, not only as a kind and skilful medical attendant, but as a friend upon whose advice and judgment they could at all times depend. His death was caused by aneurism of the aorta, involving the innominata and pressing on the trachea, as well as interfering with the pneumogastric nerves. Several prolonged attacks of asphyxia occurred during the two days preceding the fatal event.

THE "CORNWALL" OUTBREAK OF TYPHOID.

SINCE the date of our last report, more cases of typhoid have occurred on board the school-ship *Cornwall*, stationed off Purfleet, six of which have been admitted to the Seamen's Hospital, Greenwich, making, with those previously in the hospital, twenty-six. As many as twenty-eight, however, remain under treatment at Purfleet, where the boat-house has been fitted for their accommodation on shore, nurses being obtained from an institution in town. The entire number of sick at present amounts, therefore, to fifty-four, or about one-fourth of the number of boys on board. The cause of the outbreak is being investigated by the sanitary authority of the river; meanwhile, suspicion is directed to the water-supply, which is obtained in the following manner. An empty open twelve-oared pinnace is towed by another boat every morning from the ship to a jetty, where water is conveyed by pipes above to the river side; India-rubber hose is then attached to the terminal pipe, the stopcock is turned, and the empty boat partly filled, taken back to the ship, and the water pumped out into iron tanks on the lower deck, whence it is distributed by pumping when required, the boat lying alongside uncovered till next day, when the journey is repeated. This mode of water-carriage is open to grave objection; for an uncovered boat, occasionally used (as we understand that this one is) for the conveyance of passengers and stores, is exposed to sources of contamination, such as cannot fail to suggest themselves to anyone acquainted with the most elementary principles of sanitary science. We understand that a similar mode of conveying water in bulk in an open boat was formerly employed by the *Warspite* training-ship, and that, during its continuance, diarrhoea was extremely prevalent among the boys, although the boat was supposed to be cleaned out regularly. It was then determined to well whitewash the boat, and cover it in, and since this has been done it appears that cases of gastric irritation have greatly diminished. We are glad to find that the *Cornwall* has, since the outbreak, effected a reform in this particular, and that the water is now brought from shore in casks. We trust that the authorities of the various other training-ships on the Thames will profit by the lesson afforded by the *Cornwall*, and look carefully to the purity of their water-supply. We learn that, setting aside the present outbreak, only one stationary ship, during the present year, has furnished a case of zymotic disease to the Seamen's Hospital, namely, the *Arethusa*, which sent a boy suffering from typhoid in January. The first case of the *Cornwall* series was sent to the hospital on September 21st. It was a well marked and rather severe case of enteric fever, with the usual symptoms. On October 5th, four others were admitted; and, finally, the number reached twenty-six. These cases presented considerable variety as to symptoms, complications, and course, the majority presenting the ordinary characters of rose rash, diarrhoea, usual temperature, variation, and course; others, again, were examples of a low form of pneumonia, which, bearing in mind its probable origin, might be termed pythogenic, and which is interesting when we consider that it is perhaps oftener than we are aware an unrecognised indication of insanitary conditions. A third and small class were of a still more ambiguous type, being cases of pyrexia, with slight tonsillitic inflammation, cephalalgia, and cervical myalgia, and ending in complete defervescence in about eight or nine days. Isolated cases of this kind would probably be classed as "catarrhal", and are, therefore, very instructive. Headache was a marked feature in nearly all; several were delirious; bronchitis and pneumonia were frequently present; deafness, epistaxis, and slight albuminuria occurred in two. In several instances, the evening temperature in the axilla reached 105 deg. Fahr. Dr. Ralfe, who has charge of the cases, has treated them with quinine, stimulants, as a rule, being avoided, and all are progressing favourably. In concluding our observations on this subject, we wish to call attention to the inconvenience and risk attending the present mode of conveying boys suffering from fever in open boats from their ships to the Seamen's Hospital, and to renew the hope we expressed last week, that the authorities of the Thames training-ships will bestir themselves to combine to provide a hospital for the recep-

tion of cases like the present, so that, if the necessity should again arise, they may be prepared to meet the emergency with promptitude and efficiency.

SCOTLAND.

THE Kilsyth Local Authority met on Friday to consider what steps should be taken to prevent the spread of small-pox, which has assumed an alarming phase during the past week—upwards of eighteen cases were reported. It was resolved to call a special general meeting of the Local Authority for the purpose of erecting a hospital for the small-pox and fever patients, and a committee was appointed to look out for a site.

A CENTENARIAN.

THERE died a few days ago in the Tobermory poorhouse, a man, named John McMillan, who had reached the age of 104 years. He was a native of the parish of Kilmore, and had spent the greater part of his life there. Till within the last few months, he retained all his faculties, and was able to walk about and do the ordinary work of the poorhouse.

THE SANITARY CONDITION OF CARLUKE.

At the last meeting of the Sanitary Committee for the parish of Carlisle, Dr. Littlejohn's report of his visit to Carlisle on the 25th ult. was read. The document, a long one, went to show that the village was in a very unsatisfactory condition as to sanitary matters. The lower portions of the village were especially bad, the whole sewage flowing from the higher to the lower streets. In John Street, there was a most disgusting sewage smell. In the public school, he found the air vitiated, stifling, and unbearable, and saw relays of children standing at the door to get air. He had samples of four wells tested by an analyst; only one of them was found to be a "fairly pure water" for drinking purposes—all of them were unsuitable for washing. The sanitary condition of the place could never be put on a satisfactory footing unless water were brought in by the Local Authority, as the supply from wells was inadequate. The report was laid on the table to be considered at a future meeting.

WEST OF SCOTLAND CONVALESCENT SEASIDE HOME.

At the sixth annual meeting of this institution, Sir Peter Coats, who presided, stated that, since the opening of the institution six years ago, the past year had been the most satisfactory both in the number of patients admitted and in the support of the public in contributions. The number of convalescents taken in was 1,547, an increase of 323 over the previous year, being made up of 742 men, 726 women, and 79 children. There were 117 in the home at the beginning of the year, and 126 at present; there had been two deaths during the year. The institution is supported by subscriptions, donations, etc., of about £2,000 from the general public, and about £1,000 from workmen engaged at public works.

LINLITHGOW LOCH.

A MEETING of the Local Authority to inquire into the alleged unsanitary condition of this loch received a report from their medical officer corroborating that of Professor Maclagan, and showing that he had found the south side in an extremely polluted and filthy state, and dangerous to the health of the inhabitants in the vicinity. The Committee sent the following answer to the Board of Supervision, who had requested the Local Authority to take immediate steps to remedy the evil.

"While it is admitted that from the sewage of Linlithgow there are considerable accumulations in the loch, which may, if not checked, prove injurious to health, it is denied that such accumulations have hitherto had that effect. The death-rate of Linlithgow has been below the average of other similar towns, and at present eels, perch, roach, and other kinds of fish abound in the loch. But assuming that things may get worse instead of better unless something be done to

check growing accumulations, the Local Authority submit that, in the circumstances, Her Majesty's Commissioners of Works, who claim the control and management of the loch, ought to be called upon by the Board of Supervision to afford the requisite remedy by from time to time dredging and cleaning it."

THE LAST CASE UNDER THE OLD ADULTERATION ACT.

LAST week, a druggist in Greenock was charged at the police-court with having sold two ounces of citrate of magnesia, which, on analysis, was found to be a preparation containing carbonate of soda, tartaric acid, sugar, sulphate of soda, and a small portion of citrate of magnesia. Mr. McGowan, public analyst, deposed to having found these ingredients in the sample he analysed. From the evidence of a number of witnesses called for the defence, it appeared that what is generally sold in chemists' shops as citrate of magnesia, consists mainly of carbonate of soda and tartaric acid, with a little sugar, and does not contain a trace of citrate of magnesia. Evidence was also given to the effect that none of the ingredients were injurious to health. The Public Prosecutor asked for a conviction, contending that there was no need to prove that the mixture was injurious to health. The magistrate considered the case not proven. It was the last case to be tried under the old Act.

A MILK EPIDEMIC OF TYPHOID FEVER IN GLASGOW.

IN the JOURNAL for October 2nd, we briefly noted that an epidemic of typhoid fever had broken out in Glasgow, and that there were strong reasons for believing that it owed its origin to milk from an infected farm. An elaborate report from the medical officer of health enters into the question, and shows that the epidemic has had the origin indicated. The report itself is a somewhat long document; and it may be sufficient here to state that, from a house-to-house visitation of certain streets in which the disease was prevalent, the following results were obtained. There were 367 persons using milk from the suspected dairy only (called Dairy X in the report); and, of these, 55 had typhoid fever, and 14 had suspicious sickness. There were 116 using this milk partially; and among them, there were three cases of typhoid, and 16 of suspicious sickness. On the other hand, there were 579 individuals not using this milk; and there was only one case of typhoid, and no case of suspicious sickness. The medical officer points out the difficult nature of the inquiry, and hints that infected milk is oftener the cause of such outbreaks than we can prove it to be. He winds up with the two following lessons which these facts are calculated to teach.

"1. He is satisfied that, if rural authorities throughout the country made a special inspection of the sanitary arrangements of all the dairy-farms, examining particularly the water-supply, and insisting on improvements in the domestic arrangements of washing-houses, the sites of manure depôts, etc., more would be done to exterminate enteric fever both in the country and our large cities than by any other procedure which could be adopted. 2. He is afraid that milk-agents in the large cities are not sufficiently alive to the duty which is imposed upon them, as upon all dealers in articles of food, of seeing to the purity of the article which they sell; and he hints to dairykeepers who are anxious to extend their business, that they should at once introduce a reform in this respect, and seek to satisfy themselves and their constituents that they are furnished with clean and pure milk from tidily kept farms, where no disease is known to exist.—The board wisely directed that this report should be printed in a pamphlet form, and that a copy should be sent to the Board of Supervision, with a request that they should communicate with the local authorities around Glasgow, and require them to enforce the precautionary measures suggested by Dr. Russell."

We heartily endorse the recommendations of Dr. Russell; and we may add that experience has already proved, on a large scale, how well such precautions work. These, and many similar precautions, have been carried out now for some time under the direction of a medical board, consisting of Dr. Murchison, Dr. Sieveking, Dr. Whitmore, and Dr. Hardwicke, by the Aylesbury Dairy Company in Bayswater; and in no instance have the strictest precautions been found to interfere with the requirements of a large business.

IRELAND.

ROYAL COLLEGE OF SURGEONS OF IRELAND.

ROBERT MORTON, M.B., Fellow of the College, of Castleblaney, and Dr. M. J. Malone, Fellow of the College, of Limerick, have been elected examiners in preliminary education in room of Drs. Tweedy and Woodhouse.

THE WEEKLY RETURN OF DEATHS.

DURING the week ending October 9th, the deaths in Dublin represented an annual mortality of 23 in every 1,000 of the population. Zymotic diseases proved fatal in 37 instances. Of these deaths, 4 were caused by fever, 3 by scarlet fever, 4 each by measles, diphtheria, and whooping-cough, and 16 by diarrhoea. The deaths of 12 children were referred to convulsions. In Belfast, there were registered 7 deaths from scarlet fever, 8 from diarrhoea, 4 from fever, 2 from diphtheria, and 1 each from measles and whooping-cough. Four deaths from scarlet fever were registered in Londonderry, and a like number in Cork.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS.

THE following have been appointed office-bearers for the ensuing year. *President:* Samuel Gordon, M.B. *Vice-Presidents:* Lombe Athill, M.D.; Sir Dominic J. Corrigan, Bart., M.D.; Alfred Hudson, M.D.; William Stokes, M.D., F.R.S. *Council:* J. Hawtrey Benson, M.D.; J. M. Finny, M.D.; Thomas Fitzpatrick, M.D.; A. W. Foot, M.D.; T. W. Grimshaw, M.D.; Thomas Hayden, F.C.P.; James Little, M.D.; Stephen M. Mac Swiney, M.D.; J. W. Moore, M.D.; C. J. Nixon, L.C.P.; John M. Purser, M.D.; W. G. Smith, M.D. *Honorary Secretary:* G. F. Duffey, M.D.

COMPULSORY VACCINATION.

At a meeting of the guardians of the North Dublin Union held last week, a memorial was read which had been received from the guardians of the Keighley Union, Yorkshire, asking the board to co-operate in endeavouring to obtain a repeal of the compulsory vaccination law. As a reply to this request, the guardians unanimously passed a resolution approving of the system of compulsory vaccination, and declining to support the memorial. The following extract from the document in question is amusing: "That, regarding vaccination as a doing of evil that good may come, and the vaccination law as a sin against God and man, we, the Keighley Guardians, most respectfully memorialise you to aid us for the highest and most benevolent motive that can animate you, in our efforts to set free the entire country from the cruel despotism of compulsory vaccination," etc.

THE QUARTERLY SUMMARY OF THE REGISTRAR-GENERAL.

DURING the quarter ending on Saturday, October 2nd, 2,246 births and 1,705 deaths were recorded in the Dublin Registration District. The birth-rate was equal to an annual ratio of 29 births in every 1,000 of the population; and the mortality was at the average rate of 22 deaths in every 1,000 persons living. The annual rates of mortality per 1,000 during the quarter in seven other Irish towns, ranged in order from the lowest, were as follows:—Sligo, 14; Galway, 15; Limerick, 20; Cork, Londonderry, and Waterford, 22; and Belfast, 25. In Dublin, 23.2 per cent. of the deaths registered were due to zymotic diseases, and were equal to an annual ratio of 5 per 1,000 of the population. The deaths from zymotic diseases in the corresponding quarter of last year were 540. The 1,705 deaths in Dublin included 140 from diarrhoea, 51 from fever, 45 from whooping-cough, 38 from measles, 28 from scarlet fever (against 250 in the corresponding quarter of last year), 25 from croup, 11 from erysipelas, 9 from diphtheria, 207 from phthisis, 47 from cancer, 105 from bronchitis, and 47 from pneumonia. In Belfast, 253 deaths, or 22.5 per cent. of the total deaths registered, were due to zymotic diseases; of these, 88 were referred to diarrhoea, 60 to measles (which had killed 114 persons in the preceding

quarter), 57 to scarlet fever, 23 to fever, 15 to whooping-cough, 8 to diphtheria, and 2 to small-pox. In Cork, 21 deaths were registered from scarlet fever; and in Londonderry the same disease caused 42 deaths, or one-fourth of the total deaths registered during the quarter. In Dublin, the death-rates at different ages in 1,000 persons living were as follows:—73.2 in every 1,000 children under 5 years of age; 5.2 in every 1,000 persons from 5 to 15 years; 6.1 per 1,000 persons aged from 15 to 20 years; 10.9 per 1,000 persons aged from 20 to 40 years; 21.5 per 1,000 between 40 and 60; 55.8 per 1,000 between 60 and 80; and 102.2 per 1,000 aged 80 and upwards. The mean temperature of the air in Dublin during the quarter was 58.9 deg.; at Greenwich, it was 60.7 deg.; and at Glasgow, 56.7 deg. The rainfall at Dublin during the thirteen weeks measured 8.532 inches; at Greenwich, 10.13 inches; and at Glasgow, 10.91 inches.

SCARLATINA.

SCARLATINA exists to a considerable extent in various parts of Monaghan; and Dr. Burke, Inspector of the Local Government Board, has recommended that the guardians, as the sanitary authority, should use their influence with the managers of the public schools in the district, with a view of having them closed during the prevalence of the disease; which suggestion the guardians have signified their intention of complying with. In Londonderry, during the last three months, forty-two deaths were registered as occurring from this affection, a number equal to one-fourth of the total deaths.

QUEEN'S UNIVERSITY IN IRELAND.

THE degrees obtained by candidates who passed the University examinations of the year 1874-75, were conferred on the 15th instant at Dublin Castle, by his Grace the Duke of Leinster, Chancellor of the Queen's University. During the present academic year, 490 candidates have been present at the University examinations, and of these about one-third have undergone two University examinations within that period; 320 have come up to the standard required by the examiners, 46 have obtained the degree of doctor in medicine, 38 have passed for the degree of master in surgery, and 30 for the diploma in midwifery. Thirty-two candidates have been successful in seeking the degree of bachelor in arts, and fifteen of these are returned as having highly distinguished themselves. The Senate has passed a special grace for conferring the following honorary degrees: that of Master in Arts on Robert Hart, Inspector-General of the Maritime Customs of the Empire of China; that of Doctor in Science upon Peter Tait, Professor of Natural Philosophy in the University of Edinburgh, and on James Thomson, Professor of Civil Engineering in the University of Glasgow, etc. At the annual meeting of Convocation held on the 14th instant, a resolution was passed to the effect that they were of opinion that the salaries of the present professors and officers of the Queen's University and Queen's College are inadequate; and that provision should be made for their superannuation, as has already been made in the Universities of Scotland.

THE MAUNSELL MEMORIAL FUND.

IT is with much pleasure that we notice the continued prosperity of the Maunsell Memorial Fund. Not only has the fund received the unanimous support of all the leading members of the profession in Dublin, and made steady way among the provincial practitioners of Ireland, but it has also enlisted the support of many leading men not belonging to the profession; thus it is with great pleasure that we notice among the subscribers to the fund the names of the Lord Chancellor of Ireland, the Chief Secretary for Ireland, and the Secretary of the Irish Local Government Board. The support of such high officials as these show unmistakably the great appreciation in which Dr. Maunsell's services were held by those who had to deal practically with the question which he discussed in his writings. We hope that those in England who have benefited so much by Dr. Maunsell's writings, will not fail to add their contribution to the Maunsell Fund

through the hands of Dr. Rogers, its London Treasurer, or through the medium of our own office. We may remind our English friends, that the "Rumsey Fund" has supporters in Ireland, and Local Committees have been established in Dublin and Belfast; and we trust that this generous effort of Irishmen to honour the name of an English medical practitioner may be fairly reciprocated by the co-operation of Englishmen to honour an Irishman who laboured in a different part of the same field. The contributions to the Maunsell Fund now amount to over £350. We trust that the list will not close until every Poor-law medical officer in Ireland has contributed his "mite".

KING AND QUEEN'S COLLEGE OF PHYSICIANS.

AT the annual stated meeting of the College, held on St. Luke's Day (18th instant), the following officers were elected for the ensuing year: *President*, Samuel Gordon, M.B.; *Censors*, Lombe Athill, M.D. (*Vice-President*), Arthur Wynne Foot, M.D., Thomas Hayden, M.D., J. W. Moore, M.D.; *Registrar*, J. Magee Finny, M.D.; *Treasurer*, Aquilla Smith, M.D.; *Examiners in Midwifery*, Edward B. Sinclair, M.D., Fleetwood Churchill, M.D.; *Professor of Medical Jurisprudence*, Robert Travers, M.D.; *Representative on the General Medical Council*, Aquilla Smith, M.D.; *Agent to the Trust Estates*, Charles U. Townshend; *Law Agent*, Charles Woodward.

UNWARRANTED CHARGE AGAINST HOSPITAL OFFICERS.

AT a recent inquest held in Dublin, on the body of a little boy who died in Jervis Street Hospital, from the effects of an injury, an attempt was made by the boy's father to prove that the boy had been "brutally murdered" by the surgeons of the hospital. It is scarcely necessary to say that the charge was unfounded; but we regret that several attempts have been recently made in Dublin to transfer the "cause of death" from the "accident" to the surgeon. We believe such cases were unknown before the occurrence of the celebrated cases in which charges were made against eminent Dublin surgeons; in one case, at the Richmond, and in the other, at St. Patrick Dun's Hospital. A certain Dublin newspaper recently attempted to raise the question, as to whether a patient died of an accident or of the "treatment" received in another Dublin Hospital. All these charges were utterly without foundation; but, when we consider the uncertainties of the law and the vagaries of juries, especially of coroners' juries, we may congratulate the surgeons of Jervis Street Hospital that they were protected from further vexatious proceedings by action of the coroner's jury. The jury considered any adjournment unnecessary, as most of the surgical staff of the hospital were voluntarily present to answer any charge that could be made against them, and there was not the slightest foundation for the opinion expressed by the child's father. The following verdict was returned: "That William Ormond died in Jervis Street Hospital on October 11th, 1875, in consequence of injuries resulting from a fall accidentally received on July 19th, 1875. We are of opinion that deceased was treated with every kindness and skill by the surgeons of Jervis Street Hospital, and that he had had the advantage of more than ordinary care and attention."

MILITARY AND NAVAL MEDICAL SERVICES.

MOVEMENTS OF ARMY MEDICAL OFFICERS.—Surgeon-Major J. B. Hamilton, M.D., and Surgeon E. M. D. FitzGerald, M.D., have sailed for India in H.M.S. *Malabar*, on exchange.—Surgeon-Major W. M. Skues, M.D., has returned home from Malta after a tour of duty at that station.—Surgeon-Major J. G. Leask, M.B., has been ordered to take up duty at a home station after a tour of service in India.—Surgeon A. G. Bartley, M.D., has been appointed for duty to the Army Service Corps, *vice* Surgeon J. H. Ussher, M.B., who has been posted to Armagh.—Deputy Surgeon-General Best, after a long service in India, is about to join the staff at home. Mr. Best went out to India in 1868, after his exchange from the 68th Light Infantry, and has completed five years' service in the East in the rank of Deputy Surgeon-General.

MEDICAL ADVERTISING.

At a recent meeting of the East Surrey District of the South-Eastern Branch, held at Reigate on October 14th, the following resolution, proposed by Dr. HOLMAN, and seconded by Mr. E. H. GALTON, was carried unanimously:

"That, in the opinion of the meeting, the practice of continuous advertising of medical books in the non-medical papers is derogatory to the interest and dignity of the profession, and should be abandoned."

In commending the resolution to the meeting, Dr. Holman took occasion to point out that it did not reflect on advertising in medical journals; although even that practice was, in his opinion, carried to excess in the present day. He feared that books were but too often written to obtain notoriety and publicity for their compilers; not because these authors, as they would wish to be styled, were capable of imparting any specifically new information with regard to the subjects they took in hand. He considered that the far more objectionable practice of continuously advertising medical works in non-medical prints, could only be for the sake of drawing the attention of the public to the author in his professional capacity, and therefore as a practice which tended to lower the members of a liberal profession to the level of tradesmen, or of a charlatan vaunting his own nostrums. Dr. Holman considered the specialists to be peculiarly open to animadversion on this score; and remarked, that the only part of the human body which had not been repeatedly written upon and advertised was the much neglected umbilicus, which, up to this time, had escaped the notice of those gentlemen who sought at the same time to benefit the public and themselves by somewhat illegitimate means.

THE MEDICAL SCHOOLS.

THE annual registration at the Royal College of Surgeons of gentlemen pursuing their professional studies at the eleven recognised metropolitan hospitals has been brought to a close, and the return forwarded to Mr. Charles Hawkins, the Government Inspector. It appears that St. Bartholomew's Hospital takes the lead with 326, followed by Guy's Hospital with 311; University College, 283; St. Thomas's Hospital, 188; St. George's, 144; the London, 116; King's College, 115; the Middlesex Hospital, 97; St. Mary's, 87; Charing Cross, 61; and the Westminster, 26. The new entries, in which much interest is taken, are as follows: St. Bartholomew's, 116; Guy's, 91; University College, 84; St. Thomas's, 47; St. George's, 42; Middlesex, 32; King's College and St. Mary's, 30 each; the London and the Charing Cross, 26 each; and the Westminster, 11. Total, 535. The following table of the comparative increase in the number of students during the past decade will, no doubt, be read with some interest.

In 1865,	the number of students registered was	1,013.
1866,	"	1,027.
1867,	"	1,125.
1868,	"	1,194.
1869,	"	1,241.
1870,	"	1,298.
1871,	"	1,475.
1872,	"	1,496.
1873,	"	1,608.
1874,	"	1,745.
1875,	"	1,754.

The returns from the provincial schools have not yet been received.

QUEEN'S COLLEGE, BIRMINGHAM.

THE Introductory Address was delivered on October 1st by the Rev. W. H. POULTON, Warden of the College.

He commenced by apologising for the fact that he, a non-professional and non-medical man, should deliver the first lecture. Some of their friends might take it as strong evidence of the truth of the assertion they so industriously circulated, that the College was a priest-ridden institution. He considered, however, that it might be taken as an indication of the entire unanimity which existed between the two departments—medicine and theology—of the College. As to the impossibility of the two classes of students mixing together, he held it to be an entirely groundless fear. Each class, he believed, would act most beneficially upon the other.

He wished to lay before them that day one or two points connected with medical education which had been often in his thoughts. Since his connection with the hospital, many changes for the better had been brought about, amongst which was the substitution of a primary examination in general literature in place of the old system of apprenticeship. He thought most of them would agree that that change had tended to raise the general standard of education amongst the students, and to stimulate them to further efforts in the prosecution of their professional studies. It was also to the advantage of the students themselves.

The point to which he desired chiefly to draw attention was the length of time that students might waste in attendance at the national school and hospital. This concerned more especially parents and guardians, who must feel great anxiety about their sons and wards. A young man passed his preliminary examination, and registered his name as commencing his professional education. Neither the examining boards nor the London or provincial schools, however, trouble themselves much as to how long a time elapsed before he presented himself for examination. In his experience, he had known young men hanging about the college and hospital for seven, eight, nine, and even ten years, without presenting themselves as candidates for examination. No doubt this deterred many parents and guardians from allowing their sons to enter the profession. Nor was this waste of time injurious only to young men themselves. It had a baneful effect on their fellow-students. At universities, this was obviated by there being a fixed time within which certain examinations were expected to be passed. In the case of medical students, he could not but think that some similar restrictions might without any hardship whatever be made. They might fairly ask examining boards to help them. They might make some difficulty about accepting any student who presented himself for examination after the prescribed period, or they might make the examination more stringent, according to the number of years by which the limit had been passed. This latter alternative he should much prefer. After a time, it might be possible to shorten the limits first recommended. Of course, there would be difficulties in the way of the adoption of such a course; but he did not see why some considerable change for the better might not be made in the direction he had indicated. Some examining boards might attract students by the looseness of their examination; but, if the more important examining boards would take up the matter, the more insignificant ones might safely be left to their well merited obscurity.

He wished also to say a few words in the matter of prizes. The tendency of the present day appeared to be to multiply prizes out of all proportion to the perseverance expended on their acquisition. He believed, if the prizes were fewer, and if the standard required were fully known, more would be thought of being successful, and there would be more competition amongst the students. It seemed somewhat worse than a farce to award a medal or certificate to a student who did not show even the most elementary knowledge of a subject, simply because he happened to be the only competitor. He should be very glad if they could give a higher value to their prizes by raising the standard required for a medal and certificate, and by making some condition as to the number of competitors. He believed it would be found to create more *esprit de corps* amongst the students. Could they raise the standard required, the teaching body would have more inducement than they now had to support the claims of old students in anything for which they were nominated.

Having referred to the munificent gift made to the College by Mr. G. P. Wragge out of the Ingleby Fund, and expressed the hope that many wealthy Birmingham manufacturers would follow the example, the lecturer said he would conclude with a few words to the students. He advised them to foster the spirit of *esprit de corps* amongst them, and to work with earnestness and perseverance, beginning at the commencement of the session. He urged them not to regard attendance at lectures as waste of time, and not to neglect the theoretical or book work for the practical. He knew that there was a tendency amongst them to try and excel in the practical before having laid the foundation of the theoretical, and warned them that the practical would not be of so much assistance to them in passing examinations as they might imagine. Regarding the question of assistantships, he suggested whether it would not be better to discard them altogether in first and second year students. He again impressed upon the students the necessity of laying a good foundation of knowledge during the first session, and of passing the first professional examination next April twelvemonth. Sincerely he welcomed them all to the College, promising them all assistance in their studies, and urging upon them the advisability of so conducting themselves as to maintain the high character of the institution.

ASSOCIATION INTELLIGENCE.

SHROPSHIRE ETHICAL BRANCH.

THE annual general meeting of the above Branch will be held at the Lion Hotel, Shrewsbury, on Wednesday, October 27th, at 1 P.M.: *President*, RICHARD WILDING, Esq.; *Vice-President*, JOHN KILFER, Esq.

Dinner will be served at 3.30 P.M. punctually, for the convenience of the country members. Tickets, exclusive of wine, 7s. 6d. Members have the privilege of introducing friends, on transmitting their names to the President.

Members intending to read papers, etc., will oblige by communicating their titles on or before the 21st instant, to

JUKES STYKAP, *Honorary Secretary*.

Shrewsbury, October 12th, 1875.

BATH AND BRISTOL BRANCH.

THE first ordinary meeting of the Session will be held at the York House, Bath, on Thursday, October 28th, at 7.15 P.M.: W. M. CLARKE, Esq., *President*.

R. S. FOWLER, Bath, *Honorary Secretaries*.
E. C. BOARD, Clifton, *Honorary Secretaries*.

Bath, September 24th, 1875.

STAFFORDSHIRE BRANCH.

THE second annual meeting of this Branch will be held at the London and North Western Railway Hotel, Stafford, on Thursday, October 28th, at 2.30 P.M. precisely. *President*, R. GARNER, Esq., F.L.S. The *President-elect* (H. DAY, M.D., F.R.C.P.) will deliver an address. Dinner at 5 P.M. precisely. Tickets 10s. 6d. each, exclusive of wine.

VINCENT JACKSON, *Honorary Secretaries*.
RALPH GOODALL, *Honorary Secretaries*.

Wolverhampton, September 27th, 1875.

BORDER COUNTIES BRANCH.

THE autumnal meeting of the above Branch will be held at the County Hotel, Carlisle, on Friday, October 29th, at 1 P.M.

Gentlemen intending to read papers, or to be present at the dinner, are requested to give notice to the Secretaries.

STEWART LOCKIE, *Honorary Secretaries*.
JOHN SMITH, *Honorary Secretaries*.

Carlisle, October 2nd, 1875.

SPECIAL CORRESPONDENCE.

BIRMINGHAM.

[FROM OUR OWN CORRESPONDENT.]

Queen's College: Admission of Women to the Medical Profession. The Ingleby Lectureship and Scholarship. Medical Session. Introductory Addresses.—Meeting of the Birmingham and Midland Counties Branch.

THE annual meeting of the governors of Queen's College was held on Tuesday; and, in the absence of the President, the Mayor of Birmingham was voted to the chair. He proposed the following resolution: "That the governors are of opinion that competent women desiring to pursue the medical profession should not be refused the necessary facilities for obtaining instruction; and the governors accordingly request the Council to reconsider its recent decision on the subject." He reiterated certain arguments of the deputation, remarked somewhat severely upon the "Conference" and its resolution, and read the reply of the Council (as already given by your correspondent); and said that the general public knew nothing of the risk and difficulty alluded to. In reply, various members of the Council and other medical men stated reasons for their course of action (reasons which have been already summarised in the JOURNAL of last week); and based partly upon moral considerations, partly upon the present prospects of the College, the adverse feeling of the body of the profession, and the existing arrangements at the Conjoint Clinical Board. Finally, the Mayor withdrew his resolution; remarking, however, that the professional feeling and regulation "seemed to amount to trades-unionism of the worst kind"—[no, no]—"if they desired that restrictions should be imposed to prevent a few women from entering the medical profession." He alluded, also, to the possible establishment of a rival institution,

which is commonly supposed to refer to the "Mason Scientific College" now building.

In the Annual Report of the College, allusion is made to a donation of £2,000 from the trustees of the late Dr. Ingleby. This endowment is to be devoted to an "Ingleby Lectureship" and "Ingleby Scholarship" for the cultivation of obstetric medicine.

The medical session opens with an entry of twenty-five new students, and active work in the lecture and dissecting rooms. At our visit to the latter, we could not but observe its comparative cleanliness, and the absence of the foul effluvia usual in our student days. A subject of six weeks' age was admirably preserved by the injection of glycerine with carbolic acid; but, as it requires nearly a gallon of this, the expense is a drawback to its use. The last subject had been injected, Dr. Pope informed us, with chloral-hydrate—half a pound to six pints of water—according to an American plan, which, so far (*i.e.*, for ten days), had answered well; the colour of the parts was remarkably well retained.

The introductory addresses of the session were very good, and attended by large and appreciative audiences. They were both addressed more particularly to students, rather than dealing with topics of general interest. The address at the College by the Rev. W. H. Poulton, the Warden, referred particularly to the evil of men delaying their examinations, and "hanging about for eight, nine, or even ten years". At the universities, men were always expected to pass within a certain time; and he thought the examining boards and medical schools ought to make some similar regulations.

The Introductory Clinical Address was given by Mr. Alfred Baker at the General Hospital, and was devoted to considerations on the position of medicine formerly and at present, the necessity for cultivating the intellectual powers, and taking advantage of all opportunities for practical work. He "would summarise all he had to say in the sentence—Imitate John Hunter".

The first meeting of the Branch for this session was signalled by the delivery of the address by Dr. Wade, which you have already given to the profession. The meeting was a very large and representative one; and, in the after-speeches of Dr. Fletcher and Dr. Heslop, cordial expression was given to the very general feeling of obligation to Dr. Wade, and of sincere satisfaction of seeing him again amongst us after a trying illness.

CORRESPONDENCE.

MR. DAVY AND THE LONDON HOSPITAL.

SIR,—I have read with regret the abstract of the introductory lecture delivered to the students of the Westminster Hospital by Mr. Richard Davy, published in the JOURNAL of this week. I believe the students at this school will discover that their teacher has not drawn a faithful picture of their future prospects; for I am sure it would indeed be easy to show, by the examples of a large number of young medical men now living, that "their early prospects are far from disheartening"; that their "toil and ambition", if honestly applied, will be amply rewarded both in "pay and dignity" while they are yet young men. But it is no part of my intention to occupy your space with arguments to disprove these statements of the lecturer; my desire is to repudiate in emphatic terms the truth of those portions of Mr. Davy's lecture which refer to the relations which exist between the House Committee of the London Hospital and the medical officers. Allow me to state that, in the following remarks, I am expressing only my own individual opinions, and narrating only my own experience as an individual member of the staff; that I make no pretence to express the views of any one of my colleagues; they will, I am sure, deal with Mr. Davy's utterances as they severally feel disposed.

For a period of nearly eleven years, I have been a member of the staff of the London Hospital, during which time the working of my department and the performance of my duties have brought me into contact with the representative, the mouthpiece in fact, of the House Committee a very large number of times. From this gentleman (the house-governor), I declare I have always received the greatest possible kindness, consideration, and attention; never to my knowledge have I made to him a request that has not at once been complied with, no matter what outlay the execution of my wishes involved. I have never suggested an alteration or modification in the arrangements of my own department, that has not either been immediately adopted, or the inexpediency of the suggested alterations has been pointed out to me in the most courteous manner; in fine, by the representative of the Committee, I have been invariably treated like a prince. Again, during these eleven years, I have on a considerable number of occa-

sions been brought into actual communication with the House Committee itself; on every such occasion, without one single exception, I have been treated most generously; my wishes and my grumbings have alike received an amount of their consideration which I have often subsequently discovered they did not deserve. On no single occasion has my Committee ever made the smallest attempt to dictate to me how or in what manner my work was to be done, from my first introduction to them at my election until now; a generous thoughtfulness, an earnest desire to serve me, and a perfectly evident resolution to leave me unfettered in the working of my own department, have invariably characterised the conduct of the House Committee to myself. Sir, if this be "tamely submitting to have my teeth drawn", then I am perfectly prepared for the next nineteen years to go about without a tooth in my head. If this be the treatment involved in having my "nails pared", then to the quick I will be shorn of these useful appendages. I know not if Mr. Richard Davy would honour me by placing me in his list of "excellent officers"; but this I know, that he has sadly misrepresented the relations which exist between the medical staff who have the professional work of the hospital to do, and the executive who manage and conduct in a manner, I venture to assert, beyond all praise the large and efficient institution in question. No, sir; Mr. Davy is mistaken; on this occasion, he has hit the wrong nail on the head; let me assure him it is not the existing relations between the staff and committee that are at fault; it is the relations existing between the several members of the medical staff itself that is the one weak spot at the London Hospital. Had Mr. Davy desired to teach us something, he would have left the House Committee alone, and he would, in old-fashioned plain Saxon language, have told us that a house divided against itself cannot stand; that it is a sad and pitiful sight to see one-half the staff living and working at the same hospital in direct and open enmity with the other half. He would have told us that it is useless to spend large sums of money in advertising new prizes and fresh scholarships, so long as it is notorious to the whole world that we are torn and rent asunder with internal bickerings, dissensions, jealousies, and backbitings. He would have told us that our school will stand still and lack prosperity until we have learned to bear and forbear one with another; and, lastly, he would have told us that it is not manly or generous to button-hole prominent members of the House Committee, and, under the mask of zeal for the well-being of the hospital and school, exalt ourselves at the expense of our colleagues; he would, in a word, have told us that, to be a happy, useful, prosperous staff, we must first learn to forgive, as we hope to be forgiven.

I am, dear sir, yours faithfully,
 JAMES PALFREY.
 Brook Street, Grosvenor Square, October 8th, 1875.

WESTMINSTER HOSPITAL.

SIR,—In your last number, you called attention to a circular issued by Mr. Cooke to the governors of the Westminster Hospital, impugning the conduct of his colleagues and the mode in which, of late years, the elections have been conducted.

I deeply regret to see such ungrounded and erroneous statements circulated, which a very little care and reflection on the part of Mr. Cooke would have obviated. Take such a statement as this: that out of ten promotions and appointments that have taken place during the last four years, in every single case through the influence of the "Council", only one gentleman has presented himself to the governors for election. During the last eighteen months alone, no less than two elections have been severely contested, although in one case the opposing gentleman withdrew on the morning of the election. I am informed that, during many years, the "Council" have only twice expressed any formal opinion on the candidates, or exerted any influence on the elections. It may be incidentally mentioned that the term Council was applied two or three years ago to the old institution of "Committee of Lecturers", which has existed from time immemorial, to avoid confusion and mistakes. At the time of effecting the change, the assistant medical officers, non-lecturers, were admitted, amongst whom was Mr. Cooke.

The "combination" spoken of to "subvert the authority of the governors", proves to be a friendly dining club of the medical staff and lecturers, started for the object of promoting good fellowship and friendly discussion on matters of school-government. It has met but twice. Mr. Cooke, we are informed, was present on each occasion; and is, therefore, in a position to substantiate or not this statement. I can hardly believe that any one could have made such a charge without having substantial grounds for doing so.

Mr. Cooke states that his resignation has been demanded in the face of an organised opposition; he appeals to the governors for protection. It seems to have been the custom, time out of mind, for all candi-

dates holding junior appointments to resign before seeking the votes of the electors for senior offices. It is, in my opinion, an excellent, usual, and salutary rule. I am, however, informed, that no formal demand has been made for Mr. Cooke to resign. Whether justly or unjustly, Mr. Cooke seems to have made himself very unpopular with his colleagues. I believe I am justified in saying the whole medical staff and lecturers are unanimous in their opposition to his candidature. The questionable taste of dragging Dr. Gibb into the *mêlée* is the more to be regretted, as I believe he retired on the most friendly footing with his colleagues, and without professionally ever having had a word of variance.

The "Council" of the Westminster Hospital, I believe, fully realise their responsible position of public trust. A medical school should never be viewed as a private undertaking; and it is to be hoped the earnest endeavour of this school to raise its name and reputation will be crowned with success. Their staff is a remarkably young one—no great fault, as with youth there is energy. What can be done by a medical school by a judicious choice in its staff is well exemplified by the rapid rise, of late years, of Middlesex and Charing Cross Schools. Mr. Cooke's antagonist is Mr. C. N. Macnamara, a gentleman who has already made his mark in the profession in India. Westminster is to be congratulated if it be able to secure the services of so able a man, and who is so well qualified to do honour to the profession and its school. Should Mr. Cooke be unsuccessful, he has no cause to complain. To be senior assistant-surgeon in five years is no bad position. Mr. Cooke is a young man, and may have a brilliant future in store for him; but such an object is not likely to be obtained if he be not more careful in his facts and statements.

I am, sir, yours faithfully,
 W. C. GRIGG, M.D.

AN APPEAL.

SIR,—In your issue of the 7th of August, you were good enough to publish the following appeal.

"Sir,—I respectfully invite the attention of the medical officers of the public services to the following particulars of a sad case.

"An assistant-surgeon—whose name it is not, perhaps, necessary to give, but which can be given to any subscriber who desires to know it—lost his health in the Crimea; and, after a lingering illness, died from softening of the brain, leaving a widow and five children in circumstances of extreme destitution. This officer's ill-health was not brought on by imprudence or bad habits. Those who have interested themselves, and whose names are given below, know that his habits and conduct were always such as to command the respect of his friends. It must also be added that he made such provision as he could for his family by insuring his life in the Army and Navy Insurance Office, afterwards amalgamated with the 'European'. It is useless to add that no benefit was derived from this insurance, as this office disastrously failed. When this occurred, the state of the assistant-surgeon's health was such that a second insurance on his life was impossible. For several years before his death, he supported his wife and family, and met all the expenses of his long illness on his half-pay of eight shillings a day. Not having served for ten years on full pay, his widow is not entitled to a pension.

"It is proposed to raise a sum of money for the purchase of an annuity for the benefit of the widow, who at this time depends on the charity of her neighbours for daily bread for herself and children.

"The following gentlemen will be happy to receive subscriptions in aid of this fund: Major-General Lewis, Shirley, Southampton; Lieutenant-Colonel Begbie, Shirley, Southampton; Dr. Parkes, F.R.S., Surgeon-General Longmore, C.B., and Surgeon-General Maclean, C.B., Royal Victoria Hospital, Netley.

"I am, sir, your most obedient servant,
 W. C. MACLEAN, M.D."

This appeal has been most kindly responded to; and I have to announce that Messrs. Atherley, Hankinson, and Darwin, Bankers, High Street, Southampton, who have been good enough to take charge of the fund, have in their hands the sum of £178 19s., contributed for the purpose indicated in the appeal. I have in every instance acknowledged the receipt of contributions, with the exception of the sum of five shillings in postage stamps, sent by H. P., R.N., whose address I did not know, and who wished "his mite" to be acknowledged in this way.

The sum is not inconsiderable, but it is quite inadequate to meet the requirements of the case. I have been advised that my appeal was published at the most unsuitable time of the year, when all the world was on the move, and when many professional men were abroad seeking relaxation. I, therefore, venture to ask you to give space in your columns once more to my appeal in behalf of this widow and her children.

I am, sir, your obedient servant,
 W. C. MACLEAN.
 Royal Victoria Hospital, Netley, October 19th, 1875.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, OCTOBER 6TH, 1875.

WILLIAM S. PLAYFAIR, M.D., Vice-President, in the Chair.

BEFORE entering upon the ordinary business of the evening, Dr. PLAYFAIR alluded to the loss sustained by the Society by the death of its Honorary President, the late Sir Charles Locock, who had rendered valuable aid to the Society when it was first formed by accepting the Presidency and taking a special interest in furthering the aims of the Society. He announced that the unanimous feeling of the Council was in favour of asking Dr. Arthur Farre to accept the vacant post, which was received with acclamation by the Fellows present.

Retention of a Pessary.—Dr. GERVIS exhibited a pessary removed from a patient, aged 56. Fifteen years previously, it had been introduced into the vagina to relieve prolapsus of the womb. Four years ago, she began to feel a weakness in the lower back; two years ago, her legs became weak, and she was unable to walk without assistance. For six months, she has been nearly bed-ridden. For the last six months, she had had discharge from the vagina, occasionally tinged with blood, and highly offensive. She could neither stand nor walk, and was able to move her legs in bed with difficulty; being attacked two or three times during the night with cramp in them. On examination, a large round metallic pessary was found imbedded in the vaginal walls, and was removed by the aid of bone-forceps; a considerable quantity of brownish purulent discharge, horribly offensive, escaping. All the paralytic symptoms were relieved after its removal.—Dr. CLEVELAND remarked that, apart from the interest attaching to the long impaction of a foreign body in the vagina, there was the notable fact that a quantity of highly offensive putrid matter must have been locked up for a considerable time without the supervention of septicæmia. The case tended to show, in connection with the recent debate before the Society, the necessity for the coexistence of some peculiar condition of the general system before absorption of morbid matter, followed by blood-poisoning, could be effected.—Dr. BANTOCK had met with a similar case to that given by Dr. Gervis; the pessary being oval in shape, and composed of horse-hair covered by India-rubber.—Dr. ROGERS referred to a case he had before mentioned to the Society, of a boxwood pessary, which had been left in eighteen years, and had been forgotten by the patient.—Dr. EDIS also alluded to a similar case he had brought before the Society, where a large oval pessary of the size of a goose's egg had been left in the vagina for eleven years. The case had been supposed to be cancer.—Dr. PLAYFAIR thought these archaic instruments would soon be out of use. He wondered why the ulceration had not extended into the bladder and rectum. As regarded Dr. Cleveland's remark, he had noticed that fetid matter of intense virulence might be present, provided there was an absence of an absorptive surface of a freshly formed wound.—Dr. GERVIS, in reply, stated that in removing the pessary a slight laceration took place. The foetid fluid passed over it, and yet there was no septicæmia.

Fœtus and Placenta from a Syphilitic Woman.—Dr. HAYES exhibited a placenta and still-born fetus from a patient, aged 22, affected with syphilis. The placenta was pallid, soft, and friable; the villi packed with fat globules. The fetus appeared healthy. There were two questions involved in explanation of the death of the fetus: whether it resulted from syphilis, or from fatty degeneration of the placenta.

Monstrosity.—A report by Drs. AVELING and HAYES on Mr. Wallace's case of monstrosity was read; also on a specimen exhibited at a previous meeting.

A Case of Cervical Inversion of the Uterus occurring immediately after Labour was communicated by Mr. FREDERICK H. GERVIS.—The patient, aged 41, was delivered of her sixth child after a slow and tedious labour. The placenta was adherent. After waiting twenty minutes, it was felt projecting through the os, and was gently drawn down, when the uterus was found to be inverted. The placenta was immediately peeled off. The hæmorrhage was slight; but, on looking up, the patient was found to be in a state of syncope, and apparently dying. Brandy and ammonia were administered; and, after the patient had rallied somewhat, the inversion was reduced, counterpressure being applied externally to the cervical ring. Galvanism was applied to contract the uterus after its return. The patient recovered perfectly.—Dr. GALTON remarked that the mode of reduction mentioned by the author, although successful in this case, was one hardly to be recommended in general. The author described the reduction as effected by pressing two or three fingers up into the fundus of the uterus. This plan would necessitate the passage of four folds of uterine tissue through the os

instead of two folds, which would alone require to be passed through, were the reduction accomplished by the more mechanically correct, and usually recommended method, of grasping the whole body and returning first the part latest in coming down.—Dr. GRIGG inquired whether there were any severe cramps and pains in the thighs as well as shock. He remembered a case in his own practice where the uterus came down with the greatest ease without any traction having been exerted.—Dr. BANTOCK thought the treatment was confirmed by the result. He did not agree with the preceding speaker, Dr. Galton, in thinking that the uterus was doubled up by pressing in the fundus, for it was stated that the body of the uterus felt hard. It appeared to him that the reduction began at the cervix.—Mr. GERVIS explained that the uterus was exceedingly rigid and hard, and it was difficult to get a fold of the uterus. Whether the fundus or the cervix went up first, he did not know. In a previous confinement, she had had severe cramps.—Dr. CLEVELAND wished to inquire more minutely as to the amount of traction on the cord that had been used. He could conceive that, owing to the administration of ergot before the expulsion of the placenta, especially if it happened to be adherent, the uterus might take on that irregular and spasmodic action which, with only moderate traction on the cord, might eventuate in inversion.—Dr. GERVIS remarked, with reference to Dr. Cleveland's suggestions as to the production of inversion, that so accurate an observer as Dr. Tyler Smith had in one instance seen the uterus invert itself; and it was now generally allowed that this accident could arise quite independently of traction. He asked whether any Fellow present had ever seen the inverted uterus reinvert itself. He had read recently of such a case; but imagined it must be, at all events, an occurrence of extreme rarity.—Dr. HAYES observed that when it was considered what difficulty sometimes occurred in removing the placenta, the cord giving away first, it was scarcely probable that Mr. Gervis could have exerted sufficient traction to produce the inversion.—Dr. AVELING remarked that inversion might be caused by *vis à tergo*, and even *post mortem* from the development of gas in the abdomen.—Dr. GRIGG mentioned a case occurring five days after labour, where no ergot had been given.—Dr. ROGERS had only seen one case, which he replaced by means of an air-pessary. He thought Mr. Gervis's plan was the best.—Dr. GERVIS referred to a case reported in one of the early volumes of the *Transactions*, where the uterus had reinvolved itself.—Dr. WILTSHIRE admired the courage and candour of Mr. Gervis in bringing forward his case. After fifteen years' experience in practice, he would scarcely use immoderate traction; still, the process of inversion might have been commenced before. It was a question whether it was not better to peel off and not to pull.

Lateral Obliquity of the Fœtal Head.—Dr. GALABIN read a paper on the occurrence in normal labour of lateral obliquity of the foetal head. After entering into the views formerly accepted, that there is normally a lateral obliquity of the foetal head to the plane of the pelvic brim, he asserted his belief that the conclusion indicated by theory is confirmed by observation, namely, that in easy labours there is no perceptible lateral obliquity; but that, if the head meet with considerable resistance, an obliquity is produced in most cases of such a kind that the right parietal bone lies deepest in the plane of the brim.—Dr. PLAYFAIR thought the Society was very much indebted to Dr. Galabin for his erudite paper. The point at issue was one of great interest; and he had failed to satisfy himself whether obliquity really existed or not, or whether Dr. Galabin's suggestions were sufficient. Dr. Galabin had not mentioned a very elaborate treatise on the subject by Dr. Hodge.—Dr. GERVIS concurred as to the value of Dr. Galabin's paper. It would appear to favour the opinion that there was no necessary contradiction between the two opposite views, but that obliquity of the head, depending upon some undue pelvic resistance, was essentially a character of a labour in some degree abnormal, while in perfectly normal labour, the equilibrium between the propulsive force and the resistance of the parturient passage, being, as Dr. Galabin expressed it, stable, obliquity did not occur. If further research proved this view accurate, it would account for much of the present dissonance of opinion.—Dr. GALABIN thanked the Society for their patient attention. The subject was more interesting with a foetal skull and a pelvis than in describing dry mechanical details.

Dissection of a Fœtus with Placenta Parvula and Uterine Fibroids.—Dr. J. BRANTON HICKS read a paper on a dissection of an uterus, pregnant about three and a half months, the placenta being prævia, and fibroids extensively developed in the uterine walls. Attention was directed to three points: 1. Whether there were a circular sinus at the margin of the placenta; 2. The distribution of the curling arteries in the decidua serotina; 3. Whether there was any change induced by pregnancy in the fibroma. The first point was doubtful, and had yet to be carefully examined. As regards the second, the decidua processes, consequently the separation into lobules,

commence later than the third and a half month; and there was no proof that any branch from the supplying vessels of the serotina passed into the intervillal space. As to the third point, the fibres were about four times larger than in the ordinary fibroma, very much more distinct and separable from one another; a few had attained the size of the colossal fibre of the ordinary pregnant uterus.—Dr. EDIS observed that, if the fibres in the fibroma increased during pregnancy, there was no reason why they should not equally be involved in the process of involution following parturition, the same as with the ordinary uterine fibres.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, OCTOBER 19TH, 1875.

G. D. POLLOCK, F.R.C.S., President, in the Chair.

THE PRESIDENT drew attention to the just completed volume of *Transactions*, a copy of which was shown.

Hydatid of the Liver bursting into the Lung.—Dr. CAYLEY exhibited a hydatid cyst of the liver, which had burst into the lung of a man who had been admitted into the London Fever Hospital as having typhoid fever. There were dyspnoea, and, at the back, dullness. The first impression was that it was a circumscribed empyema. A small hydatid cyst was then expectorated, after which the aspirator was used, and two pints of fluid removed. The trocar was left in. Hydatids were still expectorated freely. Other openings were made, and the cyst was washed out. The man was ultimately choked by an accumulation of hydatids in his trachea. On *post mortem* examination, it was found that there was a large hydatid cyst of the liver communicating with a ragged opening. The liver was displaced by the cyst, and could be felt below the ribs in life. There was no other disease.—Mr. MAUNDER asked if the admission of air into the cyst in the tapping had led to any decomposition.—Dr. CAYLEY said that it had not.—Dr. LEARED said that in Iceland the operation was often performed by Dr. Hjaltelin, who tapped the cysts, and then injected them with iodine. The operation was very successful.

Dissection of Suprarenal Capsules.—Dr. PEACOCK showed two suprarenal capsules from a case of Addison's disease. They came from a female who had to undergo examination to be passed as a Government emigrant. She was not very well; but a mixture of iron and quinine did her much good. After some interval of time, she was admitted into St. Thomas's Hospital under his care. At the time, she was remarkably bronzed all over, including the mucous membrane of the mouth. She had then been in bed some time with sickness and vomiting, and with incomplete syncope at times. She died suddenly. At the *post mortem* examination, no disease was found in the body, except in the suprarenal capsules. Some old cretaceous tubercles, however, were found in the lungs. The patient was naturally of very dark complexion, with brown hair. Some time before, she had suffered from eczema, and was much darker afterwards. The case altogether was a very characteristic one.—Dr. GREENFIELD said that the suprarenal capsules had not yet been subjected to a thorough microscopic examination. Some sections, however, were shown. One capsule was very markedly affected with the usual changes. One point he would like to draw attention to, and that was the very extensive adhesions of the abdominal viscera found in this case. He had seen the same thing in other cases of Addison's disease. The adhesions were remarkably tough and firm, and in them were found small fibrous bands, with pearl-like nodules in them, and these were most frequent near the suprarenal capsules. The right capsule was adherent to the liver. The spleen was enlarged and tough. The pigmentation of the tongue was peculiar; it avoided the papillae, all the three forms alike, which were quite white, being pale from the anæmia present.

Ulcer of the Stomach.—Dr. PEACOCK brought forward a case of ulcer of the stomach, from a man, aged 42, a potman by trade, who was admitted into St. Thomas's Hospital after having swallowed some sulphuric acid a short time ago. A curious point was this, that at times there was a distinct tumour in the epigastrium, which tumour was hard and solid. Then came on vomiting, after which the tumour partly disappeared. From this, it was thought that there was some old standing disease, as well as the sulphuric acid poisoning. The man lived three weeks in the hospital; and, after death, most extensive ulceration of the stomach was found.

Congenital Disease of the Aortic Valves.—Dr. PEACOCK exhibited a case of congenital disease of the aortic valves, from a girl aged 12. An aortic double (obstructive and regurgitant) murmur was found, and with it a presystolic murmur at the apex. The characteristic pulse was present. The girl was subject to attacks of sickness. Her temperature was always low; and, when tested by different thermometers of various

makers, was found only to be about 95 deg. She was generally torpid, and usually found asleep. After a time, albuminuria set in, followed by ascites. On examination after death, it was found that there were but two aortic valves; the raphe of the two cusps which were blended in one, could, however, be detected. The aortic orifice was contracted, and the mitral narrowed. The girl never had rheumatic fever. The heart was a very large one for such a child, and weighed nineteen ounces and three-quarters. The stomach was ulcerated.—The PRESIDENT asked if there had been any change in the circulation in the case.—Dr. PEACOCK answered in the negative. The case was well known to Dr. Greenfield, who sent it to him. The patient had been ailing for years, but there was no acute disease. He had once thought it a case of intrauterine endocarditis, but now regarded it as one of arrested development. The semilunar valves were formed by the looping up of the endocardium, which then divided into three sections; this last process had been arrested.

Cerebral Hemorrhage.—Dr. DOWSE related a case of hæmorrhage into the pons Varolii and fourth ventricle, in a woman aged 66. She was a healthy woman till two years ago, when she became suddenly unconscious, and remained so for three days. There was complete left hemiplegia, with impaired sensation on the same side. Her mind became affected after this; and she was subject to right side convulsions. The temperature of the left side was 2 degs. higher than the right one. The convulsions of the right side were followed by facial palsy on the right side; and then coma set in, accompanied by stertorous breathing; and, after twelve hours of this, she died. When the brain was removed, it was found that the pia mater was gorged with blood; there was subarachnoid hæmorrhage in both lateral lobes of the cerebellum, more marked over the right temporo-sphenoidal convolutions. The right hemisphere was much diseased. The right centrum ovale showed two or three irregular cavities extending upwards to the grey matter of the anterior and posterior central convolutions. A great portion of the brain-substance had undergone a yellowish brown staining from hæmorrhage of old date. At the base was found a mass of recently extravasated blood, the result of hæmorrhage from the left half of the pons Varolii, which was totally destroyed. The right half was also invaded by the hæmorrhage, and the fourth ventricle was full of blood. The arteries were atheromatous.

Subarachnoid Hemorrhage of the Spinal Cord.—Dr. DOWSE showed a specimen of subarachnoid hæmorrhage of the spinal cord. The man from whom it was taken had been healthy, but a hard drinker; and, ten days before his admission, had been working in the sun, when he suddenly felt a great pain in his head, followed by giddiness, vomiting, and unconsciousness. After five days in hospital, he felt much better, and had a walk; but came home, had a fit, chiefly affecting the right side, then became comatose, and died three days afterwards. The coma was not complete; the special senses were lost, except hearing, which was least affected; there was almost general hyperæsthesia. The pulse was 120; respirations 30; temperature 103.3 deg. There was no palsy of the seventh pair; reflex excitation of the facial muscles was easily induced, most on the left side. There was rigidity of the limbs; the arms flexed; the legs extended. The urine was retained. On the day of his death, his pulse was 160; respirations 44; temperature 106 deg. On the *post mortem* examination, the vessels of the dura mater were found gorged with blood, and blood was extravasated over the cerebellum and the hemispheres. The anterior lobes alone were unaffected. At the base of the brain was a mass of clotted blood. The vessels were not atheromatous. When the cord was removed, it was found covered with hæmorrhage between the arachnoid and the pia mater, alike over the anterior and posterior surfaces.

Thrombosis of the Internal Carotid Arteries.—Dr. DOWSE drew the attention of the Society to a case of thrombosis of the internal carotid arteries. The patient, a woman, aged 66, had tottering gait, exophthalmos, a dull intellect, and a dilated heart. When walking about the ward, she was seized with incomplete hemiplegia of the right side. Next day, there was partial consciousness, with both aphasia and amnesia. The arm was worse than the leg. There were pain and hyperæsthesia in the affected limbs. Ten days afterwards, she suddenly lost the use of the left side, the intellect became more confused, and she sank into profound coma, which lasted thirty-six hours. On *post mortem* examination, there was found marked enlargement of the anterior half of the right hemisphere, which was of deep pink colour. The left hemisphere was pale, and softening was commencing. There was chronic arachnitis with accumulation of fluid. The vessels were atheromatous. Thrombosis was found in the carotids, which were completely occluded.

Cancer of the Breast.—Mr. BUTLIN showed a case of uncommon carcinoma of the breast. It was removed by Mr. Savory from a woman aged 43. It had existed a year, and was as large as an egg. It really was colloid cancer, and cells with a homogeneous material

were found amidst fibrous trabeculae. The alveoli were small, and the colloid material not so fluid as usual.

Intra-cranial Aneurism.—Dr. GREENFIELD exhibited a case of aneurism of a communicating artery of the circle of Willis. The man, a bricklayer, fell from a scaffold thirteen feet high. There were symptoms apparently of concussion. The man ultimately died suddenly. There was a coroner's inquest, which returned a verdict of death from disease of the heart; no such disease existing. At the *post mortem* examination, was found a scalp-wound, with hæmorrhage on the dura mater and on the upper surface of both hemispheres. Blood was coagulated around the medulla oblongata and the cord. The hæmorrhage was most marked at the pons. There was a laceration. Coagula were found in the fourth ventricle, continuous with the blood at the pons. The basal vessels were atheromatous. The origin of the hæmorrhage was not found; it was, however, from two distinct effusions, one quite recent. When the parts were washed, an aneurism of the size of a sweet pea was found in the anterior communicating artery, which had ruptured at its posterior portion. The first hæmorrhage arose from perforation of the sac, to which the fit was owing; the second, just before death, was due to pressure on the fourth ventricle.

Tumour of Cerebral Artery.—Dr. GREENFIELD showed a tumour of the left anterior cerebral artery. There was thrombosis, followed by fatal softening. The man had suffered from apoplexy a week ere being admitted into the hospital, and his leg was weak. He had several slight apoplectic attacks in the hospital, and had slight left ptosis. His memory was bad, and his speech affected. Had a severe attack. He died of bronchopneumonia, with a temperature of 106 deg. The right middle cerebral artery was atheromatous, and one patch nearly choked it. There was no softening. On the left side, the corpus striatum and the white matter of the left hemisphere were affected. The vessel which supplied the anterior part of the corpus striatum instead of the normal left middle cerebral was choked; the optic nerve was compressed by the tumour, which also pressed on the middle cerebral artery. The patient had had syphilis, of which resultant scars were left. In this case, the corpus striatum was supplied by the anterior instead of the middle cerebral artery.—Dr. SEMPLE referred Dr. Greenfield to a case related by him, which, however, turned out not to be identical.

Enteric Fever.—Dr. HILTON FAGGE showed a fresh specimen of enteric fever. The man, aged 23, came off a ship in which no other person was ill; he had the ordinary symptoms of typhoid fever, rose spots, etc. He came in on the 8th. The temperature at first was 104 deg. The pulse was high. There was bronchitis. The man fed well. On the night of the 17th, he had a difficulty in swallowing and died. He had been hoarse throughout. At the *post mortem* examination, two points of disease were found; one spot at the ileo-cæcal valve, and another above; in the latter was a breach of surface. Peyer's patches were healthy. The mesenteric glands were swollen and red, spleen not enlarged. The lungs were emphysematous; the large bronchial tubes contained froth. The larynx was ulcerated; and the ulceration communicated with a cavity in front of the arytenoid cartilages. There were linear ulcers on the vocal cords. The epiglottis was ulcerated with a slough. The gall-bladder contained mucus, but no bile. Dr. Fagge had several times found the gall-bladder without bile, where the patient had been fed at repeated intervals; under these circumstances the bile passed off without needing to be stored in the gall-bladder.

Syphilitic Disease of Viscera in an Infant.—Dr. COUPLAND exhibited the viscera of a child, aged three months, bearing well marked evidence of syphilitic disease in the liver, heart, and lungs. There was a large patch on the convex surface of the liver; and syphilitic infiltration of the heart, not amyloid, but gummatous cell-growth. Lancereaux had seen nodes in the heart in congenital syphilis. It was brought to the hospital in early morning, and died in a few minutes. The liver was enlarged, reaching down to the iliac crest, and on its surface was a large yellow mass, which included nearly the whole left lobe. It consisted of semitransparent material. There were smaller isolated nodules. The heart was almost square, and its apex quite square. The left ventricle bulged even through the interventricular septum with the right ventricle. Its walls were of a pale buff tint. There was a nodule in the right lung. The mother was aged 26, and had one child living, two dead, and a miscarriage. This child, she said, had had a cold in its head, and spots on its bottom. A proper microscopic examination had not yet been made. In the heart, there were small round cells betwixt the muscular fibres, and masses round the branches of the coronary arteries. In the liver were round cells; and also the lungs, pressing on the alveoli.—The President requested that the microscopic examination be given at length at the next meeting.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

NORTHERN COUNTIES' ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

THE autumn meeting of the Association was held in the St. John's Library Room, Keswick, on October 6th. The Chair was occupied by the President, R. ELLIOT, M.D., Carlisle. The following gentlemen were nominated for election. *As Member*, J. Mackie, L.R.C.S., Medical Officer of Health, Darlington. *As Associates*, J. W. Eastwood, M.D., Dinsdale Park; G. H. Philipson, M.D., and Luke Armstrong, M.D., Newcastle-upon-Tyne; A. A. H. Knight, M.D., Keswick. After the completion of the routine business of the meeting, on the motion of Mr. J. M. FOX, seconded by Mr. J. SPEAR, M.R.C.S., H. J. YELD, M.D., was elected President-elect of the Association. The following papers were read: On the results to be expected from the carrying out of the Artisans' Dwellings Act. By H. J. YELD, M.D.—On the Powers and Duties of Medical Officers of Health. By J. M. MacLagan, M.D.—Notes on Food-Inspection. By Henry E. Armstrong, M.R.C.S.—Two Years' Experience of the Cockermouth Village Closet System. By J. M. FOX, M.R.C.S. The reading of each paper was followed by discussion.

SIR,—For some time past, many of my patients have been much annoyed by having post-cards like the enclosed sent to them by the public vaccinator of this district months, in some cases, after the child had been vaccinated by me, and the certificate duly transmitted to the vaccination officer. Will you kindly suggest a remedy against this growing nuisance? The town-crier is sent round periodically to warn the inhabitants that if they have not their children vaccinated by this public officer at the next public vaccination they will be subject to a penalty. Is there any clause in the Vaccination Acts or in a public vaccinator's contract to warrant this? A great number, being ignorant of the law on the matter, think from this proceeding that they are compelled to have the operation performed by the said officer, no matter whose patients they may be, and only find out their mistake by inquiry.—I am, etc. B. J. GLISSAN, Lic. Physician, etc.

. It rests with the guardians and the vaccination officer (not with the public vaccinator) to notify to parents the times at which public vaccination is performed. If the guardians choose to take exceptional means, even by the employment of the town-crier simply to give publicity to the arrangements for public vaccination, they are clearly within their right. But the law merely requires the vaccination of children, not their vaccination by the public vaccinator; and a notice "to warn the inhabitants that if they have not their children vaccinated by the public officer they will be subject to a penalty" is obviously unwarranted. Our correspondent should make complaint to the Local Government Board, forwarding one of the cards issued by the public vaccinator to whom he refers.

OBITUARY.

MICHAEL HARRIS, M.B. LOND.

ON September 28th, Dr. Michael Harris, Assistant-Physician to the Children's Hospital, Pendlebury, died at Manchester, in the twenty-seventh year of his age. After a distinguished career at Guy's Hospital, he passed the M.B. examination of the University of London in 1872, obtaining honours in midwifery, and the first place, with the gold medal, in forensic medicine. He was at one time House-Surgeon to the Evelina Hospital, Southwark, and in 1873 was appointed Demonstrator of Anatomy in the Liverpool School of Medicine. In July of this year, he removed to Manchester, and was elected to the post of Assistant-Physician to the Children's Hospital at Pendlebury only a few days before his death.

ALEXANDER GEORGE HOME, M.D.

WE have to record the death of Dr. Alexander George Home, Fellow of the Royal College of Physicians, Edinburgh, which took place at his residence, Mount Æolus, Portobello, on September 17th. Dr. Home was son and heir of Captain Alexander Home, R.N., of Whitfield, and commenced his medical career at the University of Edinburgh, obtaining a membership of the Royal College of Surgeons at the age of nineteen; he became Resident Surgeon of the Royal Infirmary, Edinburgh, in the place of the late Professor Syme, and held that situation for a period of two years, taking out his degree of M.D. at the University of Edinburgh at the age of twenty-one. He attended hospital practice in Paris for six months, visiting many of the hospitals on the Continent; and thereafter obtained a commission as Assistant-Surgeon of the 2nd Dragoon Guards, in which regiment he served for fourteen years,

until his promotion to the Staff as Surgeon at Gibraltar. Previously to leaving the regiment, he was presented with a handsome testimonial, consisting of a breakfast-service of silver plate, by the private soldiers and their wives, as a mark of their esteem. After serving as Staff-Surgeon and medical attendant on the Governor, Sir Robert Wilson, at Gibraltar, for two years, besides holding several local appointments, on the application of the colonel and officers of the 2nd Dragoon Guards, he was reappointed Surgeon to his old regiment, in which he continued to serve until the expiry of twenty-six years' service, when circumstances occurred that rendered it necessary for him to reside near his property. He took up his residence in Portobello, and was elected Provost of that town, which office he held for three years, and took an active interest in the welfare of the burgh. He was also a Justice of the Peace for the County of Midlothian, and was a regular attender on the bench of the County Court. He was a widower, and has left two sons to inherit his property.

JAMES SNOW, F.R.C.S.

MR. SNOW, for many years the Senior Surgeon to the County Hospital, the Asylum, and Christ's Hospital, Lincoln, died last week, at the age of ninety-five. He passed his examination at the Royal College of Surgeons as far back as 1802, and was the senior member of that body. He was elected an honorary fellow of the College in 1843. Mr. Snow was a Justice of the Peace for Lincoln, and formerly surgeon to the 3rd Regiment of the Lincolnshire Militia.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

STATE MEDICINE.—The next examination in State Medicine at Cambridge will begin on Tuesday, June 13, 1876. Any person whose name is on the *Medical Register* of the United Kingdom may present himself for it, provided he is twenty-four years of age. Information respecting the examination may be obtained by application to Professor Liveing, Cambridge.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, October 14th, 1875.

Collier, Herbert, Bohemia House, Turnham Green
Ellis, Joseph Watson, Willingham, Cambridgeshire
Flood, John, Penton Street, Islington
Mathias, James, Penycuod, Bloncyffos, South Wales
Norris, Richard Hill, Birchfield, Birmingham
Walmsley, Francis Henry, Higher Broughton, Manchester

The following gentlemen also on the same day passed their primary professional examination.

Blake, George Farncombe, Queen's College, Birmingham
Jackson, Robert Alexander, University College
Merriman, William Semple, Manchester Royal School of Medicine

UNIVERSITY OF CAMBRIDGE.—The following gentlemen passed the examination in State Medicine, on October 14th. The examiners were Dr. G. E. Paget, Dr. A. W. Barclay, Dr. E. A. Parkes, and Mr. Dewar.—Examined in Part I only.

Simpson, J., M.D.

Examined in both Parts.

Bird, P. Hinckes, F.R.C.S.
Britton, T., M.D.
Carpenter, A., M.D.
Cunningham, J., M.B., C.M.
Drew, S., M.D.
Dunlop, A., M.D.
Earle, B. N., M.B.
Fosbroke, G. H., M.R.C.S.
Harrison, C., M.D.
McBeath, W., M.D.

Mason, H. H., M.R.C.S.
Morison, J., M.D.
Nicholson, E., M.R.C.S.
Phillips, H. H. E., M.D.
Saunders, C. E., M.D.
Steele, S. T., L.R.C.P.E.
Swete, E. H. W., M.D.
Turner, G., L.R.C.P.L.
Underhill, A. S., M.B., C.M.

MEDICAL VACANCIES.

THE following vacancies are announced:—

ADDENBROOKE'S HOSPITAL, Cambridge—House-Physician. Salary, £65 per annum. Applications on or before November 2nd.
BIRMINGHAM and MIDLAND FREE HOSPITAL FOR SICK CHILDREN—Acting Physician and Extra Acting Physician. The Extra Acting Physician will have to attend on three afternoons in each week, and will receive a salary of £60 per annum. Applications on or before November 3rd.
BOARD OF WORKS, ST. GILES'S DISTRICT—Medical Officer of Health. Salary, £150 per annum. Applications on or before the 23rd instant.

BROOKWOOD ASYLUM, near Woking—Second Assistant Medical Officer.
CHRISTCHURCH UNION—Medical Officer for the Eastern District. Salary, £100 per annum, and fees. Applications on or before November 6th.
HOSPITAL FOR SICK CHILDREN, Great Ormond Street—Physician.—Assistant-Physician. Applications on or before the 28th instant.
HOSPITAL FOR SICK CHILDREN, Manchester—Assistant Physician. Applications on or before the 27th instant.
HUDDERSFIELD INFIRMARY—Physician.
LEICESTER AMALGAMATED FRIENDLY SOCIETIES MEDICAL ASSOCIATION—Resident Medical Officer. Salary, £175 per annum, with residence, coals, and gas. Applications on or before November 2nd.
MIDDLESEX HOSPITAL—Two Resident Physicians' Assistants, and One Resident Obstetric Assistant. Applications on or before the 30th instant.
NORTH SHIELDS and TYNEMOUTH DISPENSARY—House-Surgeon and Dispenser. Salary, £120 per annum, with furnished house, gas, coals, etc. Applications to be made on or before November 1st.
RICHMOND INFIRMARY—House-Surgeon. Salary, £80 per annum, with board and lodging. Applications on or before the 25th instant.
ROCHDALE INFIRMARY—House-Surgeon. Salary, £100 per annum, with board, lodging, and attendance. Applications on or before November 6th.
ROSS UNION—Medical Officer and Public Vaccinator for the Third District. Salary, £100 per annum. Applications on or before the 25th instant.
ROYAL FREE HOSPITAL, Gray's Inn Road—Junior Resident Medical Officer. Applications to be made on or before the 27th instant.
ROYAL ISLE OF WIGHT INFIRMARY, Ryde—House-Surgeon and Secretary. Salary, £40 per annum, with board, lodging, and washing. Applications on or before the 25th instant.
ST. GEORGE, HANOVER SQUARE, PROVIDENT DISPENSARY—Physician-Accoucheur. Applications to be made on or before November 3rd.
TONGUE and FARR, District of, County of Sutherland—Medical Officer. Salary, £150 per annum, and house.
WESTMINSTER HOSPITAL—House-Physician. Applications on or before the 26th instant.
WEST SUSSEX, EAST HANTS, and CHICHESTER GENERAL INFIRMARY AND DISPENSARY—House-Surgeon. Salary, £80 per annum, and £20 per annum as Secretary, with board, lodging, and washing. Applications to be made on or before the 23rd inst.
WORCESTER GENERAL INFIRMARY—Physician. Applications on or before the 23rd instant.
WORKSOP DISPENSARY—Resident Surgeon. Salary, £120 per annum, with furnished apartments, coal, gas, and attendance.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BAEER, Edward C., M.B., appointed Resident Medical Officer to the Atkinson Morley Convalescent Hospital at Wimbledon.
BASKERVILLE, John D., L.R.C.S.I., appointed Honorary Surgeon to St. Bartholomew's Hospital, Chatham.
BERNARD, Armand, M.B., appointed Medical Officer to the Liverpool North Dispensary, *vice* T. Walby, L.R.C.P.Ed., resigned.
BUCHANAN, Walter, M.R.C.S.E., appointed Honorary Surgeon to St. Bartholomew's Hospital, Chatham.
CHAMBERS, Eben., M.B., appointed House-Surgeon to the Chester General Infirmary.
*DUFFEY, George F., M.D., appointed Lecturer on Materia Medica in the Carmichael School of Medicine, Dublin.
FOULDS, Samuel, L.R.C.P., appointed Surgeon to the Chesterfield and North Derbyshire Hospital, *vice* C. Booth, M.D., resigned.
GLASIER, Charles, M.B., appointed House-Surgeon to the West Norfolk and Lynn Hospital.
HALL, F. de Havilland, M.D., appointed Assistant-Physician to the Westminster Hospital, *vice* O. Sturges, M.D., promoted.
*HART, Neville, M.B., appointed House-Physician to the Queen's Hospital, Birmingham.
IMLACH, F., M.D., appointed Medical Officer to the Liverpool North Dispensary, *vice* J. Lewtas, M.B., resigned.
LE QUESNE, Edwin J., M.R.C.S.Eng., appointed Assistant House-Surgeon to the Metropolitan Free Hospital.
McEWEN, Allan C., L.R.C.P.Ed., appointed Visiting Surgeon to the Chester General Infirmary, *vice* E. Chambers, M.B.
POWELL, Harold M., M.R.C.S.Eng., appointed Visiting Medical Officer to the General Hospital for Sick Children, Manchester, *vice* W. A. Renshaw, M.R.C.S.Eng., resigned.
STURGES, Octavius, M.D., appointed Physician to the Westminster Hospital, *vice* Sir G. D. Gibb, M.D., resigned.
*SYMPSON, Thomas, F.R.C.P., appointed an Honorary Surgeon to the Lincoln Lunatic Hospital, in the room of the late J. Snow, Esq.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTH.

HEWITT.—On October 14th, at Winkfield, near Windsor, the wife of *T. Hewitt, M.D., of a daughter.

MARRIAGES.

KING—WICKHAM.—On October 19th, at St. Mark's Episcopal Church, Portobello, by the Rev. J. M. Cotterill, Thomas Radford King, M.D., to Agnes Jane Wickham, only daughter of the late Benjamin Wickham, Esq., Royal Navy.—No cards.
PUICK—METCALFE.—On October 12th, at the Parish Church, Hardrow, by the Rev. Robert Puick, father of the bridegroom, William Puick, M.B., C.M., L.R.C.S., of Newmill, Huddersfield, to Margaret Anne, only daughter of the late Robert Metcalfe, Esq., of Rigg House, near Hawes.

DEATH.

ROBINSON, John Edward, M.R.C.S.Eng. and L.R.C.P.Edin., second surviving son of Edward Robinson, Esq., Westwith, Rotherham, aged 27, on October 15th.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAYGuy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Bromton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAYSt. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 1.30 P.M.
FRIDAY.....Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAYSt. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY -Medical Society of London, 7.30 P.M.—A Clinical Evening.
TUESDAY -Royal Medical and Chirurgical Society, 8 P.M.—Dr. Greenhalgh, "On the Use of the Actual Current in the Treatment of Filarioid Tumours of the Uterus"; Dr. Lawton Moore, "On the Physiological Absorption Spectra"; Mr. E. J. Spitta, "On a Movable Mole of the Larynx".

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.
PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with Duplicate Copies.
AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.
CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.
WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.
COMMUNICATIONS respecting editorial matters, should be addressed to the Editor; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

MORTUARIES FOR CHURCH PARISHES.

SIR,—I shall be very glad to receive any practical information on the above subject. I wish to put up a small building—probably on the ground belonging to our village hospital—for the reception of the bodies of those dying in the neighbourhood, whether of infectious or of other diseases, in preference to leaving them in their small and crowded cottages. I contemplate constructing the building so that a wheeled-bier may be taken into it, but it need not be larger than would be necessary for three bodies. Any plans, details of expense, etc., will be thankfully received by
J LEE JARDINE.
Capel, Dorking, October 19th, 1875.

ASSOCIATE (King's College).—The painting of St. William Fergusson is at present suspended in the office of the Secretary of the College of Surgeons, where you will, doubtless, be able to see it. The album containing it by Mr. Joubert can be obtained by applying to that gentleman.

LETTERS OF CONSULTATION.

SIR,—Mr. A., M.R.C.S., attends Mr. B. For some reason, Mr. B. declines to be attended by Mr. A. any longer. He is, however, attended regularly by Mr. C. (Mr. A.'s unqualified assistant), who is not in the habit of consultation by Dr. D. I should like to ask your opinion of Dr. D.'s conduct, medico-ethically, in this case.—I am, etc.,
PARSONS.
** We do not understand why any medical men's "unqualified assistant" is allowed by him to attend a patient who declines to be attended by him, but if he allow his assistant to continue attendance, it can only be as his deputy; and Dr. D. probably regards his consultation as with Mr. A. by deputy, and only regards Mr. A. in the matter.

THE SYPHON STOMACH PUMP.

SIR,—The use of the siphon stomach evacuator is no novelty. I have used it in my practice since 1863; and have twice during the last month used it for cases of poisoning by laudanum—once in consultation with Dr. Bell of this town, and again in my own surgery. I have always given the credit of its application to the late Mr. Samuel Smith of Leeds. I am, etc.,
J DOUGLAS LAWRIE.
Bradford, October 17th, 1875.

WILLIAM HARVEY.—Sir James Paget, in his "Remarks," says it is one of the brightest features in the history of St. Bartholomew's Hospital, that the great discoverer of the circulation, Dr. Harvey, the famous English naturalist, was four-and-thirty years his physician, and honoured by his services, and exercising a greater influence in its affairs, than any medical officer before the time of Abernethy.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

THE SUPPOSED POISONING BY DEADLY NIGHT HAZE

SIR,—The report which appeared in the London papers of the inspection on the child Frederick Shel, whom the jury found to have been poisoned by deadly nightshade, conveyed the circumstances but very imperfectly; and some further particulars which came out in evidence, particularly with reference to the medical aspect of the case, may not be uninteresting to your readers, and may remove the impression that great ignorance of English plants was shown at the inquest.

In the afternoon, the deceased was given some blackberries and hawthorn-berries, as they thought by her mother and sister. About nine o'clock in the evening, deceased, according to the evidence of the mother, was seized with an attack of vomiting, which lasted till 2 A.M., when he became convulsed and partially insensible. Mr C. H. Steele, surgeon, of Kingston (not Kitchener), attended the child at 8 A.M., and found him evidently moribund. The pupils of the eyes were much dilated, the countenance pale, and the limbs purple and cold. The necropsy showed the membranes of the brain to be very much congested; and the stomach was very much inflamed and congested, as was also the large intestine. Mr Steele added, in his evidence, that from these symptoms, and the appearance of the vomit, he believed that death had resulted from poisoning by atropine belladonna; and the coroner having suggested that the berries of that plant might have been given in mistake for blackberries (the "haws"), as you seem to infer, the jury then returned a verdict in accordance with the medical opinion.

Not being a medical man myself, I content myself with simply giving an outline of the evidence, leaving you to draw your own conclusions. Perhaps after reading this, particularly the statement as to the pupils being dilated, you may think that it was a case of belladonna poisoning after all. I am, sir, yours obediently,
W. H. TRIGGS, Reporter to the Surrey Comet.

Kingston-on-Thames, October 16th, 1875.

** We are obliged to our correspondent for his communication, which gives some further details of the medical aspect of the case. It does not, however, satisfactorily appear that an examination of the contents of the stomach or bowels was made with the object of accurately determining the plant to which the berries belonged. There is no difficulty in distinguishing the seeds of belladonna and dill-camara. We are still induced, on the whole, with the evidence before us, to consider that the latter was the poison, for several reasons. The deadly nightshade is a rare plant, and is not known to grow anywhere in the neighbourhood of Ham, unless it may be in gardens or where planted, being in a wild state confined in the county of Surrey to the chalk range and its vicinity. Blackberries are so well known to all children, that they are little likely to mistake their fruit for them; and when belladonna-berries have been eaten, it has been for their tempting cherry-like appearance, and not in the belief that they were blackberries. With reference, too, to the dilatation of the pupils, this cannot be considered decisive as regards the poison taken, as the symptom is common to several of the solanaceous alkaloids, and has been observed in poisoning by the genera, though not constantly present in experiments with that drug and with stramonium.

CARDIFF MEDICAL SOCIETY. At the ordinary meeting, on October 6th, 1875, James Milward, Esq., President, in the Chair—present: Drs. Paine, Edwards, Taylor, Buiset, and Sheen; Messrs. Fiddian, Nell, and Trehearne—it was resolved: 1. That in the opinion of this society it is desirable that the hours of attendance in the surgery be curtailed, and that patients should not be attended to after 8 P.M., except in emergencies. 2. That a copy of this resolution be sent to each member of the society.

A NOBLE WORK IN INDIA

SIR,—Your remarks about "a noble work in India" during the last nine years in Jeypore, by Dr. Colin Valentine, omit all mention of the efforts that had previously been made in the same city for these very medical institutions by Dr. K. Burr, unenvanomed medical officer to the Jeypore Political Agency; and it is, I think, only fair to that officer that his work should be recorded, as I think you will agree with me that the initiation commenced with him. In 1858-59, Dr. Burr commenced a small midwifery hospital for the instruction of native midwives in the practice of midwifery according to European practice, and carried it on for years up to 1866, with a result that these educated midwives were frequently called in by the native as well as by the European medical cases; and so, it was said, that infanticide was often prevented. I know that up to 1866 this institution was carried on, and a fair amount of success reported. In 1862 or 1863, a small medical school to teach natives European medical practice was established; and when I examined the students in 1864, a fair knowledge of the anatomy of the bones, materia medica, and dressing of wounds, besides the general routine of hospital work, had been attained. Dr. Burr was assisted by an assistant of the Agra Medical College, then under Dr. G. Playfair. The hospital, however, was bad, being an old native building, ill adapted for a hospital. Dr. Burr obtained a large number of casts, etc., from England, and the first picking of the lock of native prejudice was overcome. It was a small matter even to attain this position in so bigoted a city as Jeypore; but this Dr. Burr did, and succeeded. The medical school was not, when I left India in 1867, a success; but I have no doubt that the way was paved for further improvement. At the time Dr. Burr commenced the school, I suggested the advisability of the Jeypore State maintaining a number of students at the Agra Medical College, sufficient for the wants of Jeypore, where (in Agra) all appliances, good hospital, staff, and medical college, were in full working order.

The employment of prisoners, when they were imprisoned in the old native gaol, was a matter of impossibility; but about 1865, the new gaol was near completion, and one of the ends contemplated by Sir H. Lawrence, who suggested the new gaol, was the employment of the prisoners; and, if I mistake not, various articles were made in the new gaol as early as 1865.

I have always understood, since I left India, that the school of arts was under the direct superintendence of Dr. De Fabek of the Bengal Medical Service. Except with respect to the last, my position as superintendent of the dispensaries in Rajpootana for five years, from 1865 to 1870, gave me every opportunity of knowing what was being done. I can only think it fair to bring to your knowledge what was done before Dr. Valentine's proposals, to show that they were not altogether original, and also that the merit of recognition is due to others, who were not even hinted at in your article. I do not care to not enter now into the cases which rendered Dr. Burr's efforts less successful, or, if I may so say, so unsuccessful, that they have been quite forgotten. Your obedient servant,
J. M. LINDSAY, M.D., late Surgeon to the

Egham Hill, Oct. 12th, 1875.

Rajpootana Agency.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than *Thursday*, twelve o'clock.

SHALL THE DRUGGISTS DISPENSE FOR US?

SIR,—I read with much interest the article headed "Shall we Dispense our own Medicines?" in your issue of October 2nd, and I venture to send a record of my brief experience (four years) of a system, with a view of eliciting the opinions of others as to its merits. Personal dispensing, doubtless, adds greatly to the toil of sufficiently hard-worked practitioners, and, to my mind, constitutes the drudgery, and infuses a strong commercial element into our otherwise noble profession. Keeping a dispenser a luxury many junior members afford, if anything, increased. Removes the personal drudgery; but the business element is, if anything, increased. The question, then, arises, Who is to do it? I answer, The druggists, undoubtedly. There is no question of increased danger to the public in their doing so, as the druggists of to-day are generally men of education, and possessing a good legal qualification. I quite agree with the writer of the article on October 2, that it will not do to give a prescription into a patient's hands to be used, *ad libitum*, to their own detriment; nor is it fair to our patients (especially the poorer class) to oblige them to pay the druggists as much, or nearly, as they pay ourselves; but what I would recommend is, that every general practitioner who has a respectable druggist living near, should arrange with him to dispense all medicines for him, at a fair professional price. The system I have adopted the last four years with success is the following. After going my rounds, I call at the druggist's, and write a batch of prescriptions in a day-book, which he dispenses and sends out. If at other times give a prescription, I put a cross (*sic*) in the corner, which means "charge to me"; and all prescriptions are retained, and not repeated, except on a written order from me. If, on the other hand, I give a prescription to a poor patient, or one who I think does not intend to pay me, I omit the cross, and the druggist charges him or her what he chooses. In this way I only lose time and trouble, not goods; and I frequently find my judgment verified, as patients of that class often refuse to have a prescription made up when they find they have to pay for it. The prescriptions are all posted in a small ledger, and I pay half-pay for it. By this means I save the trouble of dispensing, keeping up a stock of drugs, and expense of keeping a boy to take medicines cut, and, perhaps, a dispenser. I commenced six years ago by dispensing my own medicines, to which I had been accustomed in my father's surgery in the country; I gave it up, and have never regretted it. I have no clubs, nor, at the present remunerative (?) prices, do I want any, nor parish work—two items which seem to me considered by my scheme; but they may, doubtless, be overcome when further considered.

I fancy that if the druggists were more fully employed in their legitimate business by general practitioners, we should hear less of prescribing druggists, and the status of the profession would be proportionately raised.

In conclusion, I shall be happy to afford further information to any inquiring brother, for which purpose I enclose my card, and remain, sir, your obedient servant,

A JUNIOR MEMBER.

SIR,—With reference to the question, "Shall we Dispense our Medicines?" permit me to say that, though I do not dispense medicines either directly or indirectly to my patients, my experience of the system of sending prescriptions to druggists is more and more in favour of each medical practitioner supplying his patients with medicines, and decidedly confirmatory of the statement of the writer in the **BRITISH MEDICAL JOURNAL** of October 2nd, who says, "The Druggists' Bill is an item of no mean importance, particularly to those in moderate circumstances . . . a bill . . . sometimes as large as that of the attending physician." The majority of my patients are of the artisan class, and therefore find it hard to pay at the rate very generally charged by druggists for the medicines prescribed, and to pay me for attendance. As a fair specimen of the charges made, I may state that for a mixture consisting of a few grains of sulphate of iron, six drachms of sulphate of magnesia, a few drops of sulphuric acid, and six ounces of water, 2s. was charged by two different druggists; and, on another occasion, 2s. 9d. was charged by another druggist to another patient. Both these instances are quite recent. And I ask whether (my charge being at the rate of 1s. 6d. for a visit to such patients) or the druggists are best remunerated? The druggists got from 2s. to 2s. 9d. in cash for what scarcely cost them 1d.; and for calling at the houses of my patients, considering their cases, and writing the prescriptions, my fee was 1s. 8d., and even that sum had to be waited for till a more convenient period for payment. Surely this is not as it ought to be.—With all respect, I am, sir, sincerely yours,

M. D.

THE CONTAGIOUS DISEASES ACTS.

SIR,—A very sufficient answer to Mr. Worth's attempt to reply, at page 384 to my letter at page 154, would be to ask him to read it again and try to understand it; for, if he should succeed, he will find that I do not propose that examinations should be made in the vain expectation of deciding what prostitutes are safe to use, for none are so, but only which ought to be sent to hospital, it being well known that a large proportion of them ought to be for their own sakes, as well as to check the spread of disease. It is quite certain, and can hardly be too strongly insisted on, that a prostitute may be diseased without its being discovered, or that she may communicate disease from which she does not herself suffer, and that the only security is the total avoidance of bad company. That, however, is no reason why those who are known to be diseased, and who, as disorderly characters, are justly and legally liable to punishment, should not, when diseased (whereby they become especially dangerous as well as disorderly), be sent for confinement to hospital until they cease to be unusually dangerous. It is contended by those who probably do, and certainly ought to, know better, that it is an outrage of a woman's rights at common law to send her to prison if she will not submit to prove that she is not an evidently a source of special danger. And of course it would be unjust to make it legal to do so if the women in question were not already committing offences for which they are liable to punishment, not for being unchaste, not even for being prostitutes, but for being proved to be *public* prostitutes.

It has frequently been objected to the Act, that it has had no effect in diminishing prostitution, but has only changed public into private prostitution. If this were its only effect, which is unproved and extremely improbable (for prostitutes, like many other traders, can do little business if they do not seek customers), the effect so far would be a great improvement. To check open profligacy is a great good, but profligacy itself is very much diminished if open profligacy be considered good, but profligacy itself is very much diminished if open profligacy be considered checked. Fewer are tempted to become vicious when they must seek vice, instead of vice seeking them: and every one allows that the operation of the Act

has been very greatly to diminish glaringly apparent vice, while all but a few are quite convinced that vice itself has been also greatly diminished.

Mr. Worth asserts, and I presume believes, that women not proved to be prostitutes have been driven to the examining house; but does he or any one believe that they would have been so sent had they denied that they were prostitutes? Could such cases happen and not be known? Would not the fanatical opponents of the Act have been only too glad to bring actions for assault or for false imprisonment on behalf of such women, if a chance had been offered them of doing so? If such injustice ever were committed, it would not be in pursuance of, but in violation of, the Act, and would be no reason for its repeal, any more than an erroneous conviction for murder or for theft is a reason for not punishing such crimes when clearly proved, but a strong one for great caution in requiring proof.

It has often been very absurdly argued that it is an insult to women, as women, that females only should be subject to the Act; but it is not because they are women, but because they are prostitutes—*i.e.*, disorderly characters—that they are so. If there were male prostitutes, men would be equally liable to restraint. For women to feel aggrieved because women alone are liable to punishment for an offence which women alone commit, is as senseless as it would be for men to complain that men only are liable to punishment for rape, to which women are not liable, because they do not commit the crime. It is wonderful that men with any reputation for intelligence will condescend to employ such shallow sophistry. What they mean, perhaps, is, that men who spread disease ought to be liable to punishment, as they ought to be and are if it can be proved; and if it can be shown that any known class or set of men carry on a trade by which disease is spread, they should, as far as possible, be punished for doing so; but no such class of men is known to exist so as to be distinguishable from the innocent.

Mr. Worth, with, no doubt, my letter before him, misinterprets me as saying almost the reverse of what I did say, as any one may see who will refer to it. I did not say that the fear of punishment does not check crime, or that if the disease were stamped out men would have more dread of it than they now have. I said nothing that any one, at once candid and clear-headed, could mistake for that. What I said was, that fear of disease is not at all proportionate to its dangers; fear is often greater where real danger is less; that, so long as syphilis exists at all, the fear of it will be great; and, as we must have all often observed, those who have exposed themselves to it least, fear it much more than those who are in far greater danger from it. As in many other cases, familiarity breeds contempt, and certainly familiarity with the arguments of opponents of the Act does so very quickly. For example, can anything excite contempt more strongly than the constant repetition of the statement, after its falseness has been exposed, that by the Act women are licensed to pursue a shameful trade, and are certified under its authority to be safe to use, whereas those who say so are well aware that the Act does not license, but to a considerable extent restrains, those pursuing a shameful trade; and, so far from authorising them to be certified as healthy, forbids any certificate being given to them at all by the examining officer?

I am not surprised that my suggestion to employ female nurses instead of male surgeons as examiners, when surgical assistance is not known to be needed, meets with no favour from the fanatical opponents of the Act, for the like reason that enemies of a church establishment view with dislike any attempts to remove what renders the church unpopular. If blemishes or objections can be removed, the agitators' chance of success will be diminished, which is precisely what I desire; the more they dislike what I propose, the better I think it. But some supporters of the Act dislike my proposal, fearing that its efficiency may be impaired if less skilled examiners be appointed; and I am not sure that it may not be so, but, I think, to any great extent; and it would, I submit, be expedient to make some sacrifice of possible efficiency for the sake of diminishing the objections of sensible people to the existence and extension of an Act which has greatly diminished both the frequency and severity of disease, has saved and will save many innocent wives and children from its ravages, has promoted public decency, checked open profligacy, and been the means of rescuing from a life of misery and shame a large number of its otherwise helpless victims, to many of whom it has afforded at least a chance of escape, of which not a few have availed themselves; and yet there are men, and well meaning men too, who offer to such an Act every sort of opposition, fair and unfair, especially the latter.—I am, sir, your obedient servant

October 1875.

P. H. HULLAND.

P.S.—A writer in an obscure periodical, that I do not choose to advertise by naming, has thought it fair to speak of my suggestion to employ female instead of male examiners as a change of front by the supporters of the Act, indicative of a retreat from the position hitherto occupied. There is here a double misrepresentation: first, I am in no way a representative of the supporters of the Act; I offered the suggestion without concert with any of them. I do not know that it offered by approved by any, but do know it will be disapproved by some. Secondly, if it be approved, it will be no change of front, no abandonment of the principle that disorderly characters shall be sent to prison if they will not prove that they are not also evidently dangerous characters. If opponents of the Act were confident that their cause was a good one, they would not resort to misrepresentation in its support, by which no good cause can be helped, but may be hindered.

P. H. H.

CERTIFICATES OF DEATH FROM LIFE INSURANCE SOCIETIES.

SIR,—A Country Surgeon seems, by his letter in my last number, to be at a loss what to do when he is called upon to fill up a certificate of death from insurance societies. Many years ago, a person called upon my brother, who was then in practice at Upper Clapton, and requested two certificates from different insurance offices respecting a patient of his lately deceased, requesting him to fill them up, which he did. This being done, the person took them up, thanked him, and walked off. A short time afterwards, a gentleman called upon me with a certificate for the same purpose, knowing how my brother had been served, and the gentleman being a stranger, I asked him if they had not been assigned. He said it was. I told him that if they were for a small sum, my fee would be half a guinea, but if for £500 it would be a guinea. He said it was not for a large sum. I signed the certificate and accepted the half-guinea. The same thing has occurred to me more than once since. I consider that the representatives of a person whose life had been insured are bound to prove the death, and also that the death had not arisen from any cause that would invalidate the policy. If the executors of a deceased patient apply to have these certificates filled up, I always charge one guinea for each, provided they be persons well to do; but if it be for a small sum, and if it be an object to the survivors to avoid expense, I give it without charge cheerfully. I have never known executors demur to paying the fees as above.—Yours obediently,

FRANCIS TOULMIN.

Upper Clapton, October 11th, 1875.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

CANCER-DOCTORS.

CANCER-DOCTORS", says the *Atlanta Medical and Surgical Journal*, "have some ways that are dark and tricks that are vain, like Bret Harte's 'Heathen Chinee'. Their system appears to be the same in outline wherever the rascals exist, and is essentially as follows. 1. He who aspires to the dignity of 'Cancer-Doctor' must provide himself with an efficient caustic or caustics, which may be used in the form of a powder, paste, or plaster. 2. The quack must disguise the articles by suitable colouring materials, and stoutly deny that they are caustics. 3. He must advertise largely that the great Dr. Tumorsmash will 'take out the cancers without the use of a knife or caustic, and without pain', and guarantee the cure. 4. When the patients flock in, he must pronounce everything a cancer, whether it be a wart, corn, fatty tumour, ulcer, necrosis, sarcoma, or what not. Now he is ready, and his success will depend upon his enterprise in carrying out the plan. Honest John Leatherhead, the shoemaker, has observed a lump upon the surface of his thigh—in fact, an encysted tumour. It gets in the way of his lapstone, gets hit with his pegging hammer, and, when it is hammered too much, becomes swollen and tender. Mrs. Leatherhead has read Dr. Tumorsmash's handbill, and advises John to go and see him. John, who has eyed the swelling for many a month with fear and suspicion, determines to have a talk with the great man, especially as his 'consultations are free'. He dresses in his best, and presents himself. The quack views him from head to foot, and draws him out into conversation, to gauge the 'size of his pile'. He then looks at the encysted tumour, and, with solemn and ponderous dignity, pronounces it a cancer of the most malignant type. John turns pale, and his leather head shakes on his shoulders. Can he be cured? Yes, says Dr. Tumorsmash, but it will cost five hundred dollars. Leatherhead pleads poverty, but finally pays one hundred dollars in advance for a guaranteed cure. 'I believe you take out cancers without pain', says he. 'Certainly', replies the quack; 'that I always do. However, I must put you under a course of preliminary treatment for a few days. This preliminary treatment is a little painful, but you can bear it, and then I will remove the tumour without the slightest suffering.' Dr. Tumorsmash now administers a good dose of morphia; next he surrounds the tumour with a circle of adhesive plaster to protect the skin, and claps on his caustic. This hurts severely, but then it is only 'preliminary treatment'; and meanwhile he plies the morphia vigorously to keep Leatherhead as quiet as possible. After a proper number of hours, when he judges that he has produced a sufficiently deep slough, he removes the caustic and applies poultices. The pain now ceases, and the poultices are continued until the eschar is fully separated from the living flesh. Now the quack is ready for his grand operation of removing the tumour 'without pain'. The patient's friends assemble, the poultice is removed, and the surface sponged clean. Dr. Tumorsmash discourses as follows: 'My friends, I have called you in to see one of the triumphs of modern science. If you look at this tumour, you will see how wonderfully my medicine discriminates between the cancer and the natural flesh. Look at this deep groove (pointing to the line of demarcation): that was the boundary of the cancer, and you see that this wonderful remedy has followed the disease everywhere exactly up to that line, and has nowhere gone a hair beyond it. It has the property of killing the cancer to its remotest roots, and has no effect on healthy flesh. I will now proceed to remove it.' Suiting the action to the word, he gracefully seizes the rotten mass with his forceps, and lifts it out of its cavity 'without pain'. Leatherhead is amazed and profoundly grateful. In the course of three months the ulcer is healed; and for the rest of his life he and Mrs. Leatherhead never weary of sounding the praises of Dr. Tumorsmash."

MEDICAL APPOINTMENTS.

SIR.—Would it not be well for the Council of our Association to review the position of the members with respect to the public on the one hand, and on the other to medical appointments, with the object of discovering whether the custom obtaining in such matters, however well suited to the past, be out of harmony with the present, and, if necessary, of initiating such changes as should readjust present relations? That there is a misunderstanding between the public and ourselves is evident. The public believes any man undertaking hard work is paid either in money or in its equivalent; and whether the appointment be styled honorary or not, so long as it is voluntary the practical worldly wisdom of the age considers the man who accepts it a fool, so far as he has not had regard to his own interests; whilst we on our side, somewhat weakly [and sentimentally, pluming ourselves on our title, are conscious in nine cases out of ten that, neither directly nor indirectly, are we recompensed for our labours. Does this redound to the dignity of the profession? Most certainly not. Charity begins at home; and the profession actually needs the yearly gift it makes to the charities of the country of the sum our gratuitous services represent. There are plenty of men in the Council not afraid of being called mercenary; and to such men I would leave the first steps to be taken, confident that, if taken, they will in sixty years have conferred a great blessing on our successors, and at the same time have done wrong to nobody.—I am, yours, etc.,
A MEMBER.

THE FLEXIBLE CLINICAL STETHOSCOPE.

SIR.—In your JOURNAL of September 25th, Dr. Brunton states that an instrument, of which you gave a notice on September 4th, was in daily use in the Royal Infirmary, Glasgow, and that it was made for and used by Dr. Tannahill. In reply to our inquiry respecting the instrument in question, we find that the many advantages claimed for our new clinical stethoscope did not exist in the one referred to by Dr. Brunton. The following communication, received from Dr. Tannahill (with permission to publish), will be the best reply we can give to Dr. Brunton's letter.

"Eden Villa, Lenzie, Glasgow.

"Dear Sir,—In reply to your inquiry, I have to state that, when fever physician to the Glasgow Royal Infirmary many years ago, I used a stethoscope different somewhat in details of construction from that described by you, but embodying the principle on which yours is made. The ear-piece in my stethoscope was broad and slightly concave, and of course was not intended, like yours, to enter the ear, nor had it the lateral perforation which you describe. Both the chest-piece and ear-piece in my stethoscope were fixed to the tube. My object in having the instrument made was to diminish the danger of infection from typhus fever when auscultating cases of that disease. I found that, in regard to acoustic properties, it gave me all the advantages of the ordinary stethoscope, while it enabled

me to examine the case at a much greater distance from the patient. When my appointment in the infirmary expired, the stethoscope was left in the hospital, and I cannot tell what became of it. In my private practice, the want of such an instrument was less felt; and, as it was less portable than the ordinary instrument, I have continued to use the latter. At the same time, I am convinced that the principle of such a stethoscope is good, and that for fever and dispensary practice it is a decided improvement on the ordinary instrument.—Yours truly,
"To Messrs. Arnold and Sons."
"R. D. TANNAHILL.

The above letter will be the best and most conclusive evidence we can produce that the new clinical stethoscope invented by Drs. Reid and Morrison is different in construction and general details from the instrument invented by Dr. Tannahill.—We remain, sir, yours respectfully,
ARNOLD AND SONS.
35 and 36, West Smithfield, October 1875.

VESALIUS (St. Mary's).—It is called the Whartonian duct, after Thomas Wharton—one of the most celebrated anatomists in the latter half of the seventeenth century, who was the discoverer of the duct of the submaxillary gland. It was Francis Glisson who discovered and described the capsule of the liver, and whom Boerhaave calls *omnium anatomicorum exactissimus*.

FOREIGN DEGREES BY EXAMINATION.

SIR.—Permit me to ask M.D. Giessen, who publishes in the JOURNAL of this day a list of foreign graduates whose degrees are not registerable in England, whether the holders of British qualifications are recognised by the countries in which the various universities named are located? Can a medical man with a British qualification practise his profession in those countries with the legal sanction of the various governments? If this be not allowable, and the practitioner is fined, imprisoned, or expelled from the state or country, unless he possess a degree or license from the medical authorities of those states or countries, why should we in England permit the holders of their degrees to register here, and walk over us broad-shod? In France, Spain, Chili, and Peru (I cannot speak from experience in regard to the German States), no one, except a holder of a qualification granted by the medical bodies of those respective countries, is allowed to set up or practise in them as a medical man; no matter how high his qualifications are, and especially if British, these go for nothing. His British professional training and examinations, though equal, if not superior, to any in the world, are yet of no avail in those countries. Why, then, let me ask, should we recognise and register a degree given by them? We may, it appears, open our flood-gates for the gratification of foreign graduates, but we ourselves must be shut out from the countries which grant degrees asked to be registered and recognised here.—I am, sir, yours truly,
OCTOBER 16th, 1875.
A MEMBER.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Bristol Daily Post; The Evening News; The Sheffield Post; The Metropolitan; The Blyth Weekly News; The Edinburgh Daily Review; The Glasgow Herald; The Western Daily Press; The Merthyr Telegraph; The Leighton Buzzard Observer; The Bristol Daily Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Sunderland Daily Echo; The Co-operative and Financial Review; The South Wales Daily News; The Macclesfield Courier; The Melbourne Argus; The Southampton Times and Hampshire Express; The Jarrow Express; The Birmingham Daily Post; The League Journal; the Sheffield and Rotherham Independent; The Derbyshire High Peak News; The Liverpool Daily Courier; The National Food and Fuel Reformer; The Worcester Herald; The Norfolk News; The Worcester Chronicle; The North British Daily Mail; The Social Science Review; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. T. McCall Anderson, Glasgow; Mr. Christopher Heath, London; Dr. Wm. Rutherford, Edinburgh; Mr. H. K. Hitchcock, Lewisham; Mr. W. F. Hazel, London; Dr. Ringrose Atkins, Cork; Dr. Isambard Owen, London; Mr. W. H. Triggs, Kingston; Mr. C. Fleming, Sheffield; Dr. Phillips, Reading; Mr. Joseph Farrar, Bradford; Dr. Paget, Cambridge; Mr. Sampson Gamgee, Birmingham; Mr. Cook, London; Dr. Cobbold, London; Sir Duncan Gibb, London; Dr. Percy Boulton, London; Dr. Speedy, Dublin; Mr. Baker, Birmingham; Mr. W. H. Jalland, York; Mr. J. A. Warkentin, London; Dr. Wolfe, Glasgow; Dr. Wade, Birmingham; Messrs. Putnam's Sons, New York; Dr. Peters, New York; Mr. Lawrie, Bradford; Dr. Braidwood, Birkenhead; Dr. Edis, London; Mr. Hardwicke, Sheffield; Mr. W. Beale, Manchester; An Associate; Mr. J. Beal, London; The Registrar-General of England; An Old Member; The Secretary of Apothecaries' Hall; Mr. T. M. Stone, London; The Registrar-General of Ireland; Mr. Eastes, London; Dr. J. W. Langmore, London; Dr. W. Newman, Stamford; Dr. J. Milner Fothergill, London; The Secretary of the Clinical Society; Mr. W. Fairlie Clarke, London; Dr. J. H. Galton, Norwood; Mr. Sympton, Lincoln; Dr. J. G. Swayne, Clifton; Mr. H. E. Armstrong, Newcastle-upon-Tyne; Dr. Sheen, Cardiff; Mr. H. G. Dixon, Manchester; Mr. B. J. Glissan, Brynmawr; Dr. Goldie, Leeds; Dr. Weir, Sneynton; Our Edinburgh Correspondent; Dr. Holman, Reigate; Dr. Procter, York; Dr. Trimen, London; Dr. J. Wickham Legg, London; Mr. J. B. Blackburn, Robertsbridge; Mr. J. Lee Jardine, Dorking; Mr. Walter Buchanan, Chatham; Mr. A. Wm. Stocks, Salford; Mr. J. B. Denton, London; Rev. Dr. Haughton, Dublin; Dr. Maclean, Netley; Dr. Withers Moore, Brighton; The Secretary of the Pathological Society; Dr. R. Douglas Powell, London; Dr. Buchanan, London; Dr. Cousins, Gosport; Dr. Strayp, Shrewsbury; Mr. H. Thompson, Hull; Our Birmingham Correspondent; Mr. Chiene, Edinburgh; Our Glasgow Correspondent; Dr. G. E. Shuttleworth, Lancaster; Mr. Charles M. Crombie, Aberdeen; Dr. F. H. Morris, Southampton; Mr. Annandale, Edinburgh; Mr. A. C. Pope, London; Mr. Baker, London; Mr. Milner Moore, Coventry; Mr. H. E. Trestrail, Aldersht; Our Dublin Correspondent; Mr. J. Aiken, Carlisle; Dr. Duffey, Dublin; Dr. Byrom Bramwell, Newcastle-upon-Tyne; Surgeon General Mouat; Dr. Bradbury, Cambridge; etc.

REMARKS

ON A

CASE OF ABNORMAL DISPOSITION TO SLEEP, ALTERNATED WITH CHOREIC MOVEMENTS.*

BY WILLIAM T. GAIRDNER, M.D.,

Professor of Medicine in the University of Glasgow.

THE following case was recently brought under my notice, in consultation with a medical friend, on whose experience and skill entire confidence may be placed as regards such details as were not under my own observation. If I abstain from mentioning his name on the present occasion, it is simply because his absence from this meeting makes it impossible to appeal to him; while a too close indication of the locality might possibly lead to uneasiness within the bounds of a very small family circle, living in strict retirement in the country. Within my own personal experience, the phenomena of the case are unique, and I am, therefore, led to suppose that a brief statement of them may be acceptable to the members of the British Medical Association. I am also not without hope that some curious statements of a more or less parallel kind, or some useful suggestion bearing on treatment, may be the result of the present communication. It has, indeed, occurred to me since drawing up this narrative of facts, to submit a condensed statement of the case in conversation to several individual members of the profession who have kindly assisted me with their experience, and it is chiefly in the expectation of drawing from a larger circle some additional and more valuable materials for a scientific induction, that I venture to place before the Section the present narrative of facts.

As I wish to be brief, I will abstain from reading *in extenso* the notes prepared for me by my friend, on the basis of pencil jottings made by myself in presence of the patient and her immediate relatives. These notes comprise a history carried over more than three years of observation of various phases of the disorder; and as these different phases are a little perplexing to follow, I will now endeavour, without adopting a strict chronological order of narrative, to bring before you two distinct groups of abnormal phenomena as mainly constituting the peculiar manifestations of the disease after it had assumed its present form. One of these groups of associated phenomena is a disorder of the muscular movements somewhat resembling *chorea*; the other is a disposition to sleep, occurring under circumstances, and to a degree wholly unusual, and suggestive (though with marked differences) of the rare pathological conditions which have been duly labelled and classified under the heads of catalepsy, ecstasy, lethargy, etc. Indeed, the association in one and the same case of abnormal muscular movements, with a temporarily suspended state of the consciousness resembling sleep, is so directly suggestive of the states above-mentioned, that perhaps the surest way to give a clear idea of the present case will be through a series of negatives, indicating the contrasts that occurred to me in witnessing the phenomena that may be even now daily, and almost constantly observed in the case of M. T.

This young girl of eighteen is, then, not a *cataleptic* according to any of the current descriptions of that rare condition. Her muscular movements have no resemblance whatever to the peculiar rigidity of *catalepsy*, and besides this difference in their character, these movements differ from those described in *cataleptic* subjects, while they approach the well-known jerkings or jactitations of *chorea*, in the fact of their *alternating* with the state of suspended consciousness, instead of being an accompaniment, or rather an essential element of the unconscious or quasi-comatose state. In other words, while this young lady sleeps, she is for the most part still and tranquil; when she is awake, she is, almost without intermission, a prey to involuntary muscular movements. Indeed, with certain exceptions to be noticed by-and-bye, there are absolutely no movements during the sleep that would be regarded as out of place during deep natural sleep.

Further, this girl is certainly not subject to any of those conditions allied to *catalepsy*, and, like it, among the more rare phenomena of disordered innervation, but still apparently faithfully described in some instances—conditions usually arising out of disordered emotion, and

ending in more or less complete unconsciousness with or without muscular disturbed movements of an irregular kind. It is impossible, in viewing the attacks of somnolency in the case of M. T., to confound them even for an instant with *hysterical coma*, or with the cases described under the names of *ecstasy*, or *trance*. There is, in fact, in my patient, no highly wrought emotional state whatever; and any hysterical appearances, properly so called, have been purely accidental and transitory, in the earlier part of her illness only, and scarcely to a greater degree than might have been expected from the moral effect of so singular a disease affecting an ordinarily sensitive subject. She has menstruated regularly throughout; has been subject to no known cause of hysterical derangement; has never sought to attract attention, or been in any way made an exhibition of, either in public or in private; she is, within the limits of her waking movements, cheerful and even lively, presenting no trace of exaggerated self-consciousness, and no dramatic or imitative faculty; she has no religious or metaphysical prepossessions connected with her disorder; enjoys on the whole fair bodily health, and is altogether what one would call a normal person of her years, apart from the peculiarities to be stated in this communication.

An equally broad line of demarcation is to be drawn between the present case and all of those characterised by the term *somnambulism*. In the case of M. T., there is no disposition whatever to *somnambulise*, or to perform any function of the waking state during the sleep; on the contrary, the periods when consciousness is withdrawn are, if possible, more distinctly and sharply divided from the waking periods than in the case of natural sleep, and are, so far as can be clearly ascertained, undisturbed even by dreams. There is also an entire absence, in the case now under consideration, of any of those phenomena of disordered or externally controlled will witnessed in the subjects of the so-called *mesmeric coma*, or *hypnotism*; and, *à fortiori*, no kind or manner of resemblance to cases, genuine or other, of *clairvoyance*.

The nearest approach, perhaps, to a classification of the case of M. T. among the *comata* of Sauvages and other systematic writers, would be under the designation of *Cataphora*, or *Coma somnolentum*. But little is gained when that name is conferred on the present case, beyond the recognition of the fact that abnormal or excessive sleep has been in other cases described as a form of diseased function.

There remains only one hypothesis to be negatively dealt with in advance; and no doubt it will have occurred to many as having been already in view in some of the diagnostic indications previously submitted. A sceptic might be disposed to ask, Is this girl a malingerer? If the preceding remarks are not a sufficient answer to this question, I can only appeal to the strong, indeed irresistible, moral impression produced by personal observation of the case, and by strict inquiry into all its incidents and surroundings, to justify an emphatic negative to the suggestion. I can, moreover say, that anything like premeditated deception or scheming, acted out consistently for so long a period as in this case, would imply *powers*, as well as *motives*, for deception, which seem to be wholly absent. And although, in criminal cases before the courts of law, the absence of apparent motive is properly not allowed to prejudice the direct or circumstantial evidence of a crime actually committed; yet, in a scientific inquiry, the absence of motive, and the presence of every conceivable guarantee of truthfulness, together with the almost physical impossibility of a sustained self-consistent imposture under the circumstances, must be allowed great weight in determining the mental constituents (so to speak) of a case of what appears to be purely physical disease. To proceed, then, with the description of the positive facts apart altogether from hypothesis.

1. The *chorea-like movements* in M. T. were among the earliest, and have been the most persistent, of her symptoms; indeed, before the peculiar somnolence, afterwards to be described, occurred, there was perhaps not very much in the character of these movements to distinguish them from ordinary *chorea*. As already remarked, they have, at all periods of the case, been characterised by a nearly complete intermission during sleep; and this remark applies to the natural and periodic as well as to the abnormal sleep. Further, the movements are in themselves painless, however disturbing; and they belong mostly to the series of the *clonic* spasms, or involuntary jerking movements. By far the most considerable, and certainly the most characteristic of these movements, is a slight, but rapid, oscillation or rotation of the head, precisely similar to that of a person who should wish to express, more or less emphatically by signs, his dissent from some assertion or argument; three or four such successive quick shakes of the head being followed by a brief interval of rest, and then by renewed shakings. There is never any nodding movement (as of affirmation); and the rotatory or shaking movement is wholly devoid of any dramatic

* Read before the Medical Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

character or apparent significance, *i.e.*, wholly involuntary and purposeless; it is also quite distinct from the tremor of paralytic agitations or of mercurial poisoning. It is, to a certain extent, increased by mental emotion (as when she is watching), but never wholly absent at any waking moment, and yet is instantly and completely suspended during sleep. I have satisfied myself that this oscillation of the head, although, as above stated, not uninfluenced by her mental condition, is nevertheless to a considerable extent beyond the control of the will, judging by all the tests usually applied in the case of choreic movements. This peculiar movement is not, however, like the jerkings in many mild cases of chorea, determined simultaneously with, and apparently in direct relation to, a voluntary effort; on the contrary, it is capable of being considerably restrained for very limited periods, and is habitually either kept in abeyance, or at least minimised, during all positive and voluntarily directed movements of the body, but always recurs when no such positive movements are taking place. A similar effect, in temporarily restraining the involuntary movements, is produced by anything that for the moment fixes her attention, as in looking or listening intently, etc.

Associated with the rotatory movements of the head, are certain twitching movements of the left side of the face, especially of the angle of the mouth, exactly similar to the jerkings or twitchings of chorea. The same remark applies to occasional, but by no means very frequent, jerkings of the right arm. It is curious that these jerkings or twitchings, first of the *left* side of the face, and afterwards of the *right* arm, preceded in point of time the rotatory movements of the head, and also all the other local and general symptoms now present; so that the resemblance of the case at its first origin to one of ordinary chorea appears to have been very complete: When at the worst (about May 1873) the head-shaking and associated jerking movements were so constant, and so utterly uncontrollable and violent, as to be (according to the medical description) "fearful to look at". Even at this period, however, sleep, whether naturally or artificially induced, completely abolished these abnormal movements, and was practically undisturbed.

Certain abnormal muscular states, either associated with the sleep or of a more permanent character, will be mentioned immediately.

2. The *somnolence*, or abnormal disposition to sleep, in M. T., may be, as to its main characters, very easily described; it is, in fact, in most of its apparent external manifestations, nothing more than very deep and sound natural sleep, occurring at abnormal intervals, and in a very frequently recurring manner, without previous fatigue or exhaustion. In one respect it differs from this description; the patient usually cannot be roused by agitation or concussion, or even by ordinary noises; but is, on the other hand, usually readily enough awakened by calling out her name pretty loudly, and close to her ear. The most marvellous, and, to my mind, unexampled feature in the case, is the sudden transition from waking to sleep, and *vice versa*. In almost all the described cases of lethargic or comatose affections, there has been a kind of gradual transition between deep sleep or coma and thorough waking or consciousness; but in this case there is almost no such intermediate condition. Many times in the course of an hour, nay, several times within a few minutes, the patient may pass from the most perfect wakefulness into the most profound sleep, or from the latter into the former; and (with certain occasional exceptions, presently to be stated) no yawning, or stretchings, or mutterings, as in dreams, or any other of the familiar appearances of the half-asleep state, attend the transition. So uniform and so irresistible is the tendency to sleep, that the patient will inevitably be found to yield to it in a few minutes when conversing, or knitting, or performing any other habitual and mechanical operation, unless she is constantly roused and stimulated by some extraneous impulse towards voluntary and non-automatic movement. Given such impulses from without, at frequent intervals, she can be kept awake indefinitely; but in the absence of positive *external* impulses she is sure to pass into deep slumber, and that with a suddenness that is almost incredible, except on witnessing the fact. After a few seconds only of agitation the head drops upon the breast, and she is at once in a state of torpor from which nothing will arouse her but the familiar sound of her name spoken into her ear. And the moment that is done, she is awake again, and *fully* awake; the act of waking having something like the effect of a shock or concussion, and being immediately announced by a renewal of the head-shaking and other jerking and involuntary movements. So great is the tendency to fall asleep, that she has been frequently known to drop suddenly asleep when, in the course of walking about, she has stood still even for a few moments; her limbs then becoming relaxed, so that she would have fallen to the ground if not supported. And yet so completely is any permanent or enduring torpor or lethargy absent, that, if she be only *kept* awake, she will converse without any apparent sense of fatigue, will read a newspaper or a novel, will do any ordinary women's work, and will show

entire self-possession, a fairly good memory, and no deficiency of cheerfulness or of ordinary intelligence. If she be allowed to fall asleep, and then again suddenly reawakened (in the manner before mentioned), were it even many times in the course of half an hour, she still shows no want of self-possession, but resumes conversation, or her ordinary occupations, exactly at the point at which she left off. Such, in fact, has been the habitual course of her uneventful life, ever since her first period of abnormal sleep in March 1873.

To this general statement, however, there fall to be recorded several exceptions, which I shall now proceed briefly to detail. In the first place, the passage from the waking state into the sleep is not always perfectly tranquil, though always nearly instantaneous. It appeared to me, on several occasions, to be attended by spasmodic movements of a quite different kind from those observed in the waking moments; movements, especially of the hands, more or less similar to the carpopedal spasms of infancy, and with a considerable degree of tonic rigidity, though of brief duration; also a kind of unconscious *hand-washing* movement and convulsive spasms of the lips, all of which conveyed to a skilled observer a hint or suggestion of the earliest stages of certain paroxysms of epilepsy, without, however, the least degree of lividity, or pallor, or change in the character of the pulse, and without any ultimate development in the direction of a characteristic fit, either of epilepsy or apoplexy. A degree of moaning and restlessness, also, very commonly attends the first moments of the sleep; and similar manifestations are occasionally presented during its course, but without any apparent consciousness of them on the part of the patient, either at the time or afterwards. The nearest approach that has hitherto been realised to a half-asleep state, or to dreaming, has been an obscure impression of consciousness of words spoken to her in sleep; but opinions upon this point vary. It is agreed that even loud and unusual sounds, such as thunder, have often failed to awaken her, although apparently making her uneasy and restless. It is also agreed that all the usual sensations connected with the evacuations are powerless to awaken her, though giving rise to symptoms of distress, which have always made it expedient for her kind friends and nurses, by whom she is most carefully watched, to awaken her artificially; and, perhaps, one of the strangest (yet apparently well-attested) parts of the history is that she has never had any involuntary evacuations, even in her deepest somnolence. It is the decided conviction of her friends (founded, so far, upon actual experience) that she would never awake spontaneously, however long she might be left undisturbed; that neither the sense of starvation, nor the pressing necessity of evacuation, nor the weariness of an unvaried posture, nor any other naturally arising impression, would put an end to the somnolence. This impression must be taken as partly confirmed, partly to be corrected, by the observation that, in June, and again in December, 1873, she actually was submitted to a kind of unintentional experiment. On these occasions, she is said to have passed many days continuously in a state of profound and unbroken slumber, without either spontaneous evacuations or food artificially given. The longest period so passed on either occasion (as reported) was eight days. On these occasions, however, she did, at last, awake spontaneously and suddenly; so that it is not altogether certain that the experiment, if it could now be carried out with propriety, or even without danger, would not end in a similar way. But, on the other hand, it is the impression of her friends that artificial awakening is now more difficult than it was at first, requiring both more decided and loud noises, and closer to her ear than formerly. When she awoke spontaneously after an eight days' sleep, she had no conception of having slept more than a single night. She is able to dress herself, to take all her meals herself, to play the piano, and in many ways to enjoy life, and keep herself in occupation. But, in every instance, she requires to be constantly watched if anything of importance has to be done, otherwise she would be almost sure to fall asleep in the doing of it. This applies even to the ordinary evacuations as performed during her waking intervals. On the other hand, all the truly involuntary functions are perfectly maintained during the deepest sleep; the pulse never fails, the respiration is perfectly and naturally maintained, without much stertor; the feet and hands, however, tend to be cold, without any positive sense of chill.

There has never been any fever, or any severe or formidable local pain, but one of the most apparently persistent symptoms—one, indeed, present almost from the first—has been a certain amount of dull pain or uneasiness in the left temple; and she observed, at an early period, that, when this sensation was at the worst, the twitchings were also aggravated. An appreciable amount of halting in the right leg, and comparative weakness of the right arm, have been observed at times, especially by the patient herself; but there has been no permanent, nor even any unequivocal, paralysis at any time, or in any part of the body.

The following note of ophthalmoscopic observations in this case has been kindly furnished by Dr. Thomas Reid, of the Glasgow Eye Infirmary.

Ophthalmoscopic Examination in Case of M. T.

On account of the rapid and incessant lateral movements of the head, it was impossible to make the examination in the waking state. She was accordingly allowed to fall asleep, which she did quickly in the usual way. The pupils, previously normally dilated, remained so during sleep, except occasionally when, either from the stimulus of the light thrown into the eye or from involuntary muscular contraction, the pupil contracted slightly, and this was always accompanied by the associated act of accommodation for near objects. The left eye was slightly hypermetropic, and a good view of the fundus oculi was got both by the direct and the indirect method. The optic disc was oval-shaped, the major axis being vertical. The retinal veins were congested and rather tortuous; the arteries diminished in calibre, and barely visible. The right eye was slightly myopic, the optic disc ill-defined, contracted, rather pale, and slightly depressed in the centre. The veins and arteries were nearly as in the left eye. On being roused, an attempt was again made to see the fundus, in order, if possible, to compare the state of the circulation in the two conditions; but, with the exception of an apparent slight increase of the circulation indicated by the greater intensity of the reddish reflection of the fundus (which was all that could be observed under the circumstances), the condition in both states appeared to be much the same. The oval shape of the left disc was probably congenital. The atrophy of the right was probably associated with some intracranial degeneration. The appearance presented by the vessels might be accounted for by some local constriction at the optic nerve-entrance. There was no trace of hæmorrhage or exudation throughout the fundi.

Details of Case as referred to above.

M. T., a strong, well-formed, and well-coloured girl of fifteen years of age, of previous good health, and with no particular family history of any nervous disease, while sitting in an omnibus on her way home from school, in the beginning of May 1872, was suddenly seized with sickness, a feeling of fainting, and a peculiar spasmodic twitching of the muscles of the left side of the face. The sickness soon passed off, but the twitching remained: the spasmodic movements ceased during sleep. When this twitching had continued for a month or so, it was observed that her right arm began to twitch in like manner, and her head also began to jerk towards the left side. The case had at this time all the appearance of being one of chorea. In conveying food to the mouth, or otherwise using her right hand, she seemed to have little control over its movements, and it occasionally missed what it was intended to do. She continued in this state for some months with little or no change. She was able to go about, and even to go from home for change of air. About this time, she first complained of a dull heavy pain in the left temple, at the junction of the frontal and parietal bones, sometimes better and sometimes worse, but of no extreme character. This pain has been very persistent; and she has observed that when it is most severe, the twitchings are more marked than at other times. Latterly, she noticed that every second night the spasmodic twitchings of the face and the erratic movements of the head and arm were very much aggravated, so much so that she remarked that she had only one pleasant day out of the two: she dreaded the periodic return of the spasms. During this period she had a few hysterical fits.

In March 1873, she suddenly became unconscious, and lay for about a fortnight with her eyes wide open and pupils dilated. She talked nonsense in a stammering manner, sang songs and hymns, had optical delusions (*e.g.*, saw wild beasts, etc.), and did not know her friends. During this time, the spasmodic twitchings and the shaking of the head ceased. When she recovered from the unconscious state, the twitchings and the head-shaking began again in the most violent manner; and towards the end of May 1873, her state was something fearful to look at: the head rocked to and fro on the pillow in a semiroatory motion, and very rapidly; it could not be controlled, even by exerting considerable force and holding her head firmly with both hands. These violent movements ceased, however, during sleep; and in order to procure rest, the hypodermic injection of morphia was had recourse to. In performing this operation, it was remarked that at first, on the insertion of the needle, before the morphia was injected, the head ceased moving, and she fell into a sleep, the sleep being pretty much as is usual under morphia: latterly, however, she did not fall asleep till morphia had had time to act.

This violent semiroatory motion of the head continued without abatement till towards the end of June 1873, when one day she complained of feeling very wearied, and almost immediately thereafter she fell into a deep sleep, and slept continuously for two days (all the spasmodic

movements ceased). At the end of this time, she awoke for a few minutes, made a remark or so, and again fell asleep, continuing in this sleep for eight days. No amount of pinching or shaking her, however severe, could awaken her. Strong ammonia applied to the nostrils caused her uneasiness, but did not awaken her. At the end of eight days she awoke suddenly and spontaneously, her first remark being, "Is it true that my head has stopped shaking?" The head had stopped shaking, though there remained a slight, almost imperceptible, twitch of the face. During her sleep, she took no nourishment but a little wine and water, and beef-tea poured into her mouth with a teaspoon, and with difficulty swallowed (*i.e.*, swallowed mechanically). The bowels never acted, nor was her urine passed, nor did any necessity appear for the use of the catheter, there being no perceptible accumulation.

For the next five months, she kept pretty well in health, though there was always a perceptible twitching of the left side of the face (but very slight), and she complained of weakness of the right arm and right leg. In walking, it was noticed that she had a slight halt, and she dragged the right leg. She took her food well, and her health and strength visibly improved, so that she was able to go about, take walks, do fancy work, knit, sew, etc.

Towards the end of December 1873, she again suddenly fell asleep, and slept for eight days without awaking. Twitching ceased as usual during sleep, and she lay in a state similar to that in which she was in the June previous. At the end of the eight days, she awoke as suddenly as she had fallen asleep, got up and moved about as usual, seemingly unaware that she had slept more than one night; and then began the curious state in which she is at the present time. When she goes to bed, she falls asleep at once, and never awakes spontaneously, until she is awakened by her friends in the morning: she then gets up at once and dresses herself, but requires to keep always moving and active, for, if she were to sit down or stand still an instant, she would certainly fall asleep. She falls asleep at her meals, in the act of conveying food to her mouth, in the middle of a sentence, while carrying on an animated conversation, in playing the piano, or in reading or sewing. The only way she can prevent herself from falling asleep is by keeping herself in a state of activity by walking about. If she wish to read, or sew, or knit, she must keep moving; if she stand still, she falls asleep, and falls to the ground; and if she sit down, she sleeps almost immediately, and often falls off her chair, so that she has constantly to be under the supervision of her friends. During her sleep, she seems to have a sort of consciousness of some sensations, for when she has taken purgative medicine, about the time the bowels are going to act, her friends notice her getting uneasy; she moans and tosses about, and appears unhappy, and, on being awakened, she has an urgent call to stool, and asks why they did not awaken her sooner. She also appears to have a consciousness of noises, but never awakes, only gets restless and uneasy in her sleep.

At first, she used to fall asleep more easily, and was more easily awakened than she is now. She may sit now for five or ten minutes conversing before she drops off asleep, whereas at first she used to sleep the moment she sat down; now she can only be awakened by shouting her name close into her ear, whereas at first she could easily be awakened by making a noise at a distance from her, by whistling, or clapping of the hands.

Detailed Account of Waking State.—Constant lateral vibration of the head is observed, with quick movements of rotation, only stopping for a few moments when her attention is fixed, as in looking or listening intently, with slighter and less constant chorea-like twitching of the angle of the mouth on the left side; slight twitchings of the right arm are markedly observed, though not so much of late. There is a slight halt of the right leg, but no irregular movements. Washing and graspings of the hands are observed, evidently due to nervousness in the presence of strangers; they are not usual. She speaks intelligently, answers questions correctly, and is very observant.

The sleeping state is in the main a deep sleep, with body and limbs quite quiescent. This applies at least to the greater part of the duration of sleep, say during the night; and at first this was the usual condition of sleep at all times. In falling into sleep, her head drops on her breast, and she moans. At first, there was almost always more or less of spasms, twitchings, and quasi-convulsive movements of the hands and arms, and also of the face; but of late there have been decided rigid convulsions of the hands and forearms, very like the carpo-pedal spasms of infants. The hands are strongly flexed on the wrists, and the fingers bent into the palms of the hands, so strongly that they cannot be unclasped. The head is observed at times to be turned round to the right shoulder in a strong spasm; this occurs sometimes in the middle of the sleep. These spasms are sometimes increased in intensity when she has been excited. There are also

chorea-like movements of the shoulders, and rather extreme convulsive jerking of the left angle of the mouth in falling into sleep, also deep sighing and moaning: this has been more observed of late. She never awakes spontaneously, nor is she ever awakened by any ordinary disturbance, or even by severe concussion, or painfully pinching or pricking within limits. She has been lifted off her chair and roughly shaken without being awakened. The only thing that can be counted on to awake her is to speak her name into her ear, or make a loud noise or whistle close to her ear. She used to be more easily awakened than now: a loud sound at a distance, as whistling or clapping of the hands, succeeded at first in arousing her, but not now. Loud sounds disturb her sleep, but do not awake her; even thunder, which is very disturbing in its effects on her when awake, does not disturb her sleep. When she is awakened, she looks up startled and confused, and looks about for an instant as if collecting herself. She is not conscious of anything during sleep, but has been suspected of being conscious of words spoken by others during her sleep; but this has not been verified. Frequent slight whinings and restlessness occur during sleep, as if unhappy, but she appears unconscious of them, or of any impression to cause them. In sleep, the pupils are widely dilated, the pulse is not affected by sleeping or waking, breathing is perfectly calm, and her colour does not change.

From the beginning of her illness up to the present time, she has always been perfectly intelligent, and can carry on a conversation with spirit; occasionally reads books and the newspapers, writes letters, and does fancy work. Her memory is not impaired; remembers what she reads perfectly well. In her disposition she is amiable, good-tempered, equably minded; has never any paroxysms of grief or anger; feels her position keenly; is easily excited; is rather sensitive, and does not like being seen by strangers; has not had hysterical symptoms for at least two years.

Her bodily health has been pretty fair all through her illness. At first, she was stout and of good complexion, but latterly she has lost flesh, is paler, and not so strong; walks with a halt, and prefers to lean on a person's arm when walking. Pulse 90 to 100. The bowels are costive; never moved except by medicine. The urine has never passed involuntarily; it has never required to be drawn off, but accumulates during sleep; never awakens her by necessity of discharge, but gives rise to symptoms of distress. Menstruation has been regular all through her illness; no uterine derangement; appetite poor; food is not taken heartily, but not refused or vomited; no gastric derangement; tongue white, and breath mawkish; no fever at any time; extremities always cold, but no sensation of chill or shivering; she has had occasionally, however, a feeling of a creeping sensation up the back, apparently fornication.

As regards remedies used, the disease assumed so many different phases that the treatment had to be changed from time to time. At the beginning, the remedies given were such as are usually administered for chorea: notably bromide of potassium, oxide of zinc, valerianate of zinc, ammonia, quinine, strychnia, and several preparations of iron. Antispasmodics were given for the hysterical symptoms while they existed, with alteratives and purgatives. To produce sleep and give rest, and so stop the constant vibration, chloral hydrate was administered, also opiates and the hypodermic injection of morphia. Blisters were applied to the nape of the neck and down the spine; the head was shaved, and blistered over the seat of pain. The bromide of potassium was given at several times—at one time in very large doses, either alone or combined with strychnine; but its use had to be stopped, owing to misgivings as to its effect on her health. Iodide of potassium and phosphorus were also administered. Tonics of quinine, strychnine, and iron, mineral acids, with bitter infusions, have been had recourse to of late in order to restore her strength.

CASE OF AORTIC ANEURISM SUCCESSFULLY TREATED BY THE DISTAL LIGATURE.

By THOMAS ANNANDALE, F.R.S.E.,

Surgeon to the Edinburgh Infirmary, and Lecturer on Clinical Surgery.

R. B., AGED 62, was first admitted under my care in August 1874, on the recommendation of Dr. Wilson of Motherwell. The patient had suffered from symptoms of thoracic aneurism for about six months; and, as these were steadily increasing in severity, he was advised to come into the Infirmary.

On admission, there was a distinct aneurismal tumour, pulsating strongly, and passing up from behind the clavicle and sterno-clavicular articulation into the neck, as far as the cricoid cartilage. The trachea was displaced towards the left side by the tumour, and the inner half

of the clavicle and its articulation with the sternum were pushed forward by the portion of the tumour under them. There was a well-marked *bruit* to be heard on all sides of the swelling, and there was dulness on percussion over a considerable area, corresponding to the situation of the thoracic part of the tumour. In addition to these symptoms, the patient had a constant irritating cough, pains shooting up into the head, want of sleep, and he was losing flesh markedly. He was ordered to keep in bed; and iodide of potassium, in twenty-grain doses, was given three times a day. After one month of this treatment, he left the hospital with his symptoms somewhat relieved, and he was advised to continue the iodide of potassium.

On February 8th, 1875, he was again admitted into my wards, as his symptoms had returned and become more troublesome. He had been unable to continue the iodide regularly, owing to the expense of it. An examination of the tumour showed an increase in its cervical portions. It had not only spread higher up, but it had also spread laterally so as to overlap the site of the subclavian artery. The upper portion of the tumour felt softer; and it was this portion which seemed to be increasing most rapidly. After carefully considering the circumstances of the case, and determining that pressure on the right carotid artery, immediately above the cervical portion of the tumour, very much diminished the aneurismal pulsation, it seemed to me a favourable opportunity for practising the distal ligature. The position of the tumour did not permit the subclavian artery to be ligatured; but there was just sufficient room to secure the common carotid above the cervical portion of the aneurism.

The patient having given his consent, I, on the 2nd of March, ligatured the common carotid immediately under the omo-hyoid muscle, which was drawn upwards, so as to reach the vessel. The internal jugular vein was unusually large and dilated; and some care was necessary to avoid injuring it, as it completely overlapped the artery. The operation was performed under the carbolic spray, and the ligature used was prepared catgut. The immediate effect of the ligature was to almost stop the aneurismal pulsation, and to convert the strong pulsation into a kind of quivering motion. Not the slightest local or constitutional disturbance followed the operation; and the wound was healed on the 17th. A week afterwards, the patient was out of bed. The day after the operation, the patient expressed himself as greatly relieved. He no longer himself felt the pulsation in the tumour, and the pains in his head and neck had disappeared. The pulsation in the aneurism was felt to be very feeble, and the tumour itself was decidedly smaller.

The patient left the hospital a few weeks afterwards, his symptoms continuing in the same improved condition, and the tumour gradually becoming firmer to the feel.

From time to time, the patient returned from the country to show himself, and his state on September 27th was as follows. His general health was good, and he had no pain or other uneasiness. He could stoop freely without giddiness, and could go up and downstairs easily. The tumour had continued to diminish in size, and its cervical portion was fully half an inch lower in level than before the operation. The whole tumour had become much flatter, and also firmer to the touch. On placing the hand over it, only a very feeble pulsation could be felt, but the pulsation was slightly stronger over the upper part of the cervical portion. A *bruit* could still be heard on all sides of the tumour, but it was not nearly so loud as formerly.

REMARKS.—Although it cannot be said that the aneurism in the case reported was completely cured, there can be no doubt as to the great relief which followed the operation. The case, therefore, appears to me to furnish additional evidence in favour of the distal ligature in suitable examples of otherwise incurable aneurisms, and it also tends to confirm the opinions of Mr. Holmes* and Mr. C. Heath,† who have so ably written on the subject.

From my experience in other cases of thoracic and cervical aneurism, and from an observation of cases treated by my friend and colleague Dr. G. Balfour, I can testify to the value of iodide of potassium in relieving the symptoms and promoting coagulation in this disease; but I am inclined to express the opinion that, should a fair trial of this drug fail to give complete relief to the symptoms, the distal ligature of the carotid should be employed, provided the case be a suitable one for the operation. The test of the suitability of the case for operation being the effect which temporary pressure on the distal portion of the carotid has on the aneurismal pulsation. If such pressure diminish the aneurismal pulsation, and should there be sufficient space to ligature the common carotid above the tumour, then I think the case is a proper one for operative interference. I also think with Mr. Holmes that operative interference

* *Lancet*, July 13th and August 31st, 1872.

† *On the Treatment of Intrathoracic Aneurism by the Distal Ligature.*

should, in the first instance, be confined to ligature of the carotid, ligature of the third part of the subclavian being resorted to if advisable at a future stage in the progress of the case.

The case reported further illustrates the value of the antiseptic catgut ligature and other antiseptic precautions, the combined use of which has, in my opinion, removed all the most serious risks in connection with the ligature of arteries.

ON LIGATURE OF THE COMMON FEMORAL ARTERY; AND ESPECIALLY ON LIGATURE BY AN ANTISEPTIC MATERIAL.*

By OLIVER PEMBERTON, F.R.C.S. Ed.,

Surgeon to the General Hospital, and Professor of Surgery in Queen's College, Birmingham.

THREE years since, when I had the honour to deliver the Address in Surgery at our Birmingham meeting, I mentioned a case of aneurism in Scarpa's space, in which, in preference to applying a ligature to the external iliac, I tied what I presumed to be the common femoral an inch below Poupart's ligament. I did this with an ordinary hempen ligature, and left the wound completely open.

So far as the treatment of the aneurism was concerned, the case did perfectly well; but, when I came to dissect the arteries involved—death having taken place from causes wholly removed from the aneurism—I found the circumflex ilii, epigastric, and profunda femoris given off together; that is, at opposite points of a line drawn from the main trunk a little above Poupart's ligament; the point of the ligature being five-eighths of an inch below these vessels, and the tube of the artery intervening being firmly plugged.

Now, although it is obvious that I really tied here the superficial, not the common femoral, owing to the abnormal origin of the profunda, yet the case affords an overwhelming proof of the fact that an abiding coagulum can form in the immediate vicinity of almost any number of branches on the proximal side of a ligature. If this be so, the chief ground for discarding the operation of ligature of the common femoral disappears.

I wish, however, to show that it is the duty of the surgeon to choose this proceeding in preference to tying the external iliac: a duty that becomes imperative when it is based on the knowledge that he submits his patient to less risk of danger to life from the mere operation; and, what is of equal importance, that he has yet a favourable artery to tie in case of failure. I am fully aware that no mean surgical authority—Mr. Erichsen—lays down the rule of surgery, "That in all cases of aneurism above the middle of the thigh, and in which sufficient space does not intervene between the giving off of the deep femoral and the upper part of the sac for the application of a ligature to the superficial femoral, the external iliac should be tied, unless compression can be successfully employed". From this I dissent, and, as I have already said, because the very reason Mr. Erichsen assigns for his judgment—namely, that the liability to secondary hæmorrhage is almost a necessary consequence of the operation, the shortness of the trunk rendering it necessary to tie the artery in close proximity to such large collateral branches that the arterial coagulum will not readily form—does not, in my opinion, constitute a sufficiently valid reason.

And now I will ask to place on one side for a moment the case I have submitted, and inquire whether this source of danger is not diminished, or even entirely removed, by the use of a ligature composed of antiseptic materials.

CASE.—A strongly built Indian soldier, aged 33, non-syphilitic, came under my notice at the General Hospital, Birmingham, in May 1874, with a rapidly increasing aneurism of the left superficial femoral artery. Of very slow growth in its early history, its character was now changed. Reaching to within three to four inches distance from Poupart's ligament, it compassed a space of six inches in extent, was largely raised above the surrounding parts, and was accompanied by strong visible pulsation, by œdema, and severe pain.

After a few days of carefully applied pressure at the arch had proved of no avail, on May 26th I tied the main artery and what should be the common femoral, an inch below Poupart's ligament. I used an ordinary antiseptically prepared catgut ligature, tying the vessel by a single loop, and finishing by a double one. The ends were cut off short, and the wound closed. The contents of the aneurismal sac remained fluid for a long time; and it was not until nearly three months had elapsed that everything was absorbed and the limb restored.

Now, neither at the operation nor subsequently did I follow out the antiseptic method of treating the wound; that healed in the ordinary way by suppuration and gradual repair. I simply desired to permanently close the artery at a given point without cutting it through; and this, I submit, was effectually and safely accomplished, even in the midst of suppuration.

I am not aware of any previous instance in which an animal ligature has been applied to the common femoral, with the exception of Professor Lister's case referred to by him in his Address to the British Medical Association at Plymouth (August 1871), where, in the face of a diffused popliteal aneurism, he tied what he expected to be the common femoral with a catgut ligature. The vessel, at any rate, as he informs me, was ligatured about the most frequent situation of the origin of the profunda—making the case all the more striking, as the only result he would expect from the application of a silk ligature in such a situation would be secondary hæmorrhage.

The principle involved in tying arteries in their continuity by means of animal ligatures may be still on its trial; but I will be bold enough to assert "that the fate or behaviour of a given antiseptic catgut ligature, applied to the continuity of an artery", will yet be foretold with confidence as to the favourable result. And in this I appear to be more sanguine than Mr. Maunder states himself to be in his recent Lettsomian Lectures on the *Surgery of the Arteries*.

It is, I think, to be regretted, that I was unable to place my recent experience in Mr. Holmes's hands before he summed up his views on ligature of the common femoral in his lectures at the Royal College of Surgeons last year, as I intended doing, thereby strengthening the conclusion at which he arrived: that there was no just cause to banish this operation from surgical practice. The cases of Ramsden, of Mott, of Porter, Macnamara, Colles, and myself, led him to this view with the use of the hempen ligature. Surely the consideration of Professor Lister's case, and the one I now for the first time lay before the profession, should remove from his mind his remaining objection, based on the uncertainty of the place of origin of the profunda: a circumstance, I venture to think, of no real importance, when the canal of the artery is not cut through.

TWO CASES OF ANEURISM, ONE OF THE CAROTID AND ONE OF THE FEMORAL ARTERY, SUCCESSFULLY TREATED BY THE WIRE COMPRESS.

By JOHN DIX, M.R.C.S., Hull.

THE wire compress, a substitute for the ligature, was first used by me in September 1860, just fifteen years ago, and was brought before the profession by a paper read at the Royal Medical and Chirurgical Society, January 13th, 1863. An abstract of this paper, with the discussion thereon, appeared in the weekly medical journals: it was published *in extenso* in the *Edinburgh Medical Journal* of September 1864, and reproduced in Braithwaite's *Retrospect*. The procedure was then looked upon as a novelty, and there was the usual dispute about priority of invention. The late Sir James Simpson afterwards settled this question for us by showing that the idea and the practice were more than three hundred years old—older, in fact, than the ligature—and that the only change from the method of the surgeons of the fifteenth century, was the substitution of wire for the thread of hemp or silk used by them. So true is the saying of Liston, that "young surgeons meet with many anomalous cases; they also rediscover many things".

It seems that this practice was superseded by the ligature, which was invented by Ambrose Paré about the year 1564; yet it was not altogether forgotten or laid aside, as mention of it crops up here and there in the surgical writings of various old authors, both English and foreign. Its revival in modern surgery is clearly due to the impetus given to surgical ingenuity by the introduction of acupuncture by Sir James Simpson and his writings thereon, which so rudely shocked the faith of surgeons as to the perfection of the time honoured ligature.

But the long needles as at first used were by no means pretty, and many who thus made trial of acupuncture, while recognising the soundness of its principle, could not shut their eyes to its defects, and so cast about for other methods of applying it. Hence we soon had before us various kinds of needles and varying modes of using them. Hence, also, arose this process, which I have called the "wire com-

* Read before the Surgical Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

* Read before the Surgical Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

press", which seems to have occurred to many minds, independently and almost simultaneously. I may mention Langenbeck of Berlin, Neudörfer of Prague, Mr. Hilliard of Glasgow, Dr. Pollock of Pittsburgh, as well as myself. So far as I know, I was the first in this kingdom to use it in actual surgery, and the first to write thereon in the paper to which I have already referred. This paper attracted considerable attention; many surgeons expressed themselves pleased with the device, and proffered to try it, though I know of no one who really gave it a serious trial except Mr. Teale of Leeds. It found a place in the next published edition of Druitt's *Vade Mecum*; and a long chapter on the whole subject, under the title of "Filopressure", may be read in Simpson's book on *Angioplasty*.

Meanwhile, out of this crusade, or revolt as it were, against the ligature, sprang the revival of another ancient and long defunct process, viz., torsion, by Professor Syme; and, also, the *carbolic catgut* ligature of Professor Lister, which differs so much in its effect and action from the silk ligature that, but for bearing the same name, it would never be classed in the same order of appliances. These two processes have been so strenuously advocated, and been found so practically successful, that they are now the popular, and in some schools the almost exclusive, methods of arresting bleeding; and the "wire compress" has died out, and, except by myself, has been well nigh forgotten.

Yet it has never failed or disappointed me. Since I first wrote on the subject, I have scarcely ever used any other hæmstatic. I had then had but five cases. I have since employed it in many and various operations; amputation of limbs, breasts, testicles, and for various arteries accidentally wounded, and with most satisfactory results. Thus I have had, of secondary hæmorrhage, never an instance; of suppuration, a minimum; and not unfrequently complete primary union even in large wounds, and that without any antiseptic precautions. I will mention but two illustrations.

For the removal of a breast, the incision was nine inches long; three arteries were secured by the wire. On the fourth day, the only trace of the operation was a firm linear cicatrix and the suture marks. There was not a drop of pus nor exudation of any kind whatever.

About eight weeks ago, I amputated the leg of a feeble old man for acute destruction of the tarsal and ankle bones. Here again there was perfect primary union. On the sixth day, the stump was firmly healed, needing only the support of a strip of plaster. With such results, is it to be wondered at that I still have faith in this procedure and continue to employ it?

I pass now to the more immediate object of this paper, viz., to relate to you two cases of aneurism treated by this same "wire compress". In the essay to which I have already referred, I spoke of the *applicability* of this method to arteries in their continuity, and demonstrated the process by this rude model which I here again exhibit, and which, by a stretch of imagination, may be taken to represent a femoral artery, secured by the wire for an imaginary popliteal aneurism. It was two years afterwards that I first had the opportunity of bringing the idea to the test of actual practice, when the following case fell into my hands at the Sculcoates Union Workhouse, to which institution I have the distinguished honour of being surgeon.

William Gardner, aged 50, formerly a man-of-war's man, lately a lighterman, had met with much rough usage in his vocation, and also in the battles of Venus. He had aneurism of the left carotid, first observed "about the size of a hazel-nut", six weeks ago. It was now somewhat larger than a duck's-egg, occupying the anterior triangle of the neck, pushing the larynx from the medium line.

November 29th, 1865. The artery, which was very large, was exposed below the omo-hyoid, and an aneurism-needle passed under it in the usual way. A piece of surgical iron wire was threaded through the eye of the aneurism-needle and conveyed beneath the artery by the withdrawal of the needle, which was then detached from the wire. To each end of the wire a straight needle was next attached, and the two needles were passed through the tissues, on the outer side of the incision, being about half an inch apart at the surface of the skin, and the same distance from the edge of the wound; the wire being drawn through and thus looped over the artery, the needles were detached. The half of a vial-cork was placed, the flat side downwards, between the ends of the wire, and firmly pressed down along the course of the artery; the wire was tightly twisted over the cork, stopping at once the current through the artery and the pulsation of the aneurism. The superfluous ends of the wire were cut off, and the wound was united

by wire sutures. The man was then in a state of extreme collapse from chloroform; in fact, he was to all appearance dead, and was only resuscitated by the strenuous and persevering exertions of my assisting friends. With the recovery of the circulation, there was also a recurrence of feeble pulsation in the tumour. This was allowed to go on till the third day, when the compress was thus tightened. The cork being firmly pressed down upon the artery, and the wire drawn outwards by gentle traction on the twisted end, two small wooden wedges—portions of lucifer matches in fact they were—were pushed in between the cork and the wire; and now, for the first time, the circulation was entirely arrested, and all pulsation and *bruit* ceased. Two hours afterwards, there was again a feeble thrill; so next day, the fourth after the operation, another little wedge was inserted. After that, there was no more pulsation.—Fifth day. No pulsation; the tumour was evidently consolidating, and perceptibly diminished in size. One wedge was removed to lessen the tension.—Sixth day. The other two wedges were withdrawn in the morning, and, in the afternoon, the cork was also removed. The tumour was considerably smaller, and, on the seventh day, the wire was withdrawn without difficulty and without blood. Some pus exuded from the track of the wire, and there was moderate suppuration in the wound.—Tenth day. It is noted that "the tumour is nearly gone". There was pulsation in the artery up to the aneurism beyond the site of the application of the wire, showing that no damage was done to the coats of the vessels. This only continued for a few days, for, as it led to nowhere, the artery was soon obliterated, and, when the man died seven years afterwards, a fibrous cord was all that remained either of the artery or of the disease. In a fortnight, the wound had healed, and the patient was cured.

I related this case and exhibited the patient at a meeting of the East York and North Lincoln Branch of our Association, May 23rd, 1863; but it was not published, nor alluded to in print, except by a brief note in the *JOURNAL*, and in the *Medical Times and Gazette* of December 16th, 1865, in reply to Mr. Syme's strictures "On Acupressure and other Nonsensical Contrivances for the Suppression of Hæmorrhage". It is also alluded to in a paper by Mr. Teale in the *Lancet* of January 5th, 1867, on a case which he treated by this method.

On January 24th of the present year, my partner Mr. Rudd was called in to one John Hull, and, on his return, reported the case to me as one of femoral aneurism. I saw the man with him the next day. He also was a waterman, twenty-five years old, short, florid, and very fat. There was a pulsating tumour of large size at the lower part of the right thigh on its inner aspect, which was first observed about nine weeks before. It now measured quite four inches and a half in length and four inches across, and was clearly an aneurism of the femoral artery protruding from the edge of Hunter's canal. The whole limb was much swollen. Not to weary you with minute details, I would briefly state that pressure was tried for four days without benefit; and it was, therefore, determined to secure the artery by the wire compress, which was done on February 2nd, at noon. The superficial femoral was exposed in Scarpa's triangle, by an incision five inches long and at least an inch and a half deep. A wire was carried under it by an aneurism-needle, as in the previous case, brought out to the surface of the skin about half an inch on the outer side of the incision, and there twisted over the cork—which was firmly pressed down between the coats of the vessel—till the pulsation was arrested. The wound was closed by wire sutures, supported by a large pad of lint on each side, and long strips of plaster over them. The limb was already bandaged with flannel during the application of pressure, and so it was left. At 3 P.M., there was pulsation in the aneurism. At 9 P.M., there was none. The pain, which had been great, had entirely left him. Next day, at 11 A.M., there was again pulsation. Two wedges were inserted between the cork and the wire; and at 9 P.M. there was no pulsation.—Third day; at 11 A.M.: the limb was readjusted on the pillows, and his position made less irksome. There was then no pulsation. At 9 P.M., there was a feeble thrill.—Fourth day. Slight pulsation; two more wedges were inserted, and the pulsation ceased, to return no more.—Fifth day. The limb was diminishing, causing the tumour to seem more prominent. The limb retained its warmth, and there was no constitutional disturbance whatever. He complained only of being worried by fleas.—Sixth day. Tumour less, quite solid. Wedges removed.—Seventh day. The cork was taken away, and the wire loosened. It moved in consonance with the pulse.—Eighth day. Wire removed without difficulty, followed by one single drop of pus and one of blood.—Ninth day. Plasters and sutures removed. The wound was entirely and completely healed. From the time it was closed, there was never the least exudation. The tumour was solid, and much diminished; in fact, the patient was cured. It was some weeks before the tumour was entirely absorbed and the limb regained its strength; but it is now some time since he returned to his laborious occupation, and the only

* Dr. Pollock, in a pamphlet which he has kindly sent me, relates twenty-six cases of amputation and one of aneurism (popliteal) treated by this method, which he calls "the wire loop" with excellent results. When it comes back to England as an "American" invention, it will probably attract more attention than it has done as an indigenous product.

difference between this leg and the other is the large cicatrix and a greatly increased growth of long thick hair.

I think it will not be denied that these cases prove that this is a safe and efficient mode of treating an aneurism. We may, therefore, now proceed to estimate its relative merits, as compared with other methods.

Into this competition certain of the hæmostatic agents do not enter. Torsion, for instance, is not applicable to aneurism; at least, I have not yet heard of any proposal to sever the artery and twist both ends in the wound, though my friend Mr. Maunder has lately suggested the division of the vessel, and the application of a catgut ligature to each end. I trust he will not practise it.

Acupressure, too, has been tried by Dr. Heron Watson and others; a needle being passed under the artery, and a wire twisted over it. I believe the result was not satisfactory, and I have lately heard nothing of the method.

Quite recently, Dr. M'Gill of Leeds has published a case in which he applied temporary compression to an artery by means of a pair of forceps sticking out of the wound: a method suggested to me many years ago by my friend Dr. John Lowe of Lynn. Surely this is an ugly-looking appliance, and, so far as I see, offers no advantages over the wire, whilst, as I shall presently show, it lacks one of the chief merits of my compress.

There remain, then, to be considered but the old-fashioned silk ligature and the carbolised catgut. As I have already remarked, these differ so materially in their action and effect, that it is a pity they are confounded together by bearing the same name, which only leads to a confusion of ideas.

I was once taken to task by a very great surgeon for abusing the ligature, "one of the grandest things in surgery". I do not forget that the abuse of the ligature adds nothing to the merits of my substitute; but neither will praise of the old friend detract anything from the new one; and, spite of previous warning, I cannot hesitate to protest that the ligature is but a clumsy unscientific appliance in the treatment of aneurism. Let us fairly, and without prejudice, trace its course and action.

For the cure of aneurism either by the coagulation of blood, or by the deposition of lymph in layers, or by these two processes combined—as I suppose mostly happens—the one thing needful is to obstruct the flow of blood into the sac, either partially or totally. Opinions differ as to which is preferable. Of course, the ligature acts only by sudden and abrupt exclusion; whereupon arises one of the special and greatest dangers of the operation—gangrene, to wit. Nevertheless, this risk must be run; so you cut down on the artery, and tie tightly round it a piece of silk or hempen cord, which is left dangling from the wound. And what have you done by this? You have made a contused and lacerated wound of the coats of the artery. This is said to be a good thing, essential to the process of repair, and to the ultimate detachment and withdrawal of the ligature; yet surely it is a violation of the first principles of surgery, which teach us that contusion and laceration are not favourable to healing. Well, but, at any rate, you have effected your primary object, and have cut off the current of blood from the aneurism. In two or three days, consolidation has taken place; and, if you could now get rid of your ligature, all would be well. But this you cannot do. Though the ligature has answered its purpose, and is now naught but a nuisance in the wound, yet the surgeon is, so to speak, at the mercy of his own weapons; he must bide his time, awaiting the slow bungling processes of nature to cast off the foreign body. Meanwhile, what is your ligature doing? First, it is setting up suppuration in the wound: surely a thing to be avoided, if possible. Next, it is producing ulceration through the artery itself. Who will maintain that *this* is not an evil? And when, after many tedious days or weeks, it is at length detached, what guarantee have you that the needful closure of both ends of the divided artery has taken place, and that bleeding will not ensue? On the contrary, do we not know by fatal experience that often and often hæmorrhage does occur; and, even when it does not happen, no one can deny that there has been the risk of it, and that the patient escapes more by good luck than by the skill and science of the operator.

Now let us follow out in the same way the *modus operandi* and effects of the wire compress. What a contrast to the foregoing picture does it present! First, then, whilst it obstructs the circulation just as completely and effectually as the ligature, it affords the operator a choice of methods—the gradual or the sudden occlusion—according to his judgment. Surely this is an important and material point, one on which it behoves the surgeon to have a definite view. My own opinion—whatever that may be worth—is, that gradual obstruction at first is of immense advantage; that it is more favourable to the cure of the aneurism, by leading to the deposition of lymph; and also greatly diminishes the risk of gangrene by allowing time for the establishment of the collateral

circulation, which keeps the limb, or may be the brain, alive. If the limb were cold, and gangrene threatening, the compression could be relaxed or altogether removed, and so the impending mortification might be prevented; and although, in such a case, amputation might be the only resource, yet this operation would be done at less disadvantage than in a gangrenous limb.

If, on the other hand, all go on well, and in five or six days the pulsation have ceased, the surgeon has his appliance under his entire control. He first relaxes the pressure by withdrawing the cork, or untwisting the wire; feeling his way, as it were, and still keeping command of the artery in case of need, till, being assured that the desired consolidation has really taken place, he with confidence, aye, with certainty of success, withdraws the wire. Meanwhile, the wound has healed, or, at all events, has had the best chance of doing so, there being no foreign body to excite suppuration. The artery also is still intact, so that hæmorrhage is impossible, and the patient is cured; ~~may we not triumphantly say, *facta, est, et curata*?~~

Here let me remind you that, in both my cases, a moderate feeble circulation through the artery was allowed for three days, and in twenty-four hours after its entire obstruction consolidation was complete. Moreover, the secondary processes of absorption of the tumour, and restoration of power to the limb, were accomplished with unusual rapidity, dependent possibly on the more healthy condition and action of the parts which had not been excited and disturbed by adjacent inflammation and suppuration, or by the laceration and ulceration of the artery; the circulation through which is probably restored beyond the point of compression, even up to the seat of the now consolidated aneurism; it certainly was so in my carotid case. Again, out of this perfect immunity from bleeding, the surgeon gains another advantage in a wider choice as to the point of election in operation. Thus, for hæmorrhagic reasons, it is thought specially dangerous to tie the common femoral; so much so, that some think it ought never to be done, though otherwise it would often be a desirable situation for a ligature. The use of the wire entirely obviates this objection. So with the external carotid, which is rarely or never tied because of its numerous branches, and, consequent proclivity to bleed; for this reason, the common carotid is selected, though the lesser operation might suffice, *quoad* the cure of the disease. Why, for instance, should you cut off half the circulation from a man's brain to cure a vascular tumour outside his skull?

So much for comparison with the silk ligature.

I have still to deal with the antiseptic catgut.

This appears to have been uniformly successful in the five cases in which it has been used by its inventor, Mr. Lister, but, as often happens, it has been far otherwise in the hands of others. Thus, Mr. E. Watson relates a disastrous case of popliteal aneurism, in which this appliance on the femoral artery failed to arrest pulsation, apparently by reason of the early yielding of the catgut. The same thing again happened when the iliac was subsequently tied, to remedy the failure of the previous operation; and so, after amputation, the patient died.

In Mr. Spence's case of ligature of the carotid, the patient, on the second day, became comatose and paralysed from embolism of the middle cerebral artery, caused "By a fragment of clot, which had become detached from the site of operation, in consequence of the too speedy softening and relaxation of the catgut, and so carried into the circulation by the current of blood". He also says that he has known hæmorrhage to occur after amputation, from the ligature softening and losing its constricting power. From this cause also, Mr. Holden affirms that fatal bleeding occurred in a case in which the femoral artery had been tied.

My friend Mr. Maunder (from whose lecture, in the *Lancet* of April 17th, I have gleaned these cases) expresses his opinion, founded thereon, that "The catgut may melt away before repair has taken place", but he says, "for the surgeon distrustful of the catgut there is yet one resource, viz., the antiseptic silk ligature cut short". I hereby offer him another and a better resource, viz., the wire compress. Farther on, he quaintly remarks that, "After mature consideration, he has arrived at the conclusion that the fate or behaviour of a given antiseptic catgut ligature, applied to the continuity of an artery cannot be foretold." I can confidently foretell both the fate and behaviour of the wire. Its behaviour is simply to control the circulation through the artery so long as is needful for the cure of an aneurism; and its fate is to be then withdrawn, and perhaps exhibited at a meeting of surgeons. Here is the piece of wire which so "behaved" in the case of my patient John Hull.

It seems, then, that the catgut may fail from softening and yielding too soon; a special and peculiar danger superadded, as it were, to the ordinary risks of the silk ligature; that it cuts the artery, and so gives rise to the risk of bleeding, and, of course, it can act only by

peremptory stoppage of the circulation. The wire compress is free from each and all of these objections.

This, then, is a fair summing up of the case as it appears to me :

The wire compress does not damage the coats of the artery as the ligature does.

It is not a foreign body in the wound, as the ligature is.

Therefore it does not excite suppuration and impede healing, as the ligature does.

It is not a fixture upon the artery, as the ligature is ; but it can be removed, or relaxed at any time, which the ligature cannot.

It does not ulcerate through the artery, and open the blood channel, as the ligature does ; therefore, bleeding is impossible : with the ligature there is always the risk, and not seldom the occurrence, of bleeding.

It causes a retarded circulation and gradual occlusion of the artery, so diminishing the risk of gangrene ; the ligature causes sudden obstruction, hence gangrene often follows.

Ultimately, or even at once, if desired, it entirely obstructs the current of blood, so curing the aneurism, as effectually and as completely as the ligature does.

It affords a wider choice of locality for operation than the ligature does, and is applicable to all arteries alike, which the ligature is not.

As compared with the catgut :

It is not liable to become relaxed or detached too soon, as the catgut is ; it does not cut the coats of the artery, as the catgut does.

Thus it confers absolute immunity from hæmorrhage, which the catgut does not ; it causes gradual occlusion, which the catgut cannot do.

I ask you, as surgeons, are these mere fanciful imaginary advantages, or have I, as I steadfastly believe, introduced to you a real improvement in surgery ?

POST PARTUM HÆMORRHAGE TREATED BY SOLUTION OF PERCHLORIDE OF IRON.*

By J. C. CLARK, M.R.C.S. and L.S.A., Medical Officer of the Gildersome District.

THE patient whose case I have the honour of bringing before you was, in several respects, unfavourably placed—mentally, physically, and sanitarily : *mentally*, for she was impressed with the idea that she was doomed to die in her confinement—a by no means uncommon idea in pregnant women ; yet, in her case, it was deepened by the fact that her mother had died from some pelvic mischief, which had parturition as its starting point ; and her aunt, her mother's sister, had died from flooding : *physically*, for she had a contracted pelvis, instrumental aid being required for her delivery ; and *sanitarily*, because the room in which she was confined was very small, damp, and cold, there being no fireplace and no ventilation ; and, just before delivering her, I was compelled to visit a patient suffering from pneumonia, with severe erysipelas of the face and head.

Mrs. C., a primipara, aged 19 years, had been in labour several hours when I was summoned, at 3 o'clock in the morning of February 3rd, to attend her in her confinement. The patient was a small, fair-complexioned woman ; she looked somewhat exhausted, although her pulse was fair ; the pains, which were of a bearing-down character, were regular, with an interval of about five minutes. On making a vaginal examination, I was struck by the facility with which my finger touched the promontory of the sacrum, thus showing probable contraction of the brim. The os was expanded to about the extent of two inches, and was easily dilatable. The membranes were projecting through it, and the head lay in the first position at the brim. I remained with her about two hours and a half, during which time the pains were regular ; but, as I expected, no progress was made ; and, feeling convinced that instrumental aid would be required, I left her, telling her friends to let me know if any change took place. Hearing nothing from them, I returned at 9.30, accompanied by my brother, who is a qualified man. On my way down, I was entreated to visit a patient who was suffering from severe erysipelas of the face and head, complicated with pneumonia, and whom I had been attending for some days past, as his friends believed he was dying. After examining this patient, I washed my hands, brushing my nails with a tooth-brush. On arriving at the midwifery case, I again washed my hands in a solution of permanganate of potash ; and, on examining the woman, found that the liquor amnii had escaped, but not the slightest advance had been made. My brother agreed with me that, as

we had already given Nature a fair trial, and as the pulse was becoming accelerated, we had better at once put on Barnes's long forceps. Without giving chloroform, I, with comparative ease, applied them, my brother carefully steadying the uterus, whilst I made traction during the pains. With considerable effort, I brought the head on to the perinæum, and then removed the forceps, so as to allow Nature to complete the delivery. During the passage of the head through the cavity of the pelvis, a considerable amount of blood escaped by the side of the head. When, after due time, the head was born, I did not hasten the birth of the remainder of the body, but rather retarded it, so as to allow the uterus gradually to contract on its contents, my brother keeping up steady pressure, both during and after the birth of the child, the right side of whose forehead was forced in ; and it had facial paralysis.

As soon as the child was born, flooding commenced. We at once gave a full dose of ergot ; and, the placenta being extruded from the uterus by pressure from without, I removed it from the vagina ; it was followed by an unusually large amount of membranes, which I was especially careful in removing. Notwithstanding the removal of the placenta and membranes, the hæmorrhage was very profuse, although the pulse was fairly good. We at once applied cold to the vulva and lower part of the abdomen, keeping a steady grasp on the uterus. The bleeding almost stopped, only a little oozing taking place from the vulva. In a minute or two afterwards, the uterus seemed to melt away from the grasp, and profuse hæmorrhage came on. I now passed my hand into the uterus, and cleared out the blood and clots, firm pressure being maintained on the abdomen. This did not arrest the hæmorrhage ; whereupon we injected cold water into the uterus, through a Higginson's syringe. This had no effect. By this time, the patient had become blanched, respiration sighing, and pulse rapid. I passed my hand into the uterus again and again, but it would not contract on it. The woman's condition was becoming so alarming, that we thought it advisable to sponge out the cavity of the uterus with a solution of perchloride of iron (1 to 4), but it failed to arrest the bleeding. The woman's condition now appeared to be truly desperate ; the pulse was not perceptible at the wrist, she became blind, and the respiration was gasping, but blood was still running from the vulva. I now passed my left hand into the uterus (my fingers resting against the fundus), and carried the vaginal tube of the syringe along its palmar surface. I then slowly injected about six ounces of the perchloride solution. The hæmorrhage at once completely ceased, and the patient gradually rallied.

On Feb. 4th, pulse	124.....	respirations	24.....	temp.	99.8.
„ 5th, „	120.....	„	24.....	„	had no pain.
„ 6th, „	130.....	„	30.....	temp.	102.2.
„ 7th, „	134.....	„	„	„	101.8.
„ 9th, „	100 (good quality)	„	24.....	„	98.8.

From the time of her delivery on February 3rd, till the 11th of the month, when I ceased to take note, she slept well, took support freely, had no pain ; there was a very scanty flow of the lochia ; and the bowels were not moved till the seventh day.

OBSTETRIC MEMORANDA.

ON INJECTION OF THE PERCHLORIDE OF IRON IN POST PARTUM HÆMORRHAGE.

THE fatal case furnished by Mr. Boddy, in the JOURNAL of the 16th instant, and Dr. Swayne's comments upon it in the last number, are, I venture to think, of great importance, believing as I do that Dr. Swayne's explanation of the cause of death (*viz.*, the passage of some of the iron solution through the Fallopian tubes, or one of them, into the peritoneum) is very likely to be the true one. Indeed, I may say that the fear of such an occurrence has to some extent prejudiced me in the use of intrauterine injections of irritant fluids, especially since the following case happened a few years ago. Hastily summoned to a woman, I found her on the bed suffering apparently with the most severe colic that I had ever met with. On inquiry, it transpired that she had been prescribed for at the public dispensary, and for some weeks had been using, for leucorrhœa, a strong solution of sulphate of zinc and alum, which she had injected by an eight-ounce elastic bottle having an elastic nozzle of about six inches in length. She was in the act of using this injection at the time of being suddenly seized with the fearful pain in her belly ; and, as she admitted that she had introduced the nozzle higher up the vagina than usual, I considered that she had chanced to inject the womb itself, and then a Fallopian tube and the peritoneum. The case proved to be a sharp but short-lived peritonitis ; for, under opium internally, and poultices of mixed

* Read before the Leeds and West Riding Medico Chirurgical Society.

mustard and linseed, she was out of danger in two days. Probably only a little of the astringent solution found its way into the peritoneum; nevertheless, it produced such a shock as I can readily conceive a parturient woman, already reduced by hæmorrhage, might succumb to at once.

G. F. HODGSON, Brighton.

CLINICAL MEMORANDA.

A CASE OF POISONING BY EATING LABURNUM-PODS.

ON the afternoon of September 13th last, I was urgently called upon to attend a girl about five years of age, who, as I was told, had eaten some fruit of a laburnum tree. Upon my arrival, I found the child pallid, with a low and feeble pulse. The pupils were slightly contracted. She was exhausted and vomiting, the vomited matter being mixed with half masticated pods and seeds of the laburnum. An emetic of mustard was administered, which caused free vomiting, bringing up more seeds. The vomiting was kept up till the stomach was completely cleared of its contents. The child was then put to bed, and a little brandy and water given; after which, the pulse gradually increased in strength and frequency. The child slept well during the night, and in the morning seemed nearly well.

JOHN AITKEN, Carlisle, N.B.

CASE OF HYSTERIA IN A CHILD AGED TEN YEARS.

S. T., AGED 10, was always healthy. Her mother and father and grand parents were living. I was first called in to see her in September 1874, when she complained of severe pain at the epigastrium; this increased, and the child appeared in the greatest agony and misery in spite of all treatment. When first I saw her, she was a rosy healthy-looking child, but soon became sallow, and had an "abdominal" aspect. Three months previously to my seeing her, she had complained of the same pain once or twice a week; it grew worse up to September. When I visited her first, she appeared well nourished, rested upon a couch, ate and drank, could not speak above a whisper; pulse and respirations quick. She grew worse and worse, and became quite unable to walk; the pain continuing the same, though I gave her tincture of opium, belladonna, hyoscyamus, bromide of potassium, chloral hydrate, mustard and linseed poultices, blisters, and, in fact, tried every means to relieve the pain without the least (apparent) effect. In February, she began to cough and hiccupped. This lasted until April 16th, remedies having no effect; then convulsions set in, and she used to scream after taking food, of which she scarcely took anything but water (so I was assured by the parents); these convulsive seizures lasted over a week. I believed that the child, young as she was, had hysteria. I went to see her again a few days afterwards, and told the parents I believed there was nothing serious the matter, although they had given her up as about to die many times before. I ordered them to take severe measures and make her get up and walk; and, in May, she was got upon her feet, and little by little improved, and is now able to walk with crutches, and, probably, by the aid of galvanism, will be soon set to rights. She is now away for the benefit of a change of air, and I heard that yesterday the people with whom she is staying have taken away one crutch, and will shortly do away with the other. I did not suggest crutches, and was only aware of her using them a few days ago.

WM. H. SPURGIN, Maryport.

WEST HERTS MEDICAL SOCIETY.—The fifty-fourth meeting of the above Society was held at the Clarendon Hotel, on the 20th instant, Dr. P. HOOD, the President, in the Chair. A paper was read by Dr. Charles Wotton, Surgeon to the West Herts Infirmary, on The Period of Incubation of Epidemic Diseases. Small-pox, measles, scarlet fever, whooping-cough, mumps, diphtheria, typhoid and typhus fevers, and puerperal fever. The paper was illustrated by cases. A paper was also read by Dr. Saunders of London, medical officer of health for the combined sanitary district of Middlesex and Hertfordshire, on Preventable Disease in its Social Aspect. Among many practical remarks, Dr. Saunders combated the common and ignorant opinion that the infantile epidemics must be suffered at some period of life. He thought that with proper precaution they might be averted. He also thought that it was very necessary that the medical officer of health should have early information of contagious disease. He also brought forward cases to prove the increase of health following improved sanitary work. In the discussion which followed, Messrs. Hood, Brett, Saunders, Ambler, Iles, Leman, Brodribb, and Prior, took part. The next paper will be read by Dr. Iles on The Administration of Iron in Acute Disease.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, OCTOBER 26TH, 1875.

SIR JAMES PAGET, Bart., D.C.L., LL.D., F.R.S., President, in the Chair.

ON THE USE OF THE ACTUAL CAUTERY IN THE ENUCLEATION OF FIBROID TUMOURS OF THE UTERUS. BY ROBERT GREENHALGH, M.D.

THE author in this communication, after briefly alluding to the unfrequent use of the actual cautery in this country, as compared with its application on the Continent, stated that during the last twelve years he had used it frequently, and with more or less success, in chronic enlargement, with induration of the cervix uteri, due to inflammatory or fibroid disease; in epithelioma and cancer of the neck of the uterus, where the organ was movable; in some cases of vascular tumour of the meatus urinarius; in slight cases of recto-vaginal and vesico-vaginal fistula; in incontinence of urine, due to dilated urethral canal; and in certain cases of interstitial and intrauterine fibroid growths. It was to its use in the two latter classes of cases that he limited his present observations. He then gave the details of five cases, three of intramural, one of extramural, and one of intrauterine fibroid growths, with the plan adopted, and the results in each case. He expressed an opinion that diffused fibroid deposits of the uterus in the early stage were more amenable to treatment than was generally supposed. He observed that, although the large majority of cases needed no surgical interference, yet there were others which, through the large losses of blood to which they gave rise, or the mechanical effects they produced, imperatively demanded such aid. The author then drew attention to the occasional ill effects of dilatation and enucleation by the knife, and summed up the advantages of the actual cautery under the following heads. 1. It is easy of application. 2. It occasions but little pain. 3. It is rapid in its action. 4. It occasions no bleeding. 5. No plugging is needed. 6. The charred opening is not favourable to absorption. 7. There is no offensive discharge from the charred surface. 8. The opening is readily dilatible, and without bleeding. 9. It permits manipulation through the opening immediately after its use. 10. By its use, portions of the tumour may be rapidly destroyed, its size reduced, and its lower segments rendered conical; thereby facilitating dilatation of the opening and the subsequent detachment, expulsion, or removal of the morbid growth. He then remarked that spontaneous expulsive efforts shortly followed its use, and the density of the tumours appeared to be more or less reduced after its application. The author, in conclusion, drew especial attention to the three following points. Firstly, the advisability of the gradual detachment of the growth from its surrounding capsule, especially in cases where the tumour is of large size, or where the patient has been much reduced by previous hæmorrhages, by which further losses of blood are avoided, and more perfect contraction of the investing tissues is secured, and the chances of pent-up offensive discharge is almost certainly prevented. Secondly, the removal of only so much of the tumour at each operation as is external to the opening, by which the opening is kept dilated, and all chance of its closure upon the remainder of the growth avoided. Thirdly, the speedy destruction by the cautery, or removal by the *crasseur* or hand, of the tumour, should sloughing ensue.

Dr. GREENHALGH read extracts from a letter from Mr. Marriott of Leicester, with reference to one of the cases described, stating that the subject had been lately delivered of a fine healthy child, and had in all respects done well.—Dr. ALFRED MEADOWS thought that the plan of treatment recommended by Dr. Greenhalgh was valuable, but there would be difficulty in selecting suitable cases. Tumours varied much with regard to their relation to the uterine fibres. Some lay in a loose bed of cellular tissue, and were readily enucleated; while in others the tissue of the tumour seemed to merge into that of the uterus, rendering enucleation impossible. He thought that the treatment would be applicable in cases of tumours having a good amount of uterine tissue above and on the peritoneal and mucous aspects, so that the uterus could assist in their expulsion. But, if the tumour were adherent to the peritoneal surface, enucleation was not applicable. Generally, however, the cases could not be distinguished—although some cases of sub-peritoneal tumour might be diagnosed easily enough. He could scarcely agree with Dr. Greenhalgh as to all the advantages which he alleged the cautery to possess over incision. In most of Dr. Greenhalgh's cases, the finger was introduced to break down the adhesions of the tumour; and here an element of danger was introduced. The application of the cautery was in itself, however, free from danger.—Dr.

BARNES agreed as to the difficulty of distinguishing the cases proper for operation. In some instances, the dangers of meddling had been illustrated, although there had been no means of knowing them beforehand. Tumours attached to the cervix uteri were readily treated by various means; but the case was very different when the tumour was situated in other parts of the uterus. Portions of a tumour might be cut away, and healing would follow for a time; and this might be repeated, until at last a low form of inflammation appeared, and probably metritis and subsequent septicæmia. If such a tumour could be enucleated, the patient might recover; but it was not always possible to tell what tumours could be enucleated; and he did not think that the cautery would obviate the danger. And, although the cautery gave increased security against hæmorrhage, he did not think that it would absolutely prevent it. The cases indicating treatment were those attended with much hæmorrhage and with blocking of the pelvis. The application of the cautery was painless and safe, as he had noticed many years ago in the practice of Jobert de Lamballe.—Dr. GREENHALGH said that he suggested the use of the cautery in exceptional cases only, not in sub-peritoneal fibroids. One further advantage of its use was, that the lining membrane of the uterus was not interfered with.

AN ORIGINAL VIEW OF THE LARYNGEAL MOVEMENTS, ACCOMPANIED BY A NEW MOVABLE MODEL. BY EDMUND J. SPITTA, M.R.C.S.

The model illustrated the present theory by exhibiting mechanically the two operations of the larynx under which all its movements might be included, viz., the tensing and relaxing the cords and the opening and closing the glottis. The new view principally concerned the last-named operation. The author held, in the first place, from the construction of the crico-arytenoid joints, that neither forward nor rotatory movements of the arytenoid cartilages are possible, and that these cartilages can only move laterally, but that by this very movement the interval between the vocal cords is horizontally increased and the glottis opened. He then described the laryngeal muscles, and how they effect the two operations abovenamed, giving them fresh names in accordance with their actions; the arytenoideus, for example, was called the occludens, and the posterior and lateral crico-arytenoid together the patefaciens. Lastly, according to the author, a remarkable, though totally unexpected, corroboration of the truth of his view was derived from the peculiarity in distribution of the laryngeal nerves.

Mr. C. BROOKE called attention to the fact that Mr. Spitta had not represented the membranous portion of the vocal cords. The late Professor Willis had shown that, unless the upper edges of the membrane were rendered parallel, vocal vibrations were not produced, although the glottis was closed.—Mr. NUNN remarked that the principal point was the articulation of the arytenoid cartilages.—Dr. WHIPHAM had never been able to satisfy himself of the rotation of the arytenoid cartilages.—Dr. SPITTA said that the membranous parts of the cords had been omitted on account of certain difficulties, especially that of obtaining a membrane to stretch equally.

CLINICAL SOCIETY OF LONDON.

FRIDAY, OCTOBER 22ND, 1875.

GEORGE W. CALLENDER, F.R.C.S., F.R.S., Vice-President, in the Chair.

Tumour of the Skull of Doubtful Nature.—Mr. JONATHAN HUTCHINSON exhibited a child with a congenital tumour of the head, probably due to arrested development of the bones of the skull. The child was brought to Mr. Hutchinson at the Moorfields Ophthalmic Hospital in October 1871, being then six months old. She was the younger of two children, the elder being reported healthy. When she came under observation, there was found to be a large hemispherical tumour in the middle line of the top of the skull and frontal region. The tumour was smooth and hard; its base measured 4 in. by 5 in., and in the middle line it reached just to the root of the nose. On each side, the base of the tumour reached nearly as far outwards as the outer angle of the corresponding orbit. The fontanelles were not quite closed. A hard ridge occupied the situation of the sagittal suture in its anterior half. Behind the tumour, and almost continuous with its base, were one or two nodules. The eyeballs were very prominent, and the lower part of the sclerotics much exposed. The child was lost sight of until April 1875, when she was again examined. She was then four years old, but would not be taken for more than two. She had but just learnt to walk. She was cheerful, good-tempered, and could talk well. The right hand was always colder than the other, and the whole upper extremity was believed to be weaker than the left. Just above the outer angle of the eyebrows, the skull narrowed, having on each side prominent ridges which marked the junction between the squamous and

parietal bones. Thus it would appear that the whole frontal bone was too small. The eyeballs were very prominent, almost the whole cornea being exposed and much of the sclerotic below it. In the middle of the top of the skull, beginning a little behind the coronal suture, and passing backwards along the whole length of the sagittal, was a soft swelling an inch and a half high and probably two inches across. A sort of ill-marked depression crossed the tumour about its middle, and near to this depression two plates of bone could be felt in its walls. At its margins, lips of bone passed upwards into its walls, where they gradually thinned off and were lost, a condition which suggested that the tumour had pushed its way from within outwards. The tumour was soft, and received impulse from the circulation and from the respiratory movements. Mr. Hutchinson stated that he believed that, owing to the want of development of the frontal and anterior parts of the parietal bones, the brain, in its growth, had caused absorption of bone and bulging in the position of the sagittal suture. He also thought it a question whether the capacity of the child's head was increased. He had no doubt the tumour was in part brain, and partly fluid. He had notes of two other cases, in which a bony ridge passed from the nose on to the tumour, but he did not know the final result in either of those cases.—Mr. CALLENDER was inclined to agree with Mr. Hutchinson in his opinion of the case. He had seen a similar case under the care of the late Mr. Stanley. That patient died at the age of twelve years of a soft cancerous growth, which had increased slowly, and had produced scarcely any symptoms until it spread down deeply into the brain-substance.—Mr. MORRIS thought Mr. Hutchinson's explanation of the case improbable, more especially when one looked at the child's protruding eyeballs. About eighteen months before, a very similar case had come under his care; the patient being a single woman, forty-five years of age. She had some months previously received a blow over the parietal and temporal bones, whereon a small tumour arose, and slowly grew until it became about five and a half inches in diameter in all directions. It pulsed everywhere, but there were also at two or three different parts of the tumour pulsations of another kind, which were, in fact, pulsations in vessels in the tumour. A hard bony ridge ran round the tumour, and pieces of detached bone or phleboliths could be felt in its substance. The tumour being punctured, a bloodstained fluid came away. No further operation was performed, and the patient left the Middlesex Hospital. The tumour had since increased, and the patient occasionally saw black specks before the eyes, but there were no other symptoms. Mr. MORRIS thought the growth was a soft cancer of the diploë. Mr. Couling, into whose care the case had subsequently passed at Brighton, had lately examined the body of a man dying with soft cancer of the clavicle, and had also found three or four unsuspected soft tumours of the diploë of the skull. In Markoe's book of the diseases of the bones, three or four cases were mentioned, in which the characters of the growth were like those in this patient. He would ask why these cancerous tumours were so slow in growing.—Mr. HOLMES was not quite sure that the medullary cancerous character of these growths was proved. He mentioned the case of a male patient in St. George's Hospital, in whom such a tumour lasted fifteen years. He was about sixty years old at the time of his death, and had no symptoms except an occasional epileptic attack, or one of mild delirium, during which he would say foolish things. He had a soft pulsating growth at the top of his head, which was now preserved in St. George's Hospital Museum, and was of a fibrous nature, covered by thickened pericranium externally, and dura mater within. It was certainly not cancerous, and did not lead to the patient's death. This kind of tumour was included by Louis in his fungating growths of the dura mater.—Mr. MORRIS explained why the diagnosis of his cases was correct.

Ulcer of the Tongue of a Doubtful Cancerous Nature.—Mr. HUTCHINSON exhibited a patient with an ulcer of the tongue of doubtful nature. He was first seen in April 1874, when he had noticed the ulcer for two months. He was then 59 years of age. There was no history of syphilis, and the biniodide of mercury and other specifics had been given without any benefit. When first seen, the ulcer was quite clean, and had a hard border; it was about the size of a sixpence, and situated exactly in the middle of the dorsum of the tongue. The ulcer was freely cauterised with acid nitrate of mercury. When the patient was presented to the Society, eighteen months afterwards, there was an oval patch in the middle of his tongue about as large as the stone of a damson plum, a little raised in the middle, and with ill-defined borders. There was no ulceration; but at its posterior part was a little hollow overhung by smooth papillary growths. It appeared that, soon after the application of the caustic, the sore had healed, and that it had since caused him not the slightest inconvenience or pain until June of the present year, when another sore similar to the first formed behind it; and at the same time a gland under the lower jaw enlarged. The

gland softened, broke down, and discharged a thin sero-pus; and in September another gland followed the same course. There was no history of cancer in the family. Mr. Hutchinson said this was the quietest form of cancer of the tongue, if it were cancer, which he had ever seen. It was certainly a most puzzling case for diagnosis. He had not examined it microscopically.—Mr. LEE thought the history of the lymphatic glands important. A lymphatic gland affected with cancer or syphilis had no tendency to soften or discharge a serous fluid.—Mr. MAUNDER thought cancerous glands did soften, and did not suppurate. When iodide of potassium was given in cancerous disease of the lymphatic glands, there was at first an improvement, but when once the inflammatory thickening had been removed by the drug, it ceased to effect any further good.—Mr. CALLENDER thought the disease was cancer from the characters of the growth itself, the age of the patient, the implication of the glands, etc.

Renewed Discussion on the Antiseptic Treatment of Wounds.—Mr. PICK said that, at the last meeting of the Society, Mr. Callender had come to the conclusion that salicylic acid did not warrant the encumbrances passed upon it; and he (Mr. Pick) had brought forward a case of wound of the knee-joint treated by carbolic acid dressings. It was proposed to discuss both those papers this evening. [Abstracts of the papers were published in the BRITISH MEDICAL JOURNAL for October 16th, page 510.] In his case of wounded knee-joint, pus was not prevented from forming, but it was always sweet and healthy, and never decomposed. The patient was exhibited; he had a good ankylosed joint, and was able to earn his own living. Mr. Pick thought carbolic acid prevented the decomposition of the pus, but that it did not prevent suppuration. He had been especially struck with its value in excision of joints. Since he had adopted Lister's method of treatment, he had not had a case of pyæmia or of erysipelas. A recent patient of his, fourteen days after amputation of the thigh, had only had the stump dressed three times. He was struck, on removing the dressing, to find that the discharge in the external layers of the dressing, where air could reach it, was most fetid; whilst farther in, at the wound itself, the pus was quite sweet. Every case treated by him at St. George's Hospital for the past two years had been dressed after Lister's method, except one, a case in which he had removed an enchondroma from the parotid. That patient died of pyæmia, and was the only one lost by that complication throughout the two years.—Mr. MAUNDER had only read the abstract of Mr. Pick's case in the medical journals, but thought the history there presented was very much the history of other cases of suppurating knee-joints not treated by carbolic acid. He had lately had three cases at one time in the London Hospital, and had asked the worst one of those cases to attend that night to show himself. That case was six months in hospital, had suppuration extending in all directions, had drainage-tubes introduced, had required stimulants in large quantity, and finally could exhibit as good result without carbolic acid as Mr. Pick had obtained with that special mode of dressing. But Mr. Maunder thought that Professor Lister did expect something more than the prevention of putrefaction of pus, viz., the prevention of suppuration altogether. Mr. Maunder had brought down also another patient treated by another method advocated by himself, viz., by ligation of the main artery of the limb. This patient had, eight years ago, a serious injury of the knee-joint, treated by ligation of the femoral artery; and the inflammation of the joint was immensely controlled by the method of treatment adopted. The man had now a good ankylosed joint. Still, Mr. Maunder did not mean to say that great credit was not due to antiseptic treatment.—Dr. MOXON would like to know if Mr. Pick had observed whether bacteria were present in the pus from the knee-joint.—Mr. HOLMES thought the value of the antiseptic system could not be determined by appeal to individual cases. A case of compound fracture into the knee should not, for instance, be compared with a wound of the knee. Surgeons should give their general impressions of both plans of treatment. The more he himself followed the method, the more did he value it. Its chief value was in the prevention of traumatic fever, especially from large abscesses. But, to adopt the method thoroughly, the case must be so treated from the very first. The great principles of the treatment were very valuable; one especially, viz., that the wound was largely preserved from the contact of foreign bodies, and that the surgeon had to dress it himself. This Mr. Holmes believed to be the principal part of the whole thing, more than the supposed absence of germs, etc. He had seen pyæmia occur in cases treated antiseptically. He had taken three years distinct from each other (1864, 1870, and 1874), and had examined the mortality books at St. George's Hospital during those years, with the result that he found pyæmia was fatal in very different proportions in different years. In 1874, there were eleven fatal cases of pyæmia, of which eight were after various diseases for which no operation was performed, one being puerperal, one from diffused periostitis, etc.; whilst three

followed surgical operations, one of which was for fistula, one for strangulated hernia, and one an excision of the hip. In 1870, there were nineteen deaths from pyæmia; eleven of which followed disease; whilst eight were after surgical operation. In 1864, eleven of the two hundred and forty-one deaths were from pyæmia, of which only one was after surgical operation. Thus, the prevalence of pyæmia in London hospitals was comparatively rare; and one could not say that carbolic acid abolished the disease, except after many years of trial.—Mr. DE MORGAN thought that most of the benefit which had resulted from the antiseptic treatment was due to the vast care exercised by the surgeon, especially as in the case of Mr. Callender at St. Bartholomew's Hospital. At the same time, he thought antiseptics of great value. Take empyema as an example. A small opening being made into the thorax, the pent-up pus in the pleura became most fetid; but, upon more air being admitted through another opening, within twenty-four hours the pus became quite sweet. In Professor Humphry's wards at Cambridge one might see wounds thoroughly exposed, and they did remarkably well. He thought there were some cases which did very well with antiseptics. He had recorded in the first volume of the *Transactions* of the Clinical Society the case of a girl, whose joint he opened, and rubbed the interior well with the strongest solution of chloride of zinc—forty grains to the ounce of water—and in whom a cure was speedily effected. He doubted very much if that would have taken place if the powerful antiseptic had not been used. Another child with inflamed knee-joint had the joint sponged, and was better at once. If one took care that all hygienic rules were carried out, one got rid, to a great extent, of the secondary surgical diseases, which were formerly the curse of the London hospitals. He believed Professor Lister had done much good by calling attention to the benefits which great care in dressing wounds would secure. He (Mr. De Morgan) used boracic acid, sulphurous acid, and all other antiseptics; but the greatest care was now exercised in dressing all cases.—Mr. BARWELL said that, in speaking of the value of antiseptics and of Lister's method, we were speaking of two different things. In Mr. Pick's case, the wound was made some hours before the patient was seen by the surgeon. Any treatment begun thus late was likely to have the same effect of not preventing suppuration. Some cases could be healed readily without the necessity of using carbolic acid, if great cleanliness were exercised. He was sceptical of the germ-theory, but it was highly advantageous to the patient to keep the atmosphere around him saturated with carbolic acid, and to dress wounds always beneath this atmosphere. On the Continent, the antiseptic treatment had been taken up most vigorously, and rigorously carried out according to Professor Lister's directions. Several operations had been mentioned as dressed according to the method in which the wound had healed without suppuration or inflammation of any sort, as the removal of loose cartilages, etc.; and Mr. Barwell did not think that could be done by any other method of treatment. He believed Professor Lister had done his cause much injury, by mixing up with it such an amount of fussiness as to render his method unattractive to surgeons in general.—Mr. HEATH had been to Edinburgh to see Professor Lister's wards, and the results attained there were certainly astonishing. Professor Lister attributed great importance to the *minutiae* of his method; and, if anything went wrong with the wound, it was always found that something had been omitted in the dressing. Mr. Heath would like to know with which of the details insisted upon by Professor Lister Mr. Holmes dispensed. Mr. Heath thought that it was because the details were fussy, and operations under the spray were annoying, that surgeons generally had refrained from adopting Lister's plan. At the same time, he had seen cases do quite as well without carbolic acid treatment; whilst he had witnessed elevation of temperature where the antiseptic method had been used. He would like to know whether Mr. Callender continued still as successful in his operations at St. Bartholomew's Hospital as at the date of his paper in the last volume of the Reports of that hospital: because, if so, the success was as great as that attained by Lister's method. He would also ask why, if Mr. Maunder was so fond of ligaturing the femoral artery for inflamed knee-joint, he had not adopted that plan of treatment in either of the three cases he had mentioned.—Mr. THOMAS SMITH desired to raise one protest; that if surgeons tried Lister's method, they must take it with all its inconveniences. Mr. Lister felt that. Persons tried it; and, by omitting certain details, did, as Lister had said, "court failure". In the middle of an operation, for instance, persons would take up a pair of forceps, just put them momentarily into carbolic acid, and then thrust them into the wound; whilst old germs, which a proper preparation and longer soaking in the acid would have destroyed, still remained in the teeth of the instrument. Surgeons had no right to try the method without using all the details. Mr. Smith did not think any evidence had been placed before the meeting upon which an authoritative opinion from

that Society upon the value of Lister's method could be based.—Mr. MAUNDER had not ligatured the femoral artery in either of the three cases he had mentioned, because two of those cases were never had enough to warrant the operation; and he was deterred from doing it in the worst case (that of the man exhibited), because he feared that the arterial supply to the limb was, by reason of the inflammation, too fully established.—Mr. BARWELL explained that he thought there were only blemishes in Lister's method, and that an advocate would try to simplify it.—Mr. CROFT had visited Mr. Lister's wards years ago in Glasgow, and could now say much in favour of his method, having since then used it. Surgeons should look at the antiseptic method not only from the point of view of the patient operated upon, but also from that of other patients in the wards. The pure condition of the atmosphere had a good deal to do with the results in these other cases.—The discussion was again adjourned.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

THURSDAY, OCTOBER 14TH, 1875.

S. W. BROADBENT, M.R.C.S., President, in the Chair.

Prevalent Diseases of the District.—Mr. H. E. ARMSTRONG, Medical Officer of Health for Newcastle-upon-Tyne, presented a "Return of Admissions to, and Deaths at, the Newcastle Fever Hospital, from March to September 1875, inclusive". The total number of cases admitted was 73. There were 49 cases of typhus, 11 of enteric fever. Of the typhus cases, 21 were admitted in March, 5 in April, 11 in May, 5 in June, 4 in July, 1 in August, 2 in September. Ten of the typhus cases were fatal. Mr. Armstrong, after making some remarks on individual cases, stated that the sanitary condition of the town was at present good.

Sacculated Abdominal Aneurism.—Dr. PAGE showed a specimen. The aneurism was about the size of an orange. It sprang from the commencement of the vessel, involving the coeliac axis and both renal arteries. The patient was a clerk, thirty-two years of age. He denied having had syphilis, but had led a dissipated life. The origin of the disease was referred to strain. The sac ruptured behind the peritoneum. Death was preceded by convulsions.

Atrophic Degeneration of Kidneys and Spleen with Mitral Disease.—Dr. PHILIPSON showed specimens. The combined weight of the kidneys was 1 lb. 8½ ozs. The mitral valve and a large portion of the interior of the left auricle were coated with dense vegetations.

Calcareous Deposit in Mitral Valve.—Dr. PHILIPSON showed a specimen.

Aneurism of Thoracic Aorta.—Dr. PHILIPSON showed a specimen. The aneurism was of the size of a small melon. It sprang from the ascending portion of the arch. The superior vena cava was adherent to the outer wall of the sac. It was compressed by the tumour. During life, there was œdema of the face, upper extremities, and upper part of the chest.

Malignant Ulcer of the Hand.—Dr. BEATSON showed a specimen. He had, with the permission of Mr. Russell, amputated the hand under antiseptic precautions. The wound was healed in ten days, without a drop of pus, and without the slightest constitutional disturbance. The patient was seventy-five years of age.

Scirrhous of the Breast.—Dr. MURPHY showed a specimen. The tumour was a very large one. The breast was removed under the antiseptic method. The wound healed without a trace of pus. The operation was not followed by any constitutional disturbance.

Dissected Vertebra.—Dr. BYROM BRAMWELL showed a specimen. The disease was very extensive. The spinal canal was opened. The membranes were partly destroyed. The spinal cord ran through the middle of a fetid abscess. There was no paralysis.

Tumour of the Heart.—Dr. BYROM BRAMWELL showed a specimen. The tumour was of the size of a hen's egg. It was situated on the exterior of the left heart, at the junction of the auricle with the ventricle. On microscopical examination, it was found to consist of small cells, irregular in shape, containing many nuclei and nucleoli. The patient died very suddenly. Death was apparently due to cardiac syncope.

Hydatid Cyst of Liver.—Dr. BYROM BRAMWELL showed a specimen; also several drawings, and a series of microscopical preparations, illustrating its minute structure. In some of the scolices, the so-called calcareous particles were deeply stained by Beale's solution of carmine.

Hydatidous Mole.—Mr. GOWANS showed a specimen. The mass was expelled at the tenth week of utero-gestation. It was noted that the uterine tumour was larger than normal, extending to a point two inches above the umbilicus.

Progressive Muscular Atrophy.—Dr. BYROM BRAMWELL showed two cases. The first was a pitman, aged 22. Eighteen months ago, he first noticed a weakness in his left hand. A pail of water, which he was in the habit of carrying, slipped every now and again out of his hand. "Cold made the fingers curl up." The right hand became affected a year ago. The patient's general health was very good. The muscles of the body generally were well developed, the biceps remarkably so. The muscles of the left thumb and hand were completely atrophied. The muscles of the right hand were affected, though to a less degree. The muscles of the left forearm were beginning to be atrophied. The second patient was also a pitman. He was twenty-eight years of age. He was admitted to the Newcastle Infirmary some weeks ago, under Dr. Embleton, by whose kind permission Dr. Bramwell was enabled to exhibit the patient. In this case, the disease was in a very advanced stage. The man was unable to rise from his seat. He could not raise his hand to his head. The muscles of the arms and thighs were most affected. The disease had commenced only seven months ago, in the ball of the left thumb. It had rapidly spread to other muscles. The atrophied muscles still responded to galvanism. This patient stated that, when sitting, he felt perfectly well. Vision was somewhat dim. On ophthalmoscopic examination, commencing grey atrophy was seen to be present. This fact favoured the nervous origin of the disease.

Empyema treated by a Free Opening and Drainage-tube under Antiseptic Precautions.—Dr. BYROM BRAMWELL showed a case. The right chest had been twice tapped, and ninety-eight ounces of pus withdrawn by means of Weiss's aspirator. The cavity having again filled, a free opening was made, and a drainage-tube inserted under the spray, etc. The operation was performed by Dr. Muckle, junior house-surgeon to the Newcastle Infirmary, on August 30th. The dressing was changed daily. The operation had been followed by marked relief. The pulse and temperature had since been normal. Cough and expectoration had diminished. The patient had gained 8¼ lbs. in weight. There was still a daily discharge of about half an ounce. The dressing was removed for the inspection of members.

Staphyloscopy.—Dr. ARNISON exhibited a boy on whom he had operated on October 5th. The patient was only five years of age. The cleft was not complete, and did not include the alveolar process. The operation was designed to close only the posterior part of the cleft, and had been perfectly successful, union having taken place to the very tip of the uvula. Dr. Arnison stated that he had had better success by this method of procedure than by closing the whole cleft at a single sitting. He attributed the good result to the nervous and vascular supply of the parts being less interfered with.

Papers.—Mr. T. F. HOPGOOD read a paper entitled Strapping the Chest in Abscess after Pleurisy. The history of a case in which marked benefit from this mode of treatment had resulted was given.—Dr. BYROM BRAMWELL read a Report of a Case of Hydatids of the Liver treated by a free opening under Antiseptic Precautions. The patient was exhibited, and a large portion of cyst-wall discharged through the drainage-tube was shown.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

MICROSCOPIC SLIDES.

WE have just had an opportunity of inspecting a series of microscopic slides prepared by Arthur C. Cole and Son of Liverpool. These slides illustrated both healthy and morbid tissues, and the sections brought out well the different structures, and were chosen from good specimens. As to the mounting, it was all that could be desired, and the sections, in size and amount of surface, exceed anything we have hitherto seen. The staining is done by a process peculiar to Messrs. Cole, and is far superior to any in use elsewhere. Taken altogether, they are the most perfect and beautiful things of the kind ever offered for public sale. This is not only our own opinion but that of some of the most expert microscopists of the day, who have testified to the excellence of these slides. For teachers wishing illustrations for their class-teaching, they will be found very acceptable; while to students commencing their histological researches, they will be invaluable, not only for their demonstrating power, but as models to be aimed at as the students themselves become experts in the art.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, OCTOBER 30TH, 1875.

A DUBIOUS VERDICT.

A CASE of some importance in a medico-legal point of view has lately occurred at Yeovil. We allude to that of Mr. Turberville, a gentleman of property, who died rather suddenly while staying at an hotel in the town. An inquest has been held and a verdict returned, but this does not appear to have given satisfaction, and, as usual, the local papers have been filled with letters setting forth conflicting views on the cause of death.

But for the fact that the deceased was possessed of considerable property, and had disposed of it in different quarters by several wills, the public would not probably have heard of this case. Under these circumstances, the medical evidence received at a coroner's inquest is in general closely scanned and severely criticised.

The deceased was a man about fifty years of age, unmarried; somewhat eccentric in his habits, of average good health, and showing throughout life a capacity to manage his affairs. A desire for will-making appears to have been one of his eccentricities; for we learn that he left behind him no fewer than seven different wills. By one of these, the last which he made, he left a large sum to the daughter of a druggist at Yeovil of the name of Maggs, whose acquaintance he had first made about three months previously. It is also stated that he had made propositions to this lady, and, at the time of his death, was under an engagement to marry her. By another will made shortly before this, he had bequeathed the whole of his property to a Mr. Bradlaugh, to be applied by him to the advancement of socialist and atheistical principles! There is a brother who has a claim on the estate, the legality of which would appear to depend upon these wills being set aside on the ground of eccentricity or insanity. We believe, also, that a question of the validity of a life-insurance is likely to arise. The medico-legal questions which present themselves in this case, are: What was the cause of death, poison or disease? If poison, as alleged in the verdict of the jury, what was the nature of the poison? Was it taken voluntarily for the purpose of suicide, or administered accidentally? Lastly, although this was not a question for a coroner's jury to decide, what was the mental condition of the deceased when the wills were made? and, on the assumption of suicide, when was the poison taken?

According to the evidence, it appears that the deceased arrived at the hotel at Yeovil on Thursday, August 12th. On the two following days, he was chiefly at the house of Mr. Maggs, the druggist, to whose daughter he was engaged; and, up to that time, he was well in health. On Sunday, the 15th, he complained of a pain in his leg, apparently arising from an attack of sciatica. He kept his bed on that day, and took a mixture containing iodide of potassium from a prescription which he had been in the habit of using for these attacks. This was dispensed by one of Mr. Maggs's assistants. He also had some calomel and colocynth pills. The deceased afterwards applied for chloroform, and Mr. Maggs sent him one drachm. On the following day (Monday) deceased was seen by a medical man, Dr. Aldridge, in company with Mr. Maggs. He was then in great pain, and is described by both as being like a "raving lunatic". He called for more chloroform, and Mr. Maggs left him in order to procure it. During his

absence, the deceased requested Dr. Aldridge to leave the room. In three or four minutes Dr. Aldridge returned, and found deceased still raving and calling for chloroform. He was in the act of administering the vapour from a few drops which he had sprinkled on a handkerchief, when he saw a whitish fluid escaping from the deceased's mouth, and with this a lump of a white substance, which, from the smell, Mr. Maggs pronounced to be cyanide of potassium. He subsequently ejected another portion. An emetic of sulphate of zinc was then given to him, which caused free vomiting. The mouth, gums, and tongue were burnt, (? corroded), with the poison. Three drachms of chloroform (in vapour?) were given to him. This produced sleep. Subsequently, on two occasions, three and four drachms of chloroform were administered in vapour, and with these small doses of morphia. He became more quiet, but showed no signs of recovery. He was conscious that he was dying, and complained only of pain in his leg. He died at ten o'clock P.M. on Tuesday, August 17th, *i. e.*, three days after the first attack of illness.

On an inspection of the body, the lungs were found in a healthy state. The heart was quite empty and flaccid. The mouth and tongue presented marks of corrosion. The stomach contained half-a-pint of dark-coloured fluid, but the intestines were empty. The stomach was examined by Dr. A. Bernays. Its mucous surface was pale and white, except towards the intestinal end, where there was a slight redness. The surface was covered with a slimy liquid. There was some decomposition. The liver and kidneys were bloodless.

The chemical analysis was made by Dr. Bernays. The contents of the stomach were alkaline. There was some farinaceous food in them. There were no indications of cyanide of potassium; but some traces of antimony were found in the tissues of the stomach, as also in the kidneys and liver. There was no trace of morphia in the stomach or its contents. More than a week had elapsed after death before these analyses were made.

Upon this evidence, the jury returned a verdict to the effect, "That deceased, while in an unsound state of mind, took cyanide of potassium, which accelerated previous exhaustion, and resulted in death."

We cannot accept this verdict, nor can we perceive any reasonable grounds upon which such a verdict could be based. It is clear from the evidence, that the deceased was labouring under great cerebral excitement before any medicines were administered to him. It is probable that there was a diseased condition of the brain to account for this sudden attack; but unfortunately this organ was not examined, so that the existence of cerebral disease, adequate to destroy life in two or three days, must be a matter of speculation.

During his short illness, the deceased had taken three drugs, all capable of causing death—morphia, chloroform, and cyanide of potassium: the two former prescribed for him, the latter secretly taken by himself. The doses of morphia were small, given at sufficient intervals to prevent any poisonous effects from absorption, and there is no evidence to show that any symptoms of poisoning with morphia were at any time apparent. In reference to that formidable poison, cyanide of potassium, the evidence, whether physiological or chemical, fails to show that it operated in any way to accelerate death. According to legal decisions, what accelerates causes; and we are bound to look with great care to all the medical circumstances of this remarkable case before we assent to the verdict of the jury.

The deceased had clearly cyanide of potassium in his possession, and when taxed with placing some of this mineral in his mouth, he did not deny it. There is no chemical evidence of what the two white lumps which fell from his mouth consisted. Mr. Maggs states that the *smell* alone proved to him that they were lumps of cyanide of potassium, but they were neither weighed nor analysed. That the substance had a corrosive property is apparent from the condition of the mucous membrane of the mouth. So far, the theory is supported that deceased may have put some of the cyanide into his mouth during the temporary absence from his room of Dr. Aldridge and Mr. Maggs. It also follows that the substance was long enough in his mouth to pro-

duce a well-marked chemical action on the mucous membrane of the gums and tongue. It may also be inferred from the evidence, that the interval between the ejections of the two portions, was at least five minutes. One of the medical witnesses, who gave an opinion that cyanide of potassium was *not* the cause of death, stated that the quantity of this mineral which deceased had put into his mouth was about *ninety grains*! The corroded parts of the mouth were not chemically examined. The evidence of Dr. Bernays clearly shows that there was no cyanide of potassium in the stomach or its contents, nor any indications, such as are usually found, of a corroded state of the mucous membrane of the oesophagus and stomach.

Assuming that deceased had put so large a quantity as ninety grains of this mineral into his mouth and kept it there for five minutes without swallowing any portion of it, and that it was retained long enough to corrode the mucous membrane, we can only draw the inference that it must have been during that time absorbed and carried into the blood. The operation of this poison is generally rapid and well marked. The symptoms, indicated by unconsciousness, spasmodic breathing, and tetanic convulsions, come on in a few minutes, and a dose of a few grains may destroy life in from a quarter to half an hour. The interior of the stomach was not extensively reddened or corroded; and this is in accordance with the chemical result that no cyanide was there present.

In the absence of any symptom or appearance of the action of cyanide of potassium on the body, it is impossible to adopt the conclusion of the jury that this mineral in any way operated as a cause, or an accelerator of death.

The difficulty about the quantity put into the mouth and the long time which the deceased retained it there without swallowing it, in spite of its great solubility in the saliva, which would probably be more copiously secreted, still remains. It admits no explanation according to past experience. The suggestion made by Dr. Bernays, that the sample of cyanide found in the possession of deceased consisted of one-fourth of carbonate of potash, and therefore was a comparatively weak preparation, is not applicable to this case; for the ninety grains would be thereby reduced to sixty-eight grains of a poison, of which *five grains* have sufficed to destroy life.

The only conclusion which the medical and other evidence appears to us to justify, is that the deceased died from disease of the brain, probably accelerated by the frequent administrations of chloroform. The condition of the heart and the dark colour and fluidity of the blood (although decomposition may also account for these appearances), are consistent with the fatal effects of chloroform in cases of latent cerebral disease. Chloroform has not hitherto been discovered in the fluids and solids of a dead body after so long a period as a week. Had the blood and tissues been examined for chloroform soon after death, traces of this narcotic vapour might have been found in them.

There are some reports that there is likely to be a *venire de novo* in this case; that an application has been made to the Secretary of State for power to exhume and re-examine the body. We do not see what good purpose, either of a public or private nature, could be obtained by this procedure. It might include a second chemical analysis of parts not examined; but, in our view, this branch of the scientific evidence has been exhausted by Dr. Bernays. He found traces of antimony of old standing. There were no traces of morphia or cyanide of potassium, and it would be absurd to suppose that any traces of chloroform still remain in the decomposed body.

We have here professed to deal only with the cause of death. The deceased did not die from the effects of poison, but from natural disease. It may have been here, as it frequently happens under latent disease of the heart or brain, that the chloroform-vapour operated to accelerate death. It was certainly not caused or accelerated by the cyanide of potassium. In these remarks, we have confined ourselves chiefly to only one of the medico-legal questions arising out of this remarkable case; namely, the question of death. In the conclusion which we have drawn, we have had

no intention to cast blame on the medical gentleman who thought himself justified in administering full doses of chloroform on several occasions, for the purpose of alleviating the cerebral excitement under which the deceased was labouring. It is well known that this vapour has, even in experienced hands, accumulated in the blood, and either caused or accelerated death from latent natural disease. This has happened in many cases in which the fatal results could not be foreseen.

In reference to the other questions, bearing on life-insurance and testamentary capacity, but a few additional observations are required. If the deceased put lumps of cyanide of potassium into his mouth, it is clear that he did not swallow any of it, and that he did not die from the effects. He would hardly have survived for twenty-four hours the effects produced by this poison in a few minutes, as a result of absorption. There is no ground to impute suicide; and an attempt at suicide does not legally invalidate a life-insurance. The cause of death can hardly affect the question of the validity of the two wills; one bequeathing £20,000 to the daughter of the druggist to whom deceased was engaged; and the other directing the whole of his property to be devoted to the diffusion of atheism and socialism. A testamentary act of this latter kind might be taken as an indication of eccentricity or insanity! The date of the documents, and the circumstances under which they were executed, will show whether the deceased had or had not a proper disposing capacity at the time when they were made. No question arising out of his last illness and death can at all affect the rights of these claimants, and they require no consideration in this place.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

ON Monday next, an adjourned meeting of the governors of this institution will be held in the Board-Room, to decide what course shall be taken with reference to a report of a subcommittee on the income and expenditure of the hospital, which report was approved by the General Committee in June last. It will further be proposed that the ticket system, which has been in force since the establishment of the hospital in 1840, shall be abolished; and that the Committee shall be empowered to make such changes in the management of the hospital for the admission of patients as may be necessary to give effect to the proposed abolition of tickets.

We have been induced to call attention to this report, and to the points which will be fully discussed by the meeting on Monday, because the issues raised are important, not only to the supporters of the hospital immediately concerned, but to all hospital managers in these days of hospital abuse.

The working men, chiefly members of the Hospital Saturday Committee, led by their champion Mr. Sampson Gamgee, objected to the abolition of tickets, because they feared a system of espionage would be instituted which would be distasteful to the working men as a body. So strong and decided was the opposition to the scheme at the meeting in July, that the supporters of it, in the interests of the hospital, thought it best not to push matters to a division, but to adjourn the meeting until November 1st. With reference to the objections raised by the working men, we again express our opinion that Hospital Saturday has been a mistake from the first; as it has led the working classes, who are already too fond of availing themselves of the advantages hospitals offer to them of obtaining free medical attendance, whether they can afford to pay a medical man or not, to look upon these charities as institutions formed more for their own benefit than for the necessitous poor. We regret to learn that the Committee will probably offer, as a compromise to the working classes, to let the adoption of a system of careful and efficient inquiry into the fitness of the patients applying for relief stand in abeyance for the present; and to institute for it a registration fee of one shilling, which sum will be exacted from all applicants, however long under treatment. We urge the Committee to pause before they agree to any such compromise as this; because the experience of all hospitals which have tried the registration fee is, that it tends rather to increase than diminish the number of patients, and only ex-

Experiment 10. Dog weighing 11 kilogrammes.—12.2 cc. of bile injected into the duodenum (*b*, Fig. 10). Unfortunately, there is a hiatus in the curve immediately before the injection, owing to a loss of the bile; nevertheless, it is evident that increased bile-secretion followed the injection when the biliary flow had become fairly constant. Nine grains of podophylline, triturated in a mortar with 12 cc. of bile, were injected into the duodenum (*p*). A rapid increase in the bile-secretion ensued; but soon it diminished, and three hours after the injection it was lower than it had ever been. In this remarkable experiment, therefore, the *diminution* of bile-secretion after podophylline was far more remarkable than its increase; indeed, the increase might possibly have been owing to the injected bile, and not to the podophylline. Towards the close of the experiment, the pulse became weak, but not excessively so.

AUTOPSY.—The mucous membrane of stomach and whole length of small intestine were intensely red. The small intestine contained a large quantity of fluid. The large intestine contained a considerable quantity of liquid faecal matters. There was, therefore, abundant evidence that excessive purgation was imminent.

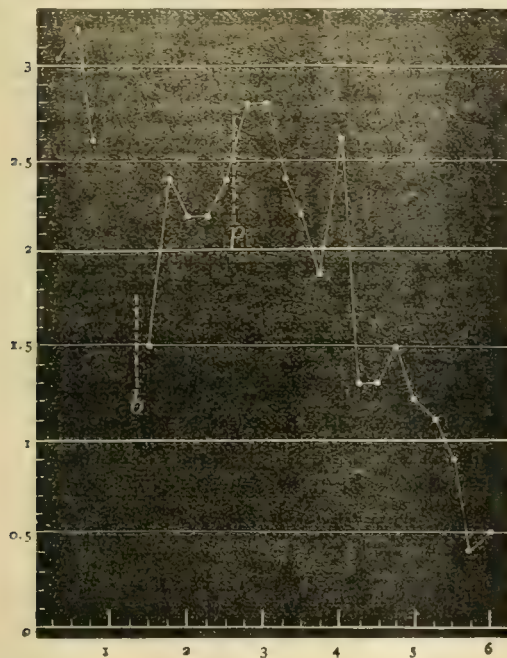


Fig. 10.

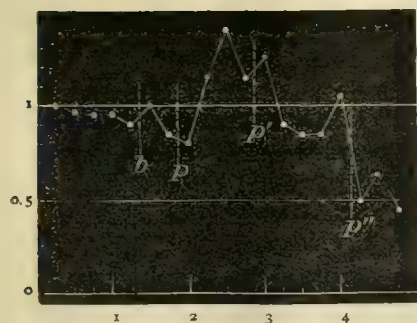


Fig. 12.

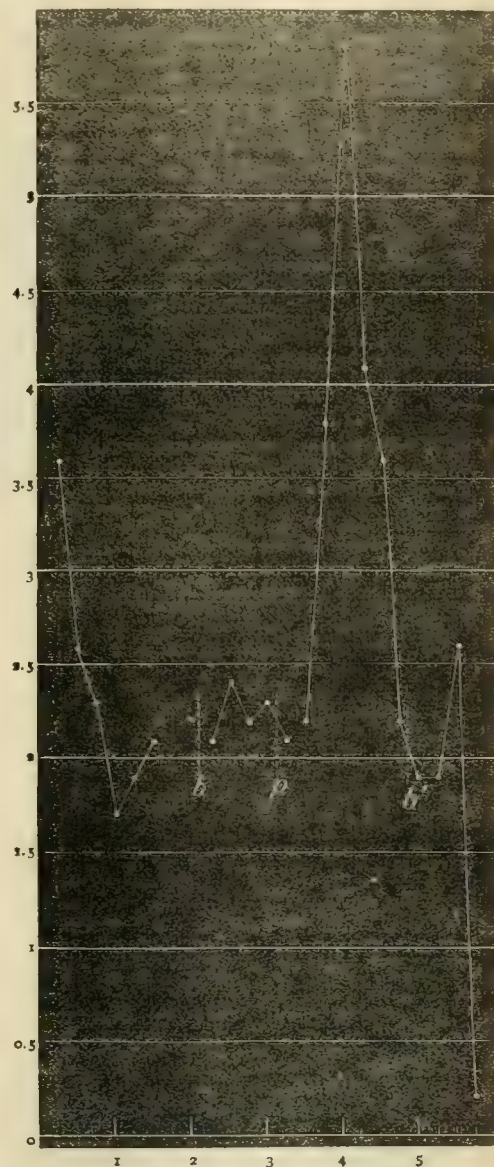


Fig. 11.

Fig. 10.—Secretion of bile in a dog that had fasted eighteen hours. *b*, 12.2 cc. of bile; *p*, nine grains of podophylline in 12 cc. of bile injected into duodenum.

Fig. 11.—Secretion of bile in a dog that had fasted nineteen hours. 6 cc. of bile and 6 cc. of water injected into duodenum at *b* and *b'*. Four grains of podophylline in 6 cc. of bile and 6 cc. of water injected at *p*.

Fig. 12.—Secretion of bile in a dog that had fasted eighteen hours. 0.5 cc. of bile and 2.5 cc. of water injected into duodenum at *b*; the same, together with one grain of podophylline, injected at *p*, *p'*, and *p''*.

In this experiment, the intestinal irritation and the purgative effect were far greater than they were in any of the previous experiments with podophylline, and it is evident that the principal change in the bile-secretion was *diminution*. It therefore ap-

peared that, with a powerful solvent such as the bile, nine grains of podophylline produced a too violent effect upon the alimentary canal. The previous experiments having shown that, with a slighter action on the intestine, there was a more powerful action on the liver, suggested that, with a smaller dose of podophylline given in the biliary solvent, an action on the liver would be evident, and that this would follow the injection more speedily than it had done in the experiments where the podophylline was not given in a state of solution. The next experiment realised this anticipation in a very striking manner.

Experiment 11. Dog weighing 17.1 kilogrammes.—The bile-secretion was about 2 cc. per fifteen minutes before injection into the duodenum of 6 cc. of bile and 6 cc. of water (*b*, Fig. 11). The subsequent increase of secretion was trivial. An hour after this, four grains of podophylline, in the same quantity of bile and water, were injected (*p*). About half an hour afterwards, a great acceleration of the biliary flow began, and lasted about an hour. In one of the periods of fifteen minutes, no less than 5 cc. of bile were secreted: a quantity never noticed in any other experiment, even on larger dogs. When this great hepatic excitement had disappeared, 6 cc. of bile and 6 cc. of water were again injected (*b*), as in the first instance. The fall in the secretion was for a time arrested; but within three hours after the administration of the podophylline, the action of the liver had almost entirely ceased. The pulse was weak, but not extremely so.

AUTOPSY.—The mucous membrane of the duodenum was intensely vascular, but that of the remainder of the small intestine did not show an increased vascularity nearly so great as in the previous experiment. The upper three-fourths of the small intestine contained very decided evidence of purgative effect. The gastric mucous membrane had a dull red appearance.

Experiment 12. Dog weighing 7.9 kilogrammes.—In this case, 0.5 cc. of bile and 2.5 cc. of water were injected into the duodenum (*b*, Fig. 12), without producing any noteworthy effect. The same quantity of bile and water, containing one grain of podophylline, was then injected, and the dose was twice repeated (*p*, *p'*, *p''*). After the first dose, an increase in the biliary secretion was perceptible in half-an-hour; it never became very marked, and it lasted only about an hour. The second, but especially the third dose, was followed by a fall in secretion, probably owing to purgative action taking place.

AUTOPSY.—There was evidence of severe irritation of the mucous membrane of the upper half of the small intestine; and a decided evidence of purgation in this portion of intestine. The lower part of the small intestine was almost quite empty and dry.

Composition of Bile before and after Podophylline.—The next question to be answered was evidently this, Is the increase in the quantity of bile after podophylline merely due to an increase of water, or are the bile-solids also increased? The bile secreted by dog 11, between the second hour and a half and the third hour, and that secreted an hour and a quarter after the administration of podophylline, were analysed with the following results. (Table II.)

TABLE II. - Podophylline.

Experiment 11.	Before.	After.
Water	90.83	91.07
Bile-acids, pigments, cholesterine, fats	7.75	7.84
Mucus	1.00	0.60
Ash	0.42	0.49
	100.00	100.00
Velocity of secretion per half-hour	4.6 cc.	9.6 cc.

It thus appears that, notwithstanding the great velocity of bile-formation, the special bile-solids were not diminished; the only noteworthy diminution being in the amount of mucus. This remarkable result was confirmed by the following analysis of the bile in Experiment 12. The table shows the composition of the bile secreted before and during the increase of the secretion after the podophylline was given.

TABLE III.—Podophylline.

Experiment 12.	Before.	After.
Water	94.26	94.28
Bile-acids, pigments, fats, cholesterine	4.66	4.68
Mucus	0.73	0.70
Ash	0.35	0.34
	100.00	100.00
Velocity of secretion per half-hour	1.86 cc.	2.47 cc.

Results of the Experiments with Podophylline.—1. Podophylline, when injected into the duodenum of a fasting dog, increases the secretion of bile. It is inferred that the increased biliary flow in the preceding experiments was due to increased secretion, and not merely to expulsion, because the gall-bladder had been wellnigh emptied by compression, and the cystic duct had been clamped: moreover, the increased flow was far too prolonged in some of the experiments to be attributable to spasm of the larger bile-ducts: therefore, an increase in secretion must have been the cause. 2. When the bile is prevented from entering

the intestine, podophylline acts less powerfully and less quickly than when bile is introduced. 3. Augmentation of the biliary secretion is most marked when the purgative effect is not severe; indeed, if the purgative effect be very decided (*Experiment 11*), diminution and not augmentation of the biliary secretion may be the chief result. 4. Podophylline purgation is apparently due to a local action, for the irritation of the intestinal mucous membrane extends gradually from above downwards. 5. The bile secreted under the influence of podophylline, although it may be in increased quantity, contains as much of the special biliary matter as bile secreted under normal conditions.

ACTION OF ALOES.

Although aloes has been found by Röhrig to accelerate the biliary secretion, we were anxious to compare its action, as ascertained by our method, with that of other substances; and we also desired to know the composition of the bile secreted before and after its administration.

Experiment 13. Dog weighing 8.6 kilogrammes.—Sixty grains of aqueous extract of Socotrine aloes in 12 cc. of water were injected into the duodenum (*a*, Fig. 13). A decided increase in the biliary secretion was perceptible within half-an-hour thereafter. After attaining a maximum about an hour and a half after the administration of the drug, the secretion gradually fell; but although the experiment was continued for seven hours after the aloes was given, the effect had not disappeared.

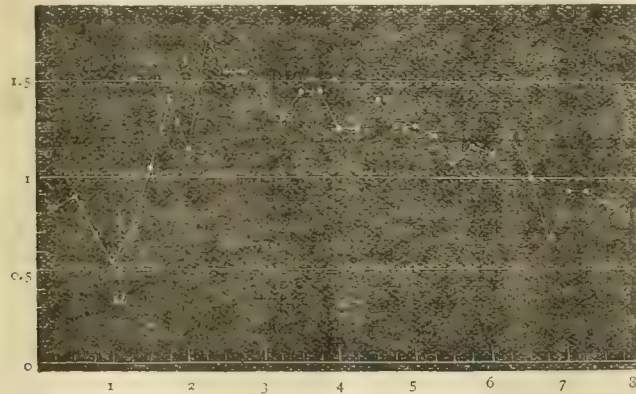


Fig. 13.

Fig. 13.—Secretion of bile in a dog that had fasted eighteen hours. Sixty grains ext. aloes Soc. in 12 cc. water injected into duodenum at *a*.

AUTOPSY.—The aloes had extended along two-thirds of the small intestine, which contained about an ounce and a half of viscous fluid as the only evidence of purgation. There was a decided increase in the vascularity of the mucous membrane in this part of the intestine. The stomach contained a little mucus. Its mucous membrane was pale.

Experiment 14. Dog weighing 5 kilogrammes.—Sixty grains of extract of Socotrine aloes in 12 cc. of water were injected into the duodenum (*a*, Fig. 14). As in the previous experiment, the subsequent increase in the biliary secretion was decided within half an hour, and became very strongly marked.

AUTOPSY.—The aloes had extended half way down the small intestine. This portion of intestine contained about two ounces of viscous fluid; and its mucous membrane, together with that of the stomach, was intensely red.

Experiment 15. Dog weighing 9.5 kilogrammes.—In this experiment, it was proposed to test the effect of aloes on the liver when wellnigh exhausted: accordingly, at the sixth hour of an experiment on a dog that had fasted the usual period of eighteen hours, twenty grains extract of Socotrine aloes in 5 cc. of water were injected into the duodenum (*a*, Fig. 15), and this dose was repeated in half-an-hour. The secretion of bile was increased, but the effect was not very marked; nevertheless, the result is noteworthy, seeing that in this case there was a great secretion of bile during the first four hours of the experiment. (Fig. 15.)

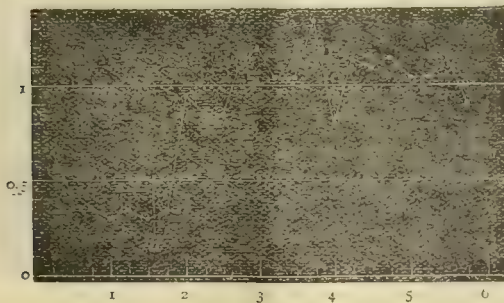


Fig. 14.



Fig. 15.

Fig. 14.—Secretion of bile in a dog that had fasted eighteen hours. Sixty grains of Extract of Socotrine Aloes in 12 cc. of water injected into duodenum at *a*.

Fig. 15.—Secretion of bile in a dog that had fasted 18 hours. Twenty grains of Extract of Socotrine Aloes in 5 cc. of water injected at *a* and at *a'*. (The curve during the first three hours is omitted.)

Composition of the Bile before and after Aloes.—Table IV shows the results of the analysis of the bile in Experiment 13, secreted before and during the first two hours after the administration of the aloes.

TABLE IV.—*Aloes.*

Experiment 13.	Before.	After.
Water	84.11	91.44
Bile-acids, pigments, cholesterine, fat	12.45	7.53
Mucus	1.77	0.38
Ash	1.67	0.65
	100.00	100.00
Velocity of secretion per half-hour	1.5 cc.	2.65 cc.

Table v gives the result of the analysis of the bile before and after the administration of aloes in Experiment 14.

TABLE V.—*Aloes.*

Experiment 14.	Before.	After.
Water	83.93	86.75
Bile-acids, pigments, cholesterine, fat	12.30	10.79
Mucus	2.74	1.49
Ash	1.03	0.97
	100.00	100.00
Velocity of secretion per half-hour	0.66 cc.	2.2 cc.

It is evident from Tables IV and v, that, under the influence of aloes, the bile became more watery; nevertheless, the amount of bile-solids secreted per unit of time increased.

Results of Experiments with Aloes.—1. Sixty grains of the extract of Socotrine aloes, when placed in the duodenum, powerfully stimulated the liver. 2. Under its influence, the liver excreted a greater quantity of biliary matter in a given time, although the bile was rendered more watery. 3. Coincident with the marked action on the liver, there was only a slight purgative action.

ACTION OF RHUBARB.

The following experiments show that rhubarb is also a very remarkable hepatic stimulant. The ordinary infusion of the *British Pharmacopœia* was made with Indian rhubarb; it was then filtered and concentrated until 5 cc. contained the active part of seventeen grains of rhubarb. This was the dose employed.

Experiment 16. Dog weighing 22.2 kilogrammes.—5 cc. of the above infusion of rhubarb were injected into the duodenum four times in succession (r, r', r'', r''' , Fig. 16). Within half-an-hour after every dose, there was an increase in the biliary secretion.

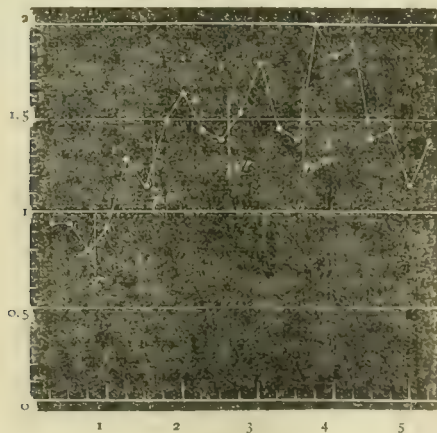


Fig. 16.

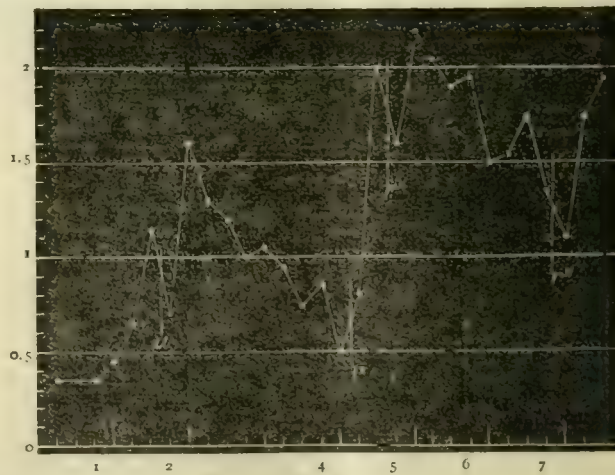


Fig. 17.

Fig. 16.—Secretion of bile in a dog that had fasted fifteen hours. 5 cc. of a concentrated infusion of rhubarb injected into duodenum at $r, r', r'',$ and r''' .

Fig. 17. Secretion of bile in a dog that had fasted eighteen hours. Respiration improved at a . 5 cc. concentrated infusion of rhubarb injected into duodenum at $r, r',$ and r'' .

cludes the pauper class, who, as we showed last week, do not form an appreciable number of the cases attended at the Queen's Hospital. If the Committee have felt it difficult to meet the expenses incidental to the treatment of the cases for which they have to provide under the ticket system, we are certain that a few months' experience of the working of the registration fee will convince them that it will be impossible to meet the demands made on their resources; and, what is far worse, without a proper system of inquiry, the adoption of such a course will be one more retrograde step in the march of hospital abuse; for directly those unscrupulous people who already frequent our hospitals in large numbers, find the doors of a great general hospital open to them without check or fear of inquiry, they will readily avail themselves of the opportunity the small registration-fee will afford to obtain the medical attendance they need without incurring the expense of a doctor's bill.

We are at a loss to understand why the Committee of the Queen's Hospital, which was the first in the United Kingdom to institute a searching inquiry into the circumstances of the patients attending the out-patient department, by means of the Charity Organisation and Mendicity Society, should so forget the sound principles of hospital management which formerly made their institution popular, as for the moment to entertain the idea of consenting to the adoption of a course which will make their hospital, we are convinced, more abused than any charity of the kind in the whole country.

Once more, we earnestly beg the Committee to be firm in the course they had decided to take in July; to adopt the free system by all means; to establish, if they think it desirable, a registration-fee—though we doubt the wisdom of this; and, above all, to insist upon the necessity of at once securing a careful and efficient system of inquiry into the fitness of all applicants for relief by means of the Charity Organisation Society, or some other body equally capable of conducting such an investigation with tact, discretion, and a due regard to the feelings and interests of the really deserving poor. If they pursue this course, they will earn the thanks of all who are interested in the great question of hospital reform; and, in addition, we are convinced they will insure for their institution that full measure of public support it at present so greatly needs.

THE DISPOSAL OF THE DEAD BODIES OF INFANTS.

THE recent discovery at an undertaker's premises in Southampton of the bodies of thirteen infants brings forward again a matter which has often been discussed, but still remains wholly unsettled. Similar discoveries, only differing in the number of bodies being smaller, have from time to time occurred with various results. Sometimes an inquest has been held, as in the case which occurred at the Bethnal Green Workhouse, where the bodies of four infants were by the merest accident discovered in a coffin supposed to contain only the body of a woman. In this case, the undertaker was severely censured by the coroner's jury; but, beyond this and the loss of a contract, which was probably not of much consequence to him, nothing more was done, for the simple reason that, legally, there was at the time no offence. Were such a discovery to be made now, and it were proved that the undertaker fully intended to conceal the fact of there being more than one body in the coffin, he could be proceeded against under Clause 19 of the Births and Deaths Registration Act, 1874, and fined £10 for the concealment alone. If, in addition to this, he attempted to bury a body without the usual certificates, he would be liable to another penalty of £10.

But, in the case before us, as in previous cases more closely resembling it, another difficulty arises. Is it an offence to bury the body of a child elsewhere than in a public burial-ground? That it is an offence against order and decency is undeniable, and that its general adoption would be attended with the greatest inconvenience and even danger, is equally plain. But is it an indictable offence to bury a child's body in a garden, field, or under a shop or dwelling-house? To answer this, we had better examine the laws which seem to bear upon the subject.

By the 24 and 25 Vict., cap. 100, sec. 60, it is enacted that, "If any woman shall be delivered of a child, every person who shall by any secret disposition of the dead body of the said child, whether such child died before, at, or after its birth, endeavour to conceal the birth thereof, shall be guilty of a misdemeanour, and, being convicted thereof, shall be liable, at the discretion of the Court, to be imprisoned for any term not exceeding two years, with or without hard labour". Dr. Alfred Taylor, in his *Principles and Practice of Medical Jurisprudence*, remarks on this:—"Various interpretations have been put upon the terms 'concealment' or 'secret disposition' of the body. . . . It will rest with the judge to determine whether the body has been so disposed of as to constitute legally a misdemeanour." It is difficult, if not impossible, to separate the disposal of the body from the concealment of birth, which may not have been the case with any of the thirteen bodies discovered at Southampton. Still there was undoubtedly a wilful concealment on the part of the undertaker's wife, who admitted the presence of only one "little still-born baby" on the premises, and added that there were no other dead children there. But let us now look at the recent Act already referred to (37 and 38 Vict., cap. 88), and see whether the most recently passed measure contains any regulations which may guide us. By Clause 17, every person who "buries" a body must either receive a burial certificate or notice from the undertaker, or must, within seven days after burial, send the registrar notice of such burial. By Clause 18, the person who has control over or ordinarily buries bodies in any burial-ground is not permitted to bury as "still-born" the body of any child without a certificate or declaration (the former from a medical practitioner, the latter from an authorised informant) or the coroner's order. The burial of a child which has lived for however short a time as a still-birth would expose the parents or custodians of the child to a penalty of forty shillings for failing to give notice of the birth, and a similar sum for not reporting the death.

As we have already seen, the undertaker, who smuggled the body into another coffin, would, on discovery, be liable to a penalty of £10, as would also the person wilfully burying the body under such circumstances. Again: making, giving, or using a false certificate of still-birth is punishable by imprisonment with hard labour, or even penal servitude. Thus it would seem as if recent laws had effectually guarded against the possibility of fraud or unfair play.

But, as has been frequently pointed out, the facilities for the disposal of the bodies of infants are so great, that detection is, and must be, a matter of difficulty. Their small size, the narrow line drawn between still and live birth, the difficulty of proving wilful concealment or false pretence—these and a host of other circumstances surround the matter with almost insurmountable difficulties. To give only one more; that much abused individual the undertaker, whose functions the recent Church Congress would supersede altogether, has been only too often willing to "undertake", amidst other offices, unsanitary if not unlawful ones. What led to the detection of the Southampton case was the effluvia arising from the decomposition of these thirteen bodies. How many similar cases may have occurred and escaped notice! It has been repeatedly suggested, and with great justification, that the State should take charge of all burial arrangements. If this were done, all such irregularities being punished with dismissal, and burial except by the State officials being illegal, it would not be worth anyone's while to offend. But, as this must be yet in the future, it becomes necessary to inquire, firstly, whether any hardship is inflicted by the present burial arrangements on the lower classes; and, secondly, whether there be a remedy. To the first question we must answer in the affirmative.

Take the case of the wife of a working man, to whom pence, to say nothing of shillings, are a matter of serious import. She is delivered of a child which just survives its birth, living a few minutes, or even drawing one feeble breath. She is attended by a medical man or midwife, who conscientiously tells what ought to be done, viz., inform the registrar, have the birth and death registered, and the body buried accordingly. It simply means that, whereas as a still-birth the

body might have been buried for half-a-crown or less, an expense varying from four to ten shillings must be incurred. That this is no imaginary case, every obstetric practitioner must admit. In one case which came to our knowledge, where a child was delivered by the forceps, only to breathe and die, the medical attendant was bitterly reproached by the mother for not giving her a false certificate, and saving, to use her own words, "all that expense". Again, a delicate matter is involved, which, however, must be faced, and that is the subject of baptism and funeral rites. It is simply preposterous to expect a working man (be his religion what it may) to see the justice of burying with funeral rites, and at the loss of half-a-day's work, an infant that has merely term a "fluke", he might have been saved all that trouble and expense. It cannot be denied that such considerations as these are most probably at the bottom of such disclosures as the recent one at Southampton.

But is there a remedy? We think there is, and it is this. In every parish there ought to be a mortuary, which, besides affording shelter for all bodies found in the streets or elsewhere, should be a receptacle for the bodies of infants awaiting burial. These might be removed periodically to the cemetery or burial-ground. The burial fees ought to be uniform throughout the kingdom, and all infants under a certain age, say seven days, should be buried for the same fee as a still-birth. By thus affording people facilities for removing from their wretched homes, which often consist of one room only, the body of an infant, till such time as they can raise means for its burial, and removing this utterly senseless pecuniary distinction between burying still-births and dead infants, which are seldom larger, and often much smaller, the principal inducement to fraudulent and secret burial would be removed.

It should be made a misdemeanour to bury any body, whether of a still-birth, deceased child, or adult, in any but a public burial ground. Possibly the undertaker at Southampton may have been guilty of obtaining money under false pretences, but if so, this is an accidental circumstance, and quite apart from the irregular and indecent disposal of these bodies under the floor of his shop, for which there is only too much reason to fear that there is no penalty.

MR. CORDER, of Earl's Court Road, Brompton, has just published a most interesting series of views of the house and grounds formerly occupied by the immortal Hunter.

THE attacks of cholera in Delhi and the surrounding districts have disappeared. Fifty-one deaths from cholera were reported from the city of Lucknow in a week.

IN the case of alleged libel by William Kenny on Captain Charles Mercier, of the Hospital Saturday Fund, an application for postponement till the next sessions was made at the Old Bailey on the defendant's behalf, and, being unopposed, was agreed to.

THE Royal Commission to inquire into the practice of subjecting live animals to experiments for scientific purposes has held several sittings during the past week, for the examination of witnesses on both sides of the question. All the commissioners have been present.

MR. IRVING, assistant to Dr. Ryott, of Thirsk, Yorkshire, while riding, at about half-past one o'clock on Sunday morning, along the high road leading to the village of Kilvington, was stabbed twice by some unknown assailant, but fortunately received only very trifling injury.

IT will be observed that Sir Trevor Lawrence, Bart., son of the late Sir William Lawrence, the eminent Surgeon of St. Bartholomew's Hospital, is a candidate for the parliamentary representation of Mid-Surrey in the Conservative interest. Sir Trevor Lawrence was formerly a Surgeon in the Indian Army, and may be expected to take a warm and intelligent interest in medical and sanitary affairs.

IN the course of his report to the Chairman and Committee of the Royal Humane Society for the year 1873, Mr. Archer Farr alludes to the necessity of providing, if possible, on additional parts of the Thames, similar accommodation to that afforded by the receiving-house at Waterloo Bridge, of which he is medical officer.

WE regret to have to announce the death of M. Lorain, Professor of Medical History to the Faculty of Medicine in Paris. M. Lorain, who was only fifty years of age, died very suddenly of what is believed to have been an attack of meningeal apoplexy. He succeeded the late M. Daremberg in the professorship about two years ago.

MR. HUMPHREYS, Coroner for East Middlesex, held an inquest this week, relative to the death of Mr. Robert Stewart, aged twenty-nine years, surgeon, who died from injuries received through being crushed between the train and platform at the Bow Station on last Thursday night. The jury returned a verdict of accidental death, with a recommendation that something be placed at each staircase to prevent passengers from proceeding on the platform while a train was in motion.

THE attention of the Council of the Royal College of Surgeons having recently been drawn to the order issued by the Local Government Board, whereby a Fellow or Member of the College, unless he possessed a registerable *medical* qualification, was disqualified from advising whether or not a medical officer under this Board was justified in performing an amputation, the Council of the College requested the President, Sir James Paget, and the Vice-Presidents, Messrs. Hewitt and Birkett, to make such representations on the subject of this order as they might think proper to the President of the Local Government Board. The result was communicated to the Council at the last meeting in a letter from Mr. Fletcher, the Assistant-Secretary, stating that an early opportunity would be taken by his Board to amend Article II of the General Order, relating to the qualification of those entitled to give certificates authorising Poor-law medical officers to perform amputations. The surprise is, that such an extraordinary "order" should ever have been passed, as by its operation it would exclude the most distinguished and competent Fellows of the College from giving the necessary surgical opinion in favour of an operation.

PROVIDENT DISPENSARIES AND THE HOSPITAL SUNDAY FUND.

CONSIDERABLE dissatisfaction is expressed as to the manner in which the provident dispensaries are affected by the Hospital Sunday collection. In the Report of the Royal Pimlico (Provident) Dispensary, it is said:

"The question has been raised in the public mind, whether provident dispensaries have received a fair proportion in the distribution of the Metropolitan Hospital Sunday Fund. With reference to this question, it may be mentioned that the clergy of the district served by the Royal Pimlico Dispensary during the past year sent above £1,100 as the result of the sermons preached by them. The amount of the share received by this institution was £93 : 15 : 9, whereas one sermon preached in aid of the dispensary alone would probably have produced from £150 to £200. Therefore the Committee, seeing the deficiency in their receipts, cannot but feel the absolute necessity that local charities should be fully provided for before money is remitted for general metropolitan purposes."

The managers of the Haverstock Hill Provident Dispensary have also had the same subject under their consideration. Being dissatisfied with the award which they received last year (£12 : 15 : 6) they asked the local clergy for special grants from their Hospital Sunday collections. These amounted to £70, a sum which gives a better indication of the value of this institution (which has now four thousand enrolled members) than the trifling grant from the Hospital Sunday Fund. We have before pointed out that this is one of the difficulties with which the Hospital Sunday has to grapple. Wherever institutions are characterised by special features which recommend them to the liberality of the district in which they are situated, they will find their advantage in appealing to their neighbours, and not to a general fund.

The provident dispensaries present such a special feature, and one which is just now attracting a great deal of public attention; and it is not surprising that the managers should wish to reap some benefit from the efforts they have made to bring about a much needed reform. They are trying to *unpauperise* the working classes (if we may be allowed the word). Many of the more intelligent of the clergy are well aware of this, and are willing to give them their aid. Why, then, should they forego an advantage which seems to be justly their due?

THE "CORNWALL" OUTBREAK OF TYPHOID.

MANY fresh cases of typhoid have occurred on board the *Cornwall* school-ship during the week, and one death has taken place. Eight cases have been admitted to the Seamen's Hospital, Greenwich, making in all thirty-four received by this institution. Six have been taken to St. Bartholomew's. The total number of sick since the commencement of the outbreak is nearly eighty. Owing to increasing numbers, it was found necessary, in addition to the boat-house and small permanent hospital, to erect a tent, which, as an extra protection from wet, has a flooring of boards laid over gratings. As regards means of prevention, we are glad to find that the mode of water-transit has been altered, and that the supply is derived from a pipe laid down directly from the shore to the ship: an arrangement similar to that formerly in use on the *Dreadnaught*. The water-tanks have also undergone cleaning and whitewashing, the good results of which, it is to be hoped, will shortly become apparent. A further step has been taken by the Committee of the *Cornwall*, in making arrangements with the port sanitary authority for the use of the *Rhin*, a vessel stationed at Gravesend, belonging to the said authority, to which thirty-five cases have already been sent in a steamer hired for the purpose; and we may, therefore, hope that the weatherbeaten temporary hospitals at Purfleet will be shortly relieved of their occupants.

MORTUARIES IN THE METROPOLIS.

We believe it is now universally recognised by all sanitary authorities that, if the moral and physical health of the poorer classes is to be preserved, it is necessary that some provision should be made in the crowded parts of the metropolis, and especially among those who occupy one or at most two rooms, for the temporary accommodation of the dead in the interval that elapses between the death and burial. In the Sanitary Act, 1866, clauses were introduced giving power to the local authority to construct mortuaries, and to provide places for *post mortem* examinations, etc.; but, such clauses being permissive only, such mortuaries have not been very extensively established. This doubtless has arisen from two or three causes: first, unquestionably, from the ignorance on the part of the sanitary authorities of the value of such provision, and probably also from their indifference; but in many instances it has also occurred that the local authority has been hindered by the great difficulty which exists in procuring suitable sites; and, as the various vestries and boards of works possess no power of compulsory purchase, it has happened that, after three or four attempts to agree upon a locality, the subject has been abandoned altogether. Certain scandals arising from the want of such accommodation having occurred in some of the smaller parishes which go to make up the Strand Board of Works, a resolution, on the motion of Dr. Joseph Rogers, was unanimously carried, to memorialise the Metropolitan Board, praying that Board "to seek from Parliament, in the ensuing session, authority to construct mortuary buildings in the metropolis in such situations as the requirements of the neighbourhood may render requisite, together with compulsory powers for the acquisition of the necessary sites". We regret, however, to note that the Metropolitan Board has declined to take up the subject, although it would appear that Mr. Richardson, in bringing up the report of the Works Committee, to whom the memorial had been referred, and in moving its adoption, stated "that the mortuary question was beset with difficulties in London. Local boards had no power to purchase land for the erection of mortuaries. Objections were also raised to the erection of mortuaries by the inhabitants; and, even supposing that a mortuary

was erected in conjunction with several parishes, by the existing law it was illegal to convey a dead body from one parish to another. Individually, the Board did not oppose mortuaries, and would be glad to see them erected; but it was a matter which should be dealt with by the local boards, and not by the Metropolitan Board." We should have imagined that the statement which we have quoted would have carried conviction to the Metropolitan Board of the propriety of the course adopted by the Strand Board in requesting them to deal with this subject; for what body could be so well fitted as that which possesses the power of surveying the metropolis as a whole? Again, the Central Board, without incurring unnecessary expense, could have secured from Parliament powers of compulsory purchase; but now, by its decision, it throws on each of the several boards of works the onus of obtaining such powers for themselves; that is, if they be so minded. It is impossible, however, for the subject to remain where it is. The opportunity has been offered to the Metropolitan Board to deal with a great sanitary evil; and, with a full knowledge of its existence, it has been deliberately ignored. We look, therefore, to the Home Office, or to the Local Government Board, to make such alterations in the law in the coming session of Parliament as will effectually deal with the question.

IMPROVED DWELLINGS.

LAST week, an extraordinary general meeting of the members of the Improved Industrial Dwellings Company (Limited) was held at the Mansion House, to consider a special report of the Directors recommending the creation of additional capital to the amount of £250,000, by the issue of 25,000 shares of £10 each. The present capital is £250,000, of which £212,500 has been paid up. £84,000 has been borrowed from the Public Works Loan Commissioners, repayable by eighty half-yearly instalments; and £22,721 has been paid by shareholders in advance of calls. £323,068 has been expended on land and buildings. The reserve fund for equalisation of dividends is £17,000, and for other purposes about £9,000. From the company's formation, a dividend of 5 per cent. has been paid. The company had now 2,199 tenements in different parts of London, accommodating 12,150 persons. The rate of mortality for the nine years last past had been 16 per 1,000 in the company's dwellings, against 23.6 per 1,000 in the whole metropolis. The density of population in the metropolis averaged 42 per acre, but in the company's dwellings it was 750 per acre; yet the death-rate of persons over a year old was 17 in the metropolis, and only 10.35 in the dwellings. The birth-rate was proportionately excessive in the dwellings; but, in comparison with the rest of the metropolis, the death-rate of infants was only 1.7 per 1,000 higher. The chairman (Sir Sydney Waterlow, M.P.) moved the adoption of the report, which was seconded by Mr. Alderman Finnis, and carried unanimously. This most admirable company, unlike many pseudo-philanthropic building societies—which are largely jobbed—is a model of economy and efficiency. Its financial management is sound, and it is in all respects a most valuable association.

A HOSPITAL SOLD.

WE regret to observe that the Royal Albert Infirmary, at Bishop's Waltham, in the county of Hampshire, which has remained unoccupied since its inauguration and the unveiling of the statue of the late Prince Consort (to whom the building was dedicated), which stands over the principal entrance, the statue being the gift of one of the present members for Southampton, Sir Frederick Perkins, was sold by auction on Tuesday last by Mr. Richard Austin, together with the greater part of the property, consisting of about 1,280 acres of land, which formed the estate of the late Sir Arthur Helps, K.C.B. The foundation stone of the proposed infirmary was laid by Prince Leopold, accompanied by Prince Louis of Hesse and Earl Granville, on August 4th, 1864; and the ceremony of inauguration was held in the presence of the Princesses Helena and Louise in November, 1855. The building is of the best materials and workmanship, standing high and dry

on an eminence facing the ruins of the old Bishop's Waltham Palace. The surrounding scenery is very pretty, the locality being one of the prettiest in the county of Hampshire. Some thousands of pounds have been expended upon the hospital. It has now been sold for £1000, to clear off the expenses of the building, and consequently the object for which it was intended has not been carried into effect. General regret is felt in the neighbourhood that such a noble edifice, erected for charitable purposes, inaugurated under Royal auspices, and founded by so notable a man as Sir Arthur Helps, should be allowed to pass into the market. The sale created much interest, and was largely attended.

VACCINATION IN ENGLAND.

DR. SEATON reports, in the first annual report of the working of the Vaccination Act, 1871, that if, from the 617 extra metropolitan unions, 39 unions in which there was an exceptional proportion of cases unaccounted for, and in regard of which the Local Government Board consequently remonstrated with the respective boards of guardians, be deducted, it will be found that of 653,811 births registered in the remaining 578 unions in 1872, all but 23,841, or 3.6 per cent., were finally accounted for in the vaccination registers at the time the returns were made. For the sake of comparison, it may be noted that in the same year in Scotland (where a system similar to that established in England under the Act of 1871 had been in operation for nine years with a success which the Registrar-General for Scotland has frequently reported as marvellous) the proportion of cases unaccounted for, including postponements, was 2.658 per cent. of the births. The much greater relative extent to which population is aggregated in large towns in England than in Scotland, must always make it a matter of greater difficulty to trace cases of neglect in the former than in the latter division of the United Kingdom.

DEATH OF PROFESSOR PORTA.

THE eminent Italian surgeon Luigi Porta, Professor of Clinical and Operative Surgery in the University of Pavia, died on September 10th, at the age of 75. His funeral was attended by deputations from almost all the Universities of Italy and from other scientific institutions. He has bequeathed the whole of his property, amounting to 250,000 *lire* (£10,000) to the University of Pavia; and has directed that, if it should be decided to place in the University a commemorative tablet, it shall bear an inscription of which the following is a translation: "Luigi Porta, Senator of the Kingdom, Professor for more than fifty years of Clinical and Operative Surgery in this University, a most loving citizen of Italy, member of national and foreign Academies, founder of the Porta Museum, author of many scientific works, in which, and in the instruction of Italian youth, he spent a life of seventy-five years, in dying bequeathed his property to the University, in testimony of affection and gratitude."

THE FEVER AT CROYDON.

THE Croydon Local Board are not out of their difficulties: typhoid continues to recur in waves, and one or two deaths are registered as occurring in the district every week. The Registrar-General draws attention to the fact, and points out to the public that sixty-two deaths have been registered as having taken place since the outbreak of the epidemic in February last. It appears, from the evidence which is published in the local journals, that the Board of Health are now taking active measures to keep up their constant supply of water, but will not adopt the measures that Dr. Carpenter advised; viz., that they should prevent the possibility of contamination by removing the openings by which contamination can arise. All manner of causes are put forth by various parties as reasons why the fever continues; but, whilst contamination of water-supply must take place whenever the supply is intermittent—and, from the report now before us, it appears that it is intermittent every other night for two or three hours—there is no necessity to go further for another surmised cause. We cannot understand how men elected to guard the public health can allow such a state of things to continue, and how they can think that digging a

new well and providing a new engine (which, the report before us informs us, is to be done) can do much towards staying the progress of the present epidemic. It appears that a year will elapse before the water-supply is effectually supplemented. In the meantime, the germs of disease continue to be spread, and cases arise, to the serious injury of the district in which they occur.

THE DEATH-RATE OF IULL.

THE high death-rate of Iull seems to have thoroughly aroused the inhabitants and local press in that town, and not before time; for, when a town which at one time ranked as one of the healthiest amongst the eighteen large ones reported on by the Registrar-General, becomes one of the lowest, there must be some grave negligence on the part of the sanitary authorities to account for the change. The negligence and defects which have led to this result may apparently be ranged under the following heads. 1. The authorities have evaded the spirit of the Public Health Act, by retaining a medical man at the paltry fee of £20 *per annum*, who can only act under the direction and with the sanction of the Sanitary Committee, which Committee is not composed of the most enlightened members of the Corporation. 2. Sewer-ventilation is neglected; there being, we believe, only one or two proper ventilating shafts for the whole town. Of course, man-holes cannot be counted as such, for it is well known that only the smallest quantity of foul air can escape from these places when closed. 3. The population has overgrown the power of the capillary drainage to carry the sewage into the main drains. The latter are good, no doubt, although not ventilated. 4. The Corporation has not yet adopted the Artisans' Dwellings Act, which would give them the power to destroy the fever-nests which exist, when they cannot be improved. 5. One of the principal defects is the want of a continuous water-supply direct from a pure source; and, if it must be stored for emergencies, the receptacles should be covered, so as to prevent vegetation, and any nuisance occurring near them immediately suppressed. 6. The house-drainage needs to be inspected, and the connections with the main drains made certain. In fact, when the local authorities have appointed a first-class medical officer of health, with a proper salary, so as to make him thoroughly independent, they will have made the first and one of the most important steps towards improving the health of the town. We think it is a case in which it would be the very best plan for the Local Government Board to send down an inspector, as then the causes of the unsatisfactory death-rate would be thoroughly investigated, and the best advice given as to the most approved means to be adopted for their removal.

PAYMENT FOR RETURNS.

DR. GIBBON, the Medical Officer of Health for Holborn, in presenting his Report on the sanitary condition of the district during the year ending Lady Day 1875, regrets that he is unable to set out as heretofore the full details of the birth-rate, death-rate, ages at death, and the causes of death, in the whole and in each subdivision of the district. The cause of this inability he states as follows.

"The Registrar-General in October last, without waiting for the completion of the year, suddenly declined any longer to let me as well as the other medical officers of health have the weekly returns of the births and deaths of the district, which he had regularly done for the previous eighteen years. These returns consisted of the local registrar's copies of the medical certificates of death, which, after being copied at the Central Register Office, the Registrar-General had regularly each week transmitted to the various district medical officers of health, and thus caused them to be utilised for the prevention of disease, instead of being treated as waste paper. The reason assigned by the Registrar-General for declining any longer to furnish me with these returns was, because he considered that the local registrars were entitled to receive additional pay for them from your Board, on the following grounds: first, because they were put to extra trouble; secondly, because, as the returns were put to a secondary use, they were entitled to extra payment for such use. On inquiry, however, it was found that the transmission of the returns to me entailed no additional trouble whatever on the local registrars; and, as the original death-certificates were sup-

plied gratuitously by the skill and labour of the medical profession, and merely copied by the district registrars, it was difficult to see how they could substantiate any claim to a 'copyright' in them. The only persons, as it appears to me, who have any copyright property in these death-certificates, and can fairly complain that they are put to a secondary use, are the doctors, whose skill and labour supply the information, which, after being appropriated by the State for Statistics, is used for the prevention of disease and in restraint of their own professional employment. The only persons put to extra trouble in transmitting the returns to me were the clerks in the General Register Office who posted them. After full consideration of the matter by a Committee, your Board did not deem it just that the ratepayers should be called upon to pay twice for one and the same copy of these death-certificates."

THE HOLBORN IMPROVEMENTS.

THE first fruit of the Artisans and Labourers' Dwellings Bill has made its appearance in the shape of a report presented to the Metropolitan Board of Works by Sir J. W. Bazalgette and Mr. Vulliamy. It gives particulars as to the proposed improvement of an unhealthy area adjoining Gray's Inn Road, containing ten acres and a half, nearly three-fourths of which is covered by a low class of houses, courts, and alleys "unfit for human habitation, owing to their closeness, narrowness, and bad condition". The report proposes to remove these houses, and to replace them by twenty-two blocks of buildings, surrounded by paved open spaces averaging thirty feet in width, and connected by streets and footways. Some difficulty has been experienced in ascertaining accurately the numbers of the present resident population; but it is believed that the labouring population living upon the area to be dealt with is 5,515, one-half of whom are adults and the other half children. They occupy 335 houses, averaging six rooms per house, or a total of 2,102 rooms: 981 rooms are let in single tenements to 981 families, numbering 3,218 persons, averaging 3.28 persons per room; 766 rooms are let in two-room tenements to 383 families, numbering 1,795 persons, averaging 2.34 persons per room; 355 rooms are let in three or more room tenements to 97 families, numbering 502 persons, averaging 1.4 persons per room, being a total of 2,102 rooms let to 1,461 families, numbering 5,515 persons, averaging 2.62 persons per room, with 132 empty rooms, making a total of 2,234. In addition to these, there are four registered lodging-houses, containing 43 rooms, and accommodating 144 persons. The cubic space per head varies from 284 to 900 cubic feet, and averages 540 cubic feet. This amount of house-room bears a favourable comparison with what has been provided by the various model lodging-houses constructed within the metropolis with very satisfactory results; so that, in fact, the miserable condition of the locality is not due to the overcrowding of the houses, but is attributable to the narrow courts and want of proper ventilation, cleanliness, and sanitary arrangements. It is proposed to deal with the 10½ acres included within the unhealthy area in the following manner:—2¾ acres of factories and other buildings mentioned in the scheme will remain undisturbed; one-third of an acre will be given up to the rebuilding of schools to be removed by this improvement scheme; one acre will be applied to the widening of Gray's Inn Road and the buildings facing it; 2¾ acres to the formation of new thoroughfares within the area to be dealt with; and two acres to be left in spaces for air and recreation between the new buildings, so that the open spaces over the whole area will amount to about 4¾, instead of the now existing open spaces of 2½ acres only. The new labourers' dwellings will cover an area of about two acres. It would doubtless be economy of space if the basement were converted into playgrounds for children in wet weather, and for the storage of the costermongers' barrows; but the difficulty of keeping such underground premises clean, and from being abused and used as receptacles for refuse, and thus converted into disease-breeding nuisances, has induced the framers of the scheme to forego this advantage, and they propose to provide for these requirements by roofs to be formed over a part of the otherwise open spaces. By the foregoing arrangements, a covered area for labourers' dwellings of about fifteen square feet per individual will be obtained, and not less than 500 cubic

feet of air per adult within the new buildings. It will, therefore, become necessary that each house should contain on the average five separate floors or flats, which will average about nine feet in height from floor to floor, and give a mean superficial area of about 150 square feet for living rooms and 100 square feet for bedrooms. The rooms may be divided into tenements of one, two, and three rooms each, probably in the following proportions:—1,000 of one room, or two smaller at one-room rents; 400 of two rooms; 100 of three rooms. The object at the present time, however, is to develop the practicability of effecting an efficient improvement scheme upon the area to be cleared in pursuance of the requirements of the new Act, and upon which to form an estimate of the cost, rather than definitely to determine the details of the improved buildings, which may hereafter, under certain general regulations to meet the requirements of the poor, be modified by those who shall undertake their erection. The rents now paid at Holborn for one room vary from 1s. 6d. to 4s. per week; for two rooms, from 3s. to 5s.; and for three rooms, from 7s. 6d.; giving an average of 2s. 11d. per room, and producing a total rent of £16,000 *per annum*. It would seem to be an essential feature of this project that the present rental should not be increased, and this standard has been adopted in framing the estimates. Under the Metropolitan Streets Improvements Act, 1872, the Board is about to provide spaces for the erection of dwellings for the artisans who will be displaced by the pulling down of the old houses. One of these spaces in Liquorpond Street is already cleared, and, being close to the Holborn area now under consideration, it would, if the new buildings were at once erected, be available for the reception of some of the persons who must be turned out for the present improvement scheme. But the Secretary of State is unable to sanction the building on this site until all the plots of land intended to be covered by artisans' dwellings have been actually acquired. It appears probable that it certainly cannot be less, and will probably be more, than a year before all these plots are actually obtained. The delay thus occasioned will to a very great extent defeat the object of the new buildings, which are to accommodate those artisans who have had to quit their dwellings. But, as those will have been driven to seek new homes at a distance from their old ones, and many of them will have found employment elsewhere and never return, the new houses will become inhabited by a fresh set of people. The writers of the report are of opinion, therefore, that, if it be possible, the difficulty should be removed, and these spaces should, as soon as practicable, be covered with such buildings, so that not only may the poorer classes who may have been displaced by the street improvement be provided with houses, but some at least of those who must be temporarily removed by the present improvement scheme may find accommodation there; and they recommend that not more than about one-fifth of the present population of the Holborn area should be displaced at one time, nor the remainder after the first fifth until the new accommodation has been provided for that fifth.

THE LONDON FEVER HOSPITAL.

WE have been compelled by pressure on our space to defer for the last few weeks notice of several important changes which have recently been effected in this very valuable institution, by which its usefulness has been much enhanced. A number of slips or side-wards, which were used for the isolation of refractory and other special patients, have been entirely removed, and the walls beside which they stood have had large windows placed in them, much to the improvement of the larger wards. New bathrooms, closets, sculleries, etc., have also been added. There was last week a goodly number of patients suffering from scarlet fever in the wards occupied by such cases; but scarcely any typhoid fever patients were in the hospital. The Metropolitan Fever Asylums now take charge of paupers suffering from contagious fever, and the Fever Hospital is the only institution in the metropolis devoted exclusively to the treatment of fever occurring amongst classes higher than those in the social scale. It receives as patients working men and their families,

domestic servants, clerks, and *employés* in commercial houses. Special wards are also provided for private patients. Thus, the hospital may be used to limit the spread of contagious fever in families in good circumstances, or in schools, hotels, etc.; and medical men and anxious heads of families have found it of most essential use in cases of pressing emergency. Working men or their families are admitted at once without payment and without letter of recommendation, if they be not in receipt of parish relief. Domestic servants, *employés* in houses of business, etc., are admitted on the recommendation of a governor or annual subscriber of a guinea, or on payment of two guineas on admission, which payment, however, covers scarcely one-third of the actual cost attending the treatment of those cases. Special wards for private patients, fitted with every comfort and convenience, are also provided, in which a single patient, or two children of the same family or school, can be placed. The payment for one of these rooms, with the attendance of an experienced nurse and the care of the resident medical officer and visiting physicians, and including food and medicines, has been fixed at three guineas per week, which is very much below the cost of similar cases at home. Cases admitted into these private wards may be attended by the family medical attendant. A carriage for the conveyance of fever-patients is kept at the hospital, and is sent at once for cases requiring admission; the only payment asked being for horse-hire, which is usually about one shilling per mile. The object of the hospital authorities has been to prevent expense from being an obstacle to the removal of cases from places where they would spread contagion. In this way, the hospital certainly meets an urgent public requirement; and we feel assured that it is only necessary that the advantages of the institution should be known for them to be fully appreciated, and for medical men and the public to avail themselves very largely of the same.

RECENT URBAN MORTALITY.

DURING last week, 5,153 births and 3,636 deaths were registered in London and twenty other large towns of the United Kingdom. The general mortality was at the rate of 25 deaths annually in every 1,000 persons living, and in the different towns varied as follows: in Portsmouth it was 17; Sunderland, 19; Wolverhampton, 20; Dublin and Glasgow, 21; Edinburgh, 22; Sheffield, 23; Newcastle-upon-Tyne and London, 24; Norwich, Leicester, and Birmingham, 25; Oldham, 26; Liverpool, 27; Manchester and Bristol, 28; Hull, 30; Nottingham, Salford, and Leeds, 31; and Bradford, 32. The mortality from scarlet fever was proportionally greatest in Bristol, Nottingham, Bradford, Leicester, and Salford. The deaths referred to diarrhoea were excessive. In London, 2,222 births and 1,563 deaths were registered. The annual death-rate was 23.7. There were 34 deaths from measles, 127 from scarlet fever, 11 from diphtheria, 47 from whooping-cough, 26 from different forms of fever, 41 from diarrhoea, and not one from small-pox; in all, 286 deaths, or 23 above the average of the week from those diseases. The zymotic rate ranged from 3.5 in the central to 5.0 in the north groups of districts. The 127 deaths from scarlet fever exceeded the average by 35, and were equal to an annual rate of 1.9 per 1,000; a higher death-rate from that disease prevailed last week in five other of the eighteen large English towns, and in Bristol it was so high as 5.9 per 1,000. The Asylum District Fever and Small-Pox Hospitals at Homerton and Stockwell, contained 330 patients on the 23rd instant, of whom 64 were under treatment for fever, and 253 for scarlet fever. In outer London, 425 births and 248 deaths were registered, and the general and zymotic death-rates were 17.0 and 3.6 per 1,000 respectively, against 23.7 and 4.3 in inner London. At Greenwich, the mean reading of the barometer during the week was 29.44; the mean temperature of the air was 49.7, or 0.5 above the average of the week; the mean degree of humidity of the air was 90; the general direction of the wind was easterly; the horizontal movement of the air averaged 10.6 miles per hour; and rain fell on six days during the week to the amount of 2.16 inches. At Greenwich, 3.88 inches of rain were measured during the first 23

days of October; and, in the three weeks ending last Saturday, 5.68 inches were measured in Wolverhampton, 6.09 inches in Sheffield, and 6.33 inches in Birmingham. During the first nine months of this year, the average rainfall, derived from observations taken at various stations between 50 and 55 degs. of latitude, amounted to nearly 23 inches, against 20, 21, and 19 inches, respectively in the same periods of the three years, 1872-3-4.

NINETEEN MORE COMPETING DIPLOMAS.

THE University of Cambridge is heartily to be congratulated on the success of her first open examination for certificates in State Medicine. It will be seen that the list includes several names of great eminence. We cannot, however, consider that the isolated action of competing Universities and examinations is a desirable method of supplying qualifications in State Medicine. The Cambridge certificate is strictly a fancy diploma. Any other medical examining body is, of course, at liberty to issue its own diploma; and we are thus threatened with a competition downwards, involving the same mischiefs as have accrued from the like unrestricted competition in medical diplomas. We should not be surprised if some examining bodies were willing to sell certificates of competency in State Medicine at a very low rate, scientifically and pecuniarily. There is nothing to prevent them from following the dictates of their own will. A statement on this subject has been addressed to the General Medical Council by the Committee of Council of the British Medical Association; and we trust that the distribution of certificates in State Medicine will by that body be considered, with a view to general organisation. Meanwhile, the University of Cambridge has acted with energy and liberality.

PATHOGENESIS OF ŒDEMA.

THE Société de Médecine et de Chirurgie de Bordeaux, being of opinion that the theories recently advanced, as well in France as in Germany, to explain the formation of œdema, are incomplete, and do not rest on bases sufficiently proved, has put forward the following question for its prize of a gold medal of £12 for 1876: "Explain the pathogeny of œdema. Essays to be sent, under the usual conditions, to M. Douand, Secretary General of the Society, Allée de Tourny, No. 10, before the 31st August, 1876."

HARVEIAN SOCIETY OF LONDON.

THE first meeting of the forty-fifth session of the Harveian Society took place on October 21st, and was attended by a very full muster of members and visitors. After some remarks by Dr. Wiltshire on Pruritus Vulvæ, Mr. Carr Jackson read a paper on Lateral Curvature of the Spine, in special relation to its early recognition and treatment. The symptoms attending the first or curable stage of the disease were minutely described; and, in laying down the general principles of treatment, Mr. Jackson entered a vigorous protest against the too often unnecessary use of cumbersome apparatus. Numerous applications for membership were received; and it is evident that this useful Society will derive fresh impulse from the establishment of the Harveian Lectures, and the happy selection of Dr. Sibson as first occupant of the chair.

CARELESS USE OF NARCOTICS.

THE *Philadelphia Medical Reporter* mentions that four deaths have occurred in the St. Louis Insane Asylum from careless administration of narcotics. The medicine administered was a mixture of fluid extract of conium, bromide of potassium, morphia, and atropia, as follows: R ℞. ext. conii (Squid's) ℥. xv; water, ℥iv; bromide of potassium, ℥iv; morphia, gr. xxiv; atropia, gr. ¼. M. The four ounces of bromide of potassium would add two ounces to the volume of the mixture, making twenty-two ounces. If a teaspoonful (or one drachm) were given (and, from the testimony, we have reason to believe much larger doses were given than were ordered), it would contain forty-three minims of the conium, to say nothing of the other elements. The

lesson so dearly learned at this institution is, that forty-three minims of (Squibb's) fluid extract of conium is an unsafe dose, unless to those habituated to its use. In the present case, doubtless, the physician prescribing a teaspoonful believed his patients accustomed to its use (*as two gallons of fluid extract of conium had been used in the institution during the two months previous*); while the fact seems to be, that the article used was inert and worthless; hence his patients were not habituated to the use of conium.

THE SUPERINTENDENCE OF EMIGRANT SHIPS.

ATTENTION is called, in an Australian letter to the *Hour*, to the putting into Holmes's Bay of the *Star Queen*, bound for Maryborough, Queensland, with 320 emigrants on board. They had suffered considerable privations, although she had only been 110 days out. It is alleged that, had she been victualled according to law, she might have lasted another month without running short of provisions. A letter was written by the surgeon-superintendent to the *Argus*, in which he stated that "the biscuits were exhausted on the eighty-ninth day out, in longitude 65 degrees E., except three and a half bags reserved for the crew. On arrival at Melbourne, the *Star Queen* was without biscuits, preserved and fresh meat, potatoes, and molasses, and had only six days' supply of salt meat, and eight days' flour for passengers and crew."

SCOTLAND.

THE Police Board of Greenock have agreed to prosecute any manufacturer or other person who allows deleterious matter to flow into West Burn, a stream passing through the town.

DR. ANGUS MACDONALD was last week elected physician to the Hospital for Sick Children, Edinburgh, in the place of Dr. Stephenson, professor of midwifery in Aberdeen.

WE understand that the Obstetrical Society of Edinburgh are about to issue shortly a third volume of *Transactions*, embracing the three sessions, 1871-72, 1872-73, and 1873-74. It is now in the printer's hands, and will appear very soon.

IN the proposed Edinburgh Police Bill, a clause is inserted requiring that medical men shall report every case of infectious disease under their care to the medical officer of health under penalty of a fine. A remuneration of 2s. 6d. is to be given for each such report.

AT the annual general meeting of the Royal College of Surgeons of Edinburgh, held last week, Dr. Littlejohn was elected President of the College, in the place of Dr. James Simson, whose term of office has expired.

WE regret to learn that the fine steamship *Britannia*, which was handsomely put at the service of the Association for the excursion to the Bass Rock during its meeting in Edinburgh, went ashore on the Ridge Rocks, Holy Island, during the recent gales, and has become a total wreck.

SEWAGE OF FORFAR.

AT a meeting of the Forfar Police Commissioners last week, a letter was read from the agents of the Earl of Strathmore, stating that the nuisance caused by the sewage of the town being allowed to flow into the Loch of Forfar had become absolutely intolerable. They wished to know if any measures were contemplated for remedying the evil, otherwise they would, without further notice, commence legal proceedings. A committee was appointed, and a letter was sent to the Earl, requesting his forbearance until the result of the Royal Commission on the sewage question was ascertained.

LADYBANK WATER-SUPPLY AND DRAINAGE.

AT a special meeting of the local authority of Colleslie, it was resolved that, with a view to abate the evils arising from want of drainage and from unwholesome water, a part of the district, including Ladybank and Monkstown, be formed into a special drainage and water-supply district. The above resolution has been come to in consequence of results of an analysis made by Dr. Stevenson Macadam of six samples of water from the wells of the village, which were all found to be contaminated by organic matter and nitrates.

HOSPITAL FOR CRIEFF.

THE chief magistrate of Crieff has received the following letter from Lord Aveland.—"Dear sir,—I am requested by Lady Willoughby to write to you and suggest whether it would not be desirable to establish a cottage hospital in Crieff. Should such a scheme be acceptable, Lady Willoughby will be happy to send £400 towards the building fund, £10 annual subscription, and grant a piece of land at a low feu-duty for the erection of the hospital. I shall be happy to give £100 donation and £5 annual subscription towards the same purpose.—I remain, yours faithfully, AVELAND."

NEW LUNATIC ASYLUM NEAR GLASGOW.

THE new lunatic asylum at Woodilee Lenzie, near Glasgow, erected by the Barony Parish, Glasgow, at a cost of £140,000, was formally opened on Friday last. The buildings, which are Elizabethan in style are 700 feet in length and 400 in breadth, and they cover about seven acres of ground. The internal arrangements are most complete. The asylum will accommodate about 1,000 patients. Several of the local members of Parliament, including Dr. Cameron, member for Glasgow, attended the banquet which took place in connection with the proceedings.

DEATHS IN EDINBURGH.

IN the weekly health report of the city of Edinburgh for last week, it is noticeable that all the deaths from zymotic disease (22 in number, out of a total death list of 89) are from scarlet fever, except one from whooping-cough. They are nearly equally distributed between the old town and the new. The week's mortality is equivalent to an annual mortality of 23 per 1,000.

IRELAND.

DR. AQUILLA SMITH has been re-elected Representative of the King and Queen's College of Physicians in the General Medical Council.

THE annual collections on Dublin Hospital Sunday have been arranged to take place on November 14th.

SEVENTY candidates have just been examined for matriculation at the Queen's College, Galway. This is the largest number since the opening of the College.

AT a special meeting of the Governors of the Cork Lunatic Asylum, held on the 22nd inst., three of the attendants were dismissed for ill-treating one of the patients of that institution. It is intended also, we understand, to prosecute one of the attendants thus discharged for assault.

MEDICAL RELIEF AND VACCINATION.

FROM a Parliamentary paper lately published, we learn that the amount of medical relief in Ireland during the decade of 1864-74 has decreased from 888,835 cases to 687,165, being a decrease of 201,670. There has been an increase, however, in the cost of medical charity, the amount expended in 1874 being £140,922, against £117,048, or an increase of £23,874; during the same period, the vaccination increased from 131,426 to 139,587 cases.

THE SCIENTIFIC GRANTS COMMITTEE.

THE Scientific Grants Committee of the British Medical Association have this year received £300 for allotment amongst those who desire assistance in original researches in medical and the allied sciences. The following grants have already been made, and the Committee are prepared to meet the balance of £1700. Applications, which must be made not later than the 29th of December next, should be sent in at as early a date as possible to the General Secretary of the Association, 36, Great Queen Street, W.C.

Dr. Braidwood and Mr. Vacher, on the Life-History of Contagion, £25; Professor Rutherford, Researches on Biliary Secretion, £20; Dr. Crichton Browne, on the Antagonism of Medicines, £10; Dr. McKendrick and Professor Dewar, on Physiological Action of Chinoline and Pyridine Compounds, £25; Dr. Mahomed, the Pathology of Albuminuria, £15; Dr. Munro, Cupar Fife, an Antidote for Chloroform, £3; Dr. Caton, on the Electric Currents of the Brain, £15; Dr. Fothergill, the Effect of Certain Agents on the Circulation, £10; Dr. Spencer, Clifton, the Action of Uranium Salts on Diabetes, £10.

In addition to the scientific grants, Mr. Samuel Wood of Shrewsbury has generously presented £25, to be given for the best essay on Pyæmia; and there is also the Hastings Prize Medal of twenty guineas, offered for the best paper on Diphtheria, its Pathology, Diagnosis, and Treatment. Papers for the Wood Grant and Hastings Medal should be sent in, addressed to the General Secretary, 36, Great Queen Street, on or before the 1st of May next.

ASSOCIATION INTELLIGENCE.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

THE next meeting of the above District will be held in the Library of the County Hospital, Canterbury, on Thursday, November 11th, 1875, at 3 o'clock; FRANK WACHER, Esq., in the Chair.

Dinner at the Fleur-de-Lis Hotel at 5 o'clock precisely. Charge, 6s. 6d., exclusive of wine.

Gentlemen who wish to make communications to the meeting are requested to inform me at once, in order that a notice thereof may be included in the circular convening the meeting.

EDWARD WHITEFIELD THURSTON, *Honorary Secretary.*

Ashford, October 27th, 1875.

SOUTH OF IRELAND BRANCH.

A MEETING of Council was held on October 20th, and it was arranged to hold the general annual meeting of the Branch on November 9th, 1875.

At this meeting, officers for the ensuing year will be elected, and the Council's report read.

It was also resolved that a dinner be provided, and that the members dine together on the day of the annual meeting.

Further particulars of the business to be transacted at the general meeting will be announced after the next meeting of Council.

SOUTHERN BRANCH: DORSET DISTRICT MEETING.

A MEETING of the Dorset District of the Southern Branch was held in the Board-room of the County Hospital, Dorchester, on Wednesday, October 20th, at 4 P.M.: DR. ALDRIDGE, President, in the Chair.

THE PRESIDENT read a letter from Dr. Lush of Weymouth, regretting his absence from domestic affliction. A letter of condolence was voted to Dr. Lush.

Officers.—The meeting proceeded to elect the following officers for the ensuing year. *President:* F. J. Parsons, L.R.C.P.Ed., Portland. *Vice-Presidents:* R. G. Long, Esq., of Stalbridge, and R. M. Rendall, Esq., of Maiden-Newton. Dr. W. Vawdrey Lush of Weymouth, and Mr. C. H. Watts Parkinson of Wimborne-Minster, were re-elected Joint Secretaries and Treasurers, and a vote of thanks given them for past services.

The Thanks of the meeting were given to Dr. Aldridge, President, for the able manner in which he had filled the duties of the office during the year.

The Next Meeting was arranged to take place at Portland.

New Members.—Dr. G. Leworthy Thorne of Swanage, and Dr. R.

T. Hearne of the Dorset County Hospital, were unanimously elected members of the Branch and District.

Papers, etc.—Dr. ALDRIDGE then read an interesting address on the Hygienic Treatment of Disease, and congratulated the members on the formation of the Dorset District.

2. Mr. EWENS of Cerne-Abbas, Vice-President, read an account of a Case of Hypospadias, on which he had operated with success.

After some little discussion, the meeting terminated after votes of thanks to Dr. Aldridge and Mr. Ewens for their papers, and to the Committee of the County Hospital, for their kindness in granting the use of their Board-room.

YORKSHIRE AND EAST YORK AND NORTH LINCOLN BRANCHES: CONJOINED MEETING.

AN ANNUAL meeting of these Branches was held in the Museum, York, on October 13th.

Communications.—The following communications were made.

Mr. Dix: Cases of Aneurism treated by the wire compress.

Mr. Jalland: Fracture of the Upper End of the Tibia, from indirect violence.

Dr. Kelburn King: Case of Congenital Hard Cancer treated by Amputation, four years ago, with a return up to the knee.

Dr. HIME: Cases of Ovariectomy.

Mr. Nicholson: Removal of Nine False Teeth with Metal Plate, from behind the Larynx.

Mr. Haxworth: Remarks on the Treatment of Dipsomania by Capsicum.

Dr. Lunn: Cases of Laryngotomy.

Dr. Elliott: Treatment of Enteric Fever.

Dr. Shann: Case of Fracture of the Petrous Portion of the Temporal Bone.

Dinner.—After the meeting, thirty-six members dined at Harker's Hotel.

SHROPSHIRE SCIENTIFIC BRANCH: ANNUAL MEETING.

THE annual meeting of the Shropshire Scientific Branch was held in the Natural History and Antiquarian Museum, Shrewsbury, on Wednesday, September 22nd; WILLIAM MATTHEWS, Esq., of Nantwich, President, in the Chair.

Address.—The PRESIDENT opened the proceedings by an address on puerperal fever and pelvic abscess, and the history of several patients, and the treatment he had adopted in his practice. A prolonged and animated discussion followed.

Papers.—Dr. ALFRED EDDOWES read a paper on a Case of Apoplexy of the Heart, and exhibited the preparation he had made, showing the degeneration of the muscular fibre, the ruptured vessel, and the infiltration into the walls of the heart.—Mr. WOOD read a paper on Chorea.

Dinner.—The members afterwards sat down to an excellent dinner at the George Hotel. There were twenty-five guests.

WEST SOMERSET BRANCH: AUTUMNAL MEETING.

THE autumnal meeting of this Branch was held at the Railway Hotel, Taunton, on Thursday, October 14th, at 5 P.M., GEORGE CORDWENT, M.D., President, in the Chair. Twelve members were present.

The Secretary produced letters of regret from several members who were unavoidably prevented from attending.

Paper.—Dr. CORDWENT read a paper on Tissue Change in Fever. A discussion followed. It was proposed that the thanks of the meeting be given to Dr. Cordwent for his paper, and that he be asked to have it printed. The proposal was supported by several speakers, and carried with acclamation. Dr. Cordwent declined, for reasons assigned, to allow his paper to be printed.

Blood-letting in Disease.—The question of the evening, viz., "Is the disuse of Blood-letting in the Treatment of Disease in accordance with the principles of Pathology?" was put from the chair, and answered by all present, the discussion being very full and animated. An unanimous and emphatic expression of opinion as to the value of blood-letting, and of its disuse not being in accordance with the principles of pathology, was elicited.

Habitual Drunkards.—Petitions to the Legislature on the subject of habitual drunkenness, which Mr. Randolph had ready for signature, were signed at the conclusion of the above business; and the meeting broke up at half-past eight o'clock.

CORRESPONDENCE.

THE ORIGINATOR OF CRÈCHES.

SIR,—In the JOURNAL of October 23rd, I see noticed the death of M. Marbœuf, "the originator of crèches, or infant nurseries".

The following quotation is from the curious *Budget of Paradoxes*, by my late brother. "At Amiens, at the end of the last century, an institution was endowed by a M. de Morgan, to whom I hope I am of kin, but I cannot trace it: the name is common at Amiens. It was the first of the kind I ever heard of. It is a salle d'asyle for children, who are taught and washed and taken care of during the hours in which their parents must be at work. The founder was a large whole sale grocer and colonial importer, who was made a Baron by Napoleon I for his commercial success and his charities." Here, I take it, we have the first introduction of the principle of the infant nursery.

Yours obediently, etc., C. DE MORGAN.

London, October 23rd, 1875.

VIVISECTION.

SIR,—Sir Charles Bell has left on record an express declaration that his great discovery was due not to experiment, but to observation. A few experiments were afterwards made, not for his own conviction, but for the satisfaction of others. He, therefore, protested against the statement of a foreign reviewer, that the results were in favour of vivisection. "They are, on the contrary", he said, "deductions from anatomy"; adding that "experiments on living animals have done more to perpetuate error than to enforce the just views taken from anatomy and the natural sciences". Certain it is that this method of research is subject to many fallacies, and that its advantages have been greatly exaggerated. Dr. Prichard, in reviewing the researches of Flourens, Serres, Bouillaud, and other experimenters, says:—"The results thus obtained not only differ in essential respects from each other, but are completely opposed to conclusions deduced from minute and careful observation of pathological facts." A more recent French physiologist, M. Colin, admits this uncertainty of results. "Often the same experiment repeated twenty times gives twenty different results, even when the animals are placed apparently in the same conditions. It may even happen that the same experiment gives contradictory results." To the same effect, Legallois had formerly said:—"I had almost as many results as experiments, and at length resolved to abandon this method of inquiry, not without regret at having sacrificed a vast number of animals and lost much time." It is not surprising, therefore, that Dr. Carpenter says:—"Almost all our knowledge of the laws of life must be derived from observation only. Experimentation can conduct us very little farther in this inquiry." And again: "On such subjects as the functions of the different parts of the encephalon, I do not believe that experiment can give trustworthy results, since violence to one part cannot be put in practice without functional disturbance of the rest. Here I consider that a careful anatomical examination of the progressively complicated forms of the encephalon, from fishes up to man—experiments, as Cuvier calls them, ready prepared by nature—is far more likely than any number of experiments to elucidate the problem." Still there are found men, impelled by scientific zeal and ambition, who renew the Sisyphean labour, hoping to solve the mysteries that have baffled their predecessors. Let such men hear the words of the old Roman Celsus:—"It is alike unprofitable and cruel to experiment with the knife on living bodies, so that the art which is designed for the protection and relief of suffering is made to inflict injury, and that of the most atrocious nature. Of the things sought for by these cruel practices, some are altogether beyond the reach of human knowledge, and others could be ascertained without the aid of such nefarious means. The appearances and conditions of the parts of a living body thus examined must be very different from what they are in their natural state. If, in the entire and uninjured body, we can often, by external observation, perceive remarkable changes produced from fear, pain, hunger, weariness, and a thousand other affections, how much greater must be the changes induced by the dreadful wounds and cruel mangling of the dissector in internal parts whose structure is far more delicate, and which are placed in circumstances altogether unnatural." The vivisectors of those days had human subjects to operate upon, condemned malefactors being given over to them, especially in the school of Alexandria. The differences of structure and function in the lower animals must give the less chance of light being thrown on human physiology.

These introductory remarks I make not as an opponent of experi-

ment, but to remind those who have not closely studied the question of the fallacies of this mode of inquiry. That some discoveries are due to experimental physiology no one will deny; but the number and importance of these discoveries are grossly exaggerated. In an early number of the BRITISH MEDICAL JOURNAL for 1875, a list was given of "discoveries due to vivisection". Not one in ten of these alleged discoveries can be truly affirmed to be due to experiment alone. By far the largest number are equally due to observation, either by anatomical research, as in the case of Sir Charles Bell, or in the ordinary way of clinical and pathological study.

But it is not the object of this letter to discuss with physiologists the precise number or importance of discoveries thus made. Granting at present all that can be said in favour of vivisection as a legitimate and useful mode of inquiry, I wish to appeal to the profession on the subject of abuses of very recent growth. Ten years ago, when Dr. Markham of St. Mary's Hospital published his prize essay, he said that "experiments performed before students, in classes or otherwise, for the purpose of demonstrating known facts in physiology or therapeutics, are unjustifiable". Dr. Markham says of such operations:—"They are needless and cruel; needless, because they demonstrate that which is already acquired to science; and especially cruel because, if admitted as a recognised part of students' instruction, their constant repetition through all time would be required." Then, in parenthesis, he adds:—"I need hardly say that courses of experimental physiology are nowhere given in this country; and that these remarks apply only to those schools in France and elsewhere where such demonstrations are delivered."

What is the state of matters now? and to what length could the imitators and pupils of foreign vivisectors have gone but for the protest of public opinion, which has given origin to the Royal Commission? It may be said:—"Let us wait to hear the report of the Commission." The publication of that report will begin rather than end this controversy. It is difficult to obtain direct evidence of what is done, and those who used to be boastful among their brethren of the number of their experiments are now cautious and reticent. But the publication of such a book as the *Handbook for the Physiological Laboratory* suffices to show the nature and extent of the evils against which the public voice has been raised.

That any legislation should be the result of the Commission is the last thing to be desired. It would be a disgrace to science if schools of physiology were to be registered, and licensed, and inspected, like slaughter-houses. The appeal against the abuse of vivisection must be made to the medical profession itself, either to the members individually or to the Medical Councils and official bodies. It is not a question of science against sentiment; true science is on the side of humanity on this point. Professor Owen has thus recorded his views: "I reprobate the performance of experiments to show the students what such experiments have taught the master; whilst the arguments for learning to experiment by repeating experiments on living animals are as futile as those for so learning to operate chirurgically." Professor George Wilson, in his *Life of Dr. John Reid*, says that, to encourage students to engage in such researches, is "putting a premium upon animal torture and animal murder". Sir Robert Christison objects to all public demonstrations by experiment on living animals, and has always done so. These exhibitions are, therefore, against the highest scientific opinions, and are justly characterised as wanton and cruel.

I do not think that the depth and strength of popular feeling as to the abuses of vivisection are sufficiently known to the medical profession. Foolish things may have been said, and extreme opinions urged by those who advocate the total abolition of vivisection. But, apart from this popular and sometimes ignorant clamour, there is a public opinion not to be despised. Sir Arthur Helps gave expression to the feeling prevalent among men of culture in all professions when he said that "any man known to have practised needless cruelties on animals should be placed under a social ban". It is very certain that the whole tone and standing of the profession may be lowered from being associated in the public mind with these horrors. It was not by mere technical knowledge and skill that the medical profession obtained and kept the high place that it holds in English life and history. There has been always a succession of men of high standing, scholars and gentlemen, men also as conspicuous for their generous and humane character as for professional acquirements. It was when the associate of such men that Dr. Samuel Johnson wrote his celebrated paper on Vivisection (No. 17 of the *Idler*), describing "a race of wretches among the inferior professors of medical knowledge", who, by knife, fire, and poison, sought the advancement of knowledge: He would not have written thus if the higher grades of the profession approved such practices. There has been always in the Provinces also a succession of

medical men, high in character as well as attainments—men like Cotton of St. Alban's, Hey of Leeds, Bardsley of Manchester, and others—whose names are yet held in honour. These men gave tone to the whole profession in the spheres of their influence. There are men of the same stamp now in all parts of England, who could maintain the same high tone in our provincial medical associations. To them this appeal is made to resist the influence of those who would hold up as the great lights and ornaments of the profession men like Magendie and Schiff, instead of men like Haller and Heberden, Bell and Abercrombie. If a new epoch of medical history in England is to be begun, let it at least not be without a protest being heard.

I am, etc., JAMES MACAULAY, M.D., F.R.C.S.E.

THE USE OF "SOOTHING SYRUPS".

SIR,—There are few medical men in general practice who cannot call to mind numerous instances of children who have from time to time come under their care in an emaciated helpless condition, brought about by the constant pernicious use of quack medicines, known as "soothing syrups". Nor can we wonder that poor ignorant mothers should have recourse to such baneful remedies, when the proprietors of these patent drugs can find qualified medical men ready to eulogise the vendors by flaming testimonials of the marvellous efficacy of the nostrum in any and every disease, and will even stand by them in open court when the wholesale use of such medicines is called in question. It is much to be deplored, that our medical governing bodies have not the power or the inclination to deal with this subject.

The following is a brief sketch of a case of a death from an overdose of soothing syrup which has lately come under my care.

On the morning of September 14th, I was called to see two children, twins, who, from the report brought to me by the father of the children, were dying from "a dose of a bottle" given to them by the mother. On my arrival, I found the twins, eight weeks old, in a helpless, lifeless condition. I learnt from the mother that, in making some purchases in the town the Saturday previous, a pamphlet was placed in her hands by a chemist, which set forth in powerful language the wonderful efficacy of "Harrop's Soothing Syrup in every imaginable disease". The woman carefully perused the book, which stated among other things, that "Harrop's Soothing Syrup is a safe remedy in all infantile diseases"; that "it is a safe, harmless, and innocuous remedy"; and that "it neither stupefies nor sleeps the child". And having satisfied herself that this harmless syrup was so efficacious, she, on the first occasion that the children showed any uneasiness or became restless, gave each a teaspoonful of the syrup. It would appear that the woman, being fully convinced after reading the pamphlet that the syrup was harmless, did not take the trouble to take off the paper in which the bottle was folded, and consequently did not see the label which gave directions as to the doses to be given to children; not one word, however, is mentioned in the pamphlet as to the dose to be given, nor does it even guard the reader by referring him to the label on the bottle, but leaves (as it did in this case) the impression that the dose of so harmless a remedy need not require a consideration.

On examining the children, I was fully satisfied that they were both under the influence of some powerful narcotic. They appeared to be in a deep sleep; violent agitation failed to bring about the slightest movement in either of them. The skin was markedly livid; the pupils were firmly contracted almost to a pin's point; frothy mucus flowed from their mouths; pulse and breathing were scarcely perceptible; and in this condition they remained for eight hours, when one died; the other, the stronger child of the two, by powerful stimulation, violent jactitations, and the use of cold douche, gradually but very slowly recovered. The *post mortem* appearances fully confirmed the view that I had entertained, that the child had died from an overdose of an opiate. The skin was so livid as to be almost black, and conveyed the impression to those who assisted me in my examination that the child's parents were negroes. The vessels of the pia mater were immensely distended, and on the surface of the brain two large clots of blood were deposited. The substance of the brain was much congested, the ventricles containing a quantity of serum. The heart was firmly contracted and empty. The stomach, intestines, and other organs of the body were normal and healthy.

By the order of the Coroner, the contents of the bottle from which the doses were taken were analysed, and were found to contain morphia; and, from the statement of the proprietor of the syrup, that each pint contained one grain of morphia, supposing the evidence of the mother to be correct, the dose of morphia which proved fatal in this case was one-sixtieth of a grain, a dose sufficient to cause death when the age and the condition of the child are taken into account, it being a twin and in a weak emaciated condition. I am of opinion that morphia should

not be given to children of such tender age under any circumstances, so susceptible are they to its influence. May not the use of these syrups so frequent in the present day account for many of the deaths in children on whom inquests are held, and where the deaths are returned as convulsions, etc.?

This case fully illustrates the necessity for the Government to make an order that no patent shall be granted for the sale of any medicines unless the contents are specified, and then the sale of those containing narcotics or other powerful remedies should be strictly prohibited.

I am, sir, yours truly, JOSEPH MORRIS, M.D., etc.
Barnsley, October 22nd, 1875.

COMPULSORY REGISTRATION OF DENTISTS.

SIR,—Will you kindly permit me to make a few remarks concerning a recent provincial meeting which was convened with the object of obtaining aid from Parliament to ensure the compulsory registration of dentists?

I most thoroughly agree with the intelligent criticism upon this subject which recently appeared in your JOURNAL.

The conclave was composed, with few exceptions, of unqualified members of the profession; and, although it is satisfactory to find that all ranks are being aroused to the necessity of improving the status of their calling, I fear that the result of this meeting may not be that speedy success which its promoters anticipate. Moreover, it is to be regretted that the means employed to enlist the sympathies of those taking the highest rank in the profession are not by any means the best calculated to attain that end, inasmuch as I have just received a paper giving a notice of the above mentioned meeting, in which is enclosed a thin tablet of cork of cunning workmanship, on which is imprinted an advertisement recommending certain "plastic fillings" to be obtained of one who took a prominent part in this movement for the promotion of dental reform. Now, although this can only be looked upon in the light of a trade circular, still it is certainly a paradox to see it enclosed with a scheme for "dental reform".

The only true reform must consist in higher and more perfect education; and there need be no fear lest dental surgery should not take its legitimate position immediately a majority of those who practise the specialty become fully qualified practitioners. You still insist upon the necessity of separating the mechanical from the more purely surgical part of dental practice, and, at the risk of giving offence to some less liberal members of the profession, I frankly confess that I think that such a consummation is devoutly to be wished; for I am convinced that it is this connection which has brought much that is undesirable into our ranks, though I cannot see that the union of the two branches converts a profession into a business more than the retailing of drugs by the general practitioner who compounds his own prescription.

The manufacture of mechanical substitutes for the natural denture I would gladly relegate to a body of skilled mechanicians, who should hold a similar position to that of the ordinary manufacturer of surgical appliances; the instruments being made and adjusted subject to the supervision of the surgeon, who, especially in dental practice, ought to have a competent knowledge of mechanics, as a mere mechanist might fail in that æsthetic, artistic, and anatomical perception which is necessary in cases of deformity like those alluded to here.

But this division will not achieve all that which is to be desired; for those who are ambitious of the highest professional and social position must enter their profession through a portal, the entrance to which should imply a liberal education, both general and special; and this is to be found in the diploma of Member of the Royal College of Surgeons, to which it is to be regretted that the special degree in dental surgery was not primarily appended. One of our most distinguished and celebrated surgeons lately said, whilst speaking authoritatively in the name of the Royal College of Surgeons, that that body would be only too glad to receive the best men of that specialty into its fold; and I likewise believe that those men would infinitely prefer that connection to any other. Speaking for myself, and I believe for some others, I desire no other position than that which I have as a qualified surgeon. I trust that ere long every general hospital will have a special department for instruction in dental diseases, as for those of the eye, throat, or ear; for I am certain that the attempt to separate the profession of dental surgery from that of general surgery would be a great mistake. Had the diploma of Licentiate of Dental Surgery been only conferred as a pendant to that of M.R.C.S., the coveted means of registration would have been thereby obtained at once. Still, although it is to be feared that a special registration would have a tendency towards the separation of the general and special branches, yet, on the principle of choosing the least of two evils, I believe that, if that registration could be made to depend upon the possession of the diploma of L.D.S., so that none

should practise without this *minimum* degree, the profession would be purged of much that is unclean and unhealthy in its ranks; above all, of that advertising class which makes a sensitive man occasionally blush for the name of his profession. To such a project I would give support, though I should esteem it a matter of regret if this should lead to such a separation as that to which I have referred. In America, such a mistake has been made, and we find that the children are now seeking a connection which the parent justly disclaims, save on the condition that they educate themselves as fully qualified practitioners. Let us take warning from that example, and determine to ally ourselves with those from whom to be divided would be a loss of honour in a professional as well as in a social point of view.

Finally, if specialists are ambitious of the status granted to their medical *confrères*, they have only to educate themselves as they are educated. Let them take a larger and more liberal view of their calling, banishing all petty jealousies and intestine bickerings. Let them advance schemes for the common weal, apart from mere personal interest and the gratification of individual ambition, and there would then be no difficulty about special registration, whilst men who now hold aloof from special politics, and the general body of those practising the specialty they have adopted, would join the van of those who love the good name and support the fair fame of their profession in word and action.—Believe me, sir, yours faithfully,

S. HAMILTON CARTWRIGHT, Professor of Dental Surgery at King's College, and Lecturer at the London School of Dental Surgery.

London, October 25th, 1875.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

NOTTINGHAM SEWERAGE WORKS.

CONSIDERABLE improvements in the sewerage of the town and neighbourhood of Nottingham have recently been carried out. The town contains about 100,000 inhabitants, and is surrounded by numerous populous suburbs, all of which, with the town, lie more or less upon the banks of the River Trent and its tributary the Leen. The Trent has a total watershed of 4,076 square miles, of which 2,900 lie above the town. As a rule, towns and villages become involved in unnecessary expense, because their sewerage works are carried out quite independently of their neighbours. This, however, the Town Council of Nottingham, who have the credit of holding advanced views on many sanitary questions, determined, if possible, to avoid; and, in view of the pollutions to which the Trent and its tributaries were subjected, they felt that, sooner or later, the various offending places would be dealt with in Chancery by the riparian owners; each place would in turn proceed against its higher neighbour; and so the various authorities in the neighbourhood would gradually become immersed in a sea of litigation and strife, and the evils complained of would in all probability remain long unabated. Under these circumstances, a delegation was invited from each of the interested localities to join a committee of inquiry, and each authority, that for Bulwell alone excepted, took up the matter with the earnestness it deserved. The result was a Bill known as the "Nottingham and Leen District Sewerage Act, 1872", which is stated to have received the hearty commendation of the Government before it became law. The sewerage district created under this Act included an area of twenty square miles, and a population of about 150,000; it contained a large manufacturing district, with the special pollutions of streams inseparable from such a neighbourhood. The first step adopted was the construction of a large intercepting sewer, about six miles in length, in the valley of the Leen, by which all polluting matter was taken out of the Leen, and so the purification of that river has been ensured. This sewer is so constructed that its whole length can be carefully examined, and its ventilating arrangements consist of open shafts, at intervals, connected with the manholes. Speaking of these ventilators, Mr. Tarbotton, the borough engineer, says:—"These are unobstructed by charcoal or any other deodorant; the principle relied upon has been thorough aëration of the interior and frequent points of exit" for the already diluted foul air. It is worth stating here that in Nottingham all the sewer-ventilators were formerly filled in with charcoal trays of various patterns; but it was found that charcoal really impeded sewer-ventilation, and hence its use was at last abandoned. Storm water-overflows are also built along the course of the intercepting sewer, by which excessive rainfall can escape into the River Leen at convenient places. In one part, water-tight iron pipes

have been used as sewers, because the sewer passes through some thin limestone beds which are full of water. The next operation of the Board formed under this Act will be to determine how the sewage shall be purified, and probably utilised, before passing out at the outfall into the Trent. The present total daily volume of sewage to be treated at the outfall is about five millions of gallons; but prospective increase must, of course, be contemplated.

The Act gives the contributing districts ample powers to prevent the pollution of streams within the area described, and under it the various manufacturers will be compelled to resort to the sewer for the disposal of their refuse, and in some cases, as, for example, in bleaching and dyeing establishments, to modify their systems of discharging foul and surplus liquids from their works. The advantages of the Act may also be, under certain circumstances, extended to sanitary authorities without the district; and it is possible that before long Bulwell may see that it has gained no advantage in remaining inactive whilst all its neighbours are working to free themselves of filth.

The advantages of the action taken by the Town Council of Nottingham and some of its neighbours in this matter are very great; and it would be well if, in many other localities, the union of districts lying upon the same watershed were made compulsory for the purposes of outfall sewerage, and for the joint appropriation or distribution of sewage. Much disjunctive action, which is almost necessarily weak, costly, and socially unsatisfactory, would thus be avoided, and the extended area of local administration thus secured could hardly fail to result in a more intelligent representation of the interests concerned.

POOR-LAW MEDICAL SERVICE OF SCOTLAND.

THE Secretaries of the Aberdeen, Banff, and Kincardine Branch would be glad to receive from any members of the Branch information concerning any defects in the administration of parochial medical relief, and any suggestions for reforming the present Poor-law for Scotland.

Aberdeen, October 20th, 1875.

J. URQUHART
ALEX. OGSTON.

MILITARY AND NAVAL MEDICAL SERVICES.

AT the quarterly meeting of the directors of the Naval Medical Compassionate Fund, held on the 12th instant, Sir Edward Hilditch, Inspector-General, in the chair, the sum of £90 was distributed among the various claimants.

LAST Friday's *Gazette* contained the announcement that Surgeon-Major Sydney Alder had been placed on the half-pay list of his rank. Mr. Alder, who served in the Crimea and Ashantee campaigns, returned from the Gold Coast, suffering from severe mental aberration, and it will be recollected was recently acquitted from all blame in the melancholy circumstances attending the death of Lieutenant Wilson of the Royal Artillery at Cardiff.

THE appointment of medical officer to the Royal Horse Guards is vacant by the retirement of Dr. Cosmo Gordon Logie on half-pay, with the rank of Deputy Surgeon-General. Dr. Logie, who leaves to the regret of all ranks, joined the Medical Department of the Army as an Assistant-Surgeon in October, 1841, and has been connected with the "Blues" for over twenty-two years, joining the regiment as its surgeon in April, 1853, as the successor of Mr. George Gulliver, now on the half-pay list of army medical officers.

DRESS OF MEDICAL OFFICERS OF THE INDIAN ARMY.—The Viceroy of India, on August 30th, directed that the dress laid down in the dress regulations for the army, dated Horse Guards, War Office, 1st November, 1874, pages 68 to 72, for officers of the British Medical Department, with the modification stated in the following paragraph, shall be worn by officers of the Indian Medical Department, without reference to the branch of the Service to which they may be attached. The buttons shall bear the words Bengal (Madras or Bombay) Medical Staff. Two years from the date of the order are allowed for wearing out any uniform in possession.

OFFICIAL STATEMENTS.

SIR,—Will you kindly permit me, through the medium of your JOURNAL, to inquire of any of your readers, how it was that, in spite of the assertion made some time during the summer by Mr. Gathorne Hardy, that he did not object to the publication of the number of vacancies to be competed for at the examinations for medical officers in the home service, yet the advertisement in the *Times* referring to the last examination in August, was just as silent as ever on the matter?

Surgeons were wanted, and that was all. One other point I would wish to draw attention to. Mr. Ward Hunt, some time ago, in answer to a question from an Irish member, stated that rejected army candidates had never been received at the Admiralty. He spoke accurately, I believe; but he failed to state, that men who were qualified for the army, but who did not obtain a vacancy, were often offered the navy, and that several accepted it. I know myself of three instances.

I have the honour to be, Sir, your obedient servant,
Aberdeen. VIGILANT.

OUR MILITARY HOSPITALS.

THE court of inquiry convened to consider the case of Private Ban, of the 78th Highlanders, has now made its report, and the decision is, that henceforth soldiers suspected of being insane are to be sent for observation to the Royal Hospital at Netley. But the fact cannot be disguised, that the man ought to have been removed thither for treatment in the first instance, in accordance with instructions fully laid down in the Queen's regulations and arrangements specially made at that establishment for the purpose. Originally admitted for primary syphilis on February 1st, Ban's disease was subsequently altered in the returns to melancholia, the theory of those in attendance being that the symptoms of mental derangement from which he suffered were the result of the constitutional manifestation of the venereal poison. Ordinary precautions were taken to as great an extent as was possible in a hospital which is only a series of huts, and at all times unsuitable for such cases; but any effective arrangement was seriously impaired by the frequent change of surgeons in responsible charge, no fewer than seven successive signatures having been affixed to the diet-sheet during the month of July.

The Court animadverted strongly on this point, and called upon several medical officers to state what duties had been performed by them since their arrival at Aldershot; and their evidence showed the very multifarious variety of work they had been called upon to do, and the very frequent changes to which they had been subjected. The principal medical officer was then requested to explain whether such arrangements were necessary, and his answer was, that they were quite inseparable from the present system as put in operation at the camp. But it is perfectly clear that, with an undermanned department, such irregularities must continue, as there are not medical officers enough to secure effective trial of the present plan, and as the whole medical staff is now working at high pressure, and is quite inadequate to perform even the ordinary routine duties of peace time. Relaxation is only attainable by throwing additional work on an already highly taxed *confrère*, and in the Army Hospital Corps things are worse, and confusion reigns supreme. Perhaps at no previous period did so much dissatisfaction prevail throughout the ranks of our military brethren, and we hope soon to return to this question, with the view of putting our readers in possession of a few more plain facts concerning the administration of our military hospitals.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, October 21st, 1875.

Blake, George Farcombe, Old Square, Birmingham
Parker, Alfred Charles, Worthington, Leicesterhire
Thayer, Linus Orton, 71, Mildmay Park, N.
Tyrrell, Frederick, Harlington, Middlesex

The following gentlemen also on the same day passed their primary professional examination.

Bradford, Cordley, Queen's College, Birmingham
Davis, Arthur Randall, Middlesex Hospital
Mason, John Wallis Parson, Middlesex Hospital
Warner, James, London Hospital

MEDICAL VACANCIES.

THE following vacancies are announced:—

ADDENBROOK'S HOSPITAL, Cambridge—House-Physician. Salary, £5 per annum. Applications on or before November 1st.
BIRMINGHAM and MIDLAND FREE HOSPITAL FOR SICK CHILDREN. Acting Physician and Extra Acting Physician. The Extra Acting Physician will have to attend on three afternoons in each week, and will receive a salary of £50 per annum. Applications on or before November 1st.
BROOKWOOD ASYLUM, near Woking—Second Assistant Medical Officer.
CHRISTCHURCH UNION. Medical Officer for the Eastern District. Salary, £100 per annum, and fees. Applications on or before November 6th.
COLCHESTER UNION.—Medical Officer. Salary, £50 per annum. Applications before November 1st.

COVENTRY and WARWICKSHIRE HOSPITAL.—House-Surgeon and Dispenser. Salary, £100 per annum, with board, lodging, and attendance. Applications on or before November 1st.

DENBIGHSHIRE INFIRMARY.—House-Surgeon. Salary, £85 per annum, with board, washing, and residence.

HIDDERSFIELD INFIRMARY.—Physician.

LEICESTER AMALGAMATED FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Resident Medical Officer. Salary, £105 per annum, with residence, coal, and gas. Applications on or before November 1st.

LIVERPOOL INFIRMARY FOR CHILDREN.—House-Surgeon.

METROPOLITAN FREE HOSPITAL.—Honorary Assistant Physician. Applications on or before November 6th.

MIDDLESEX HOSPITAL.—Two Resident Physicians' Assistants, and One Resident Obstetric Assistant. Applications on or before the 14th instant.

NORTH SHIELDS AND TYNEMOUTH DISPENSARY.—House-Surgeon and Dispenser. Salary, £120 per annum, with furnished house, gas, coal, etc. Applications to be made on or before November 1st.

NORTH WALES COUNTIES LUNATIC ASYLUM, Denbigh—Assistant Medical Officer. Salary, £100 per annum, with board, lodging, and washing. Applications before November 1st.

PROVINCIAL HOSPITAL, Port Elizabeth, Cape of Good Hope—House-Surgeon and Dispenser. Applications to T. E. Fuller, Cape Emigration Agent, 15, Coleman Street, London, E.

ROCHDALE INFIRMARY.—House-Surgeon. Salary, £100 per annum, with board, lodging, and attendance. Applications on or before November 6th.

ST. GEORGE, HANOVER SQUARE, PROVIDENT DISPENSARY.—Physician-Accoucheur. Applications to be made on or before November 3rd.

STROUD GENERAL HOSPITAL.—House-Surgeon. Salary, £60 per annum, with board, furnished rooms, attendance, and washing.

TAWKESBURY RURAL HOSPITAL.—Assistant Surgeon.

TONGUE and FARR, District of, County of Sutherland—Medical Officer. Salary, £150 per annum, and house.

WEST RIDING PRISON, Wakefield—Resident Surgeon. Salary, £140 per annum, with house, coal, gas, and water. Applications before November 14th.

WORKSOP DISPENSARY.—Resident Surgeon. Salary, £120 per annum, with furnished apartments, coal, gas, and attendance.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

***FOSTER,** Balhazar, M.D., F.R.C.P., appointed Honorary Consulting Physician to the Ear and Throat Infirmary, Birmingham, *vice* *Alexander Fleming, M.D., F.R.C.P., deceased.

***GRESHAM,** Thomas W., M.D., appointed Physician to the Coombe Hospital, Dublin.

***MOORE,** John W., M.D., appointed Physician to the Coombe Hospital, Dublin.

PEELE, Edward, L.K.Q.C.P.L., appointed Physician to the Coombe Hospital, Dublin.

SVKES, William, M.R.C.S. Eng., appointed House-Surgeon to the Doncaster General Infirmary and Dispensary, *vice* F. Wallis, M.R.C.S. Eng., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTH.

HEWITT.—On October 16th, at Winkfield, near Windsor, the wife of T. Hewitt, M.D., of a daughter.

MARRIAGE.

CAREY—KAUNZLE.—On the 27th inst., at Union Chapel, Oxford Road, Manchester, by the Rev. Alexander McLaren, B.A., William Carey, M.B., eldest son of W. H. Carey, Esq., of Sault, India, to Rebecca Charlotte, second daughter of the late Captain Henry Kaunzle, 11th Hussars. No cards.

DEATHS.

***HEYGATE,** Thomas Nicholas, M.R.C.S. Eng., at Hanslope, Bucks, in the 65th year of his age, on October 12th. He had been in practice at that place upwards of forty years, and was brother of the late Dr. Heygate of Derby.

LESLIE.—On October 18th, at Wexmouth, Ann, wife of *William George Vawdrey Lush, M.D., for six years Sister Mary, and for twelve Sister Elizabeth, of St. Bartholomew's Hospital.

At Michaelmas Quarter Sessions, Dr. Joseph Wickham of Penrith qualified as Justice of the Peace for the County of Cumberland.

ST. MARY'S HOSPITAL MEDICAL SCHOOL. Mr. H. W. Vate has obtained the Epsom Scholarship of £60 the first year, £25 the second, and £15 the third; Mr. R. N. Homasji the Scholarship, tenable for three years, of £60 the first year, £40 the second, and £20 the third; Mr. A. B. Prowse, the Scholarship of £20 in Anatomy; Mr. K. W. Millican, the Exhibition of £20 for one year.

TESTIMONIAL.—The Rev. Arthur G. Purchas, M.R.C.S. Eng., has been publicly presented with a purse of 137 sovereigns and an address at the Choral Hall, Onehunga, Auckland, New Zealand. The address was as follows:—“To the Rev. Arthur Guyon Purchas, M.R.C.S.E. As you are about to remove from the town of Onehunga, after an intimate connection with the place of more than twenty-eight years, we have been requested by your fellow townsmen and others to ask your acceptance of the accompanying purse of sovereigns, as a small testimonial of the estimation in which you are held as a clergyman, medical man, and public-spirited citizen. We take leave to express the sincere regret which is felt at your removal from our midst, and, for the future wish it may ‘be well with thee.’”

OPERATION DAYS AT THE HOSPITALS.

MONDAY Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY .. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAY St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.
FRIDAY..... Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAY St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. General Meeting; Revision of Laws. Mr. Jabez Hogg, "On Concussion of the Spine, followed by Impairment on Loss of Vision"; Mr. Wm. Adams: "A Patient on whom he had operated for Obliteration of Depressed Cicatrices".
TUESDAY.—Pathological Society of London, 8.30 P.M. Mr. Heath: Calculi of Cystic Oxide. Mr. Heath: Epithelioma of Tongue and Jaw. Mr. Heath: Cancer of Rectum; Colotomy. Dr. Hilton Fagge: Carcinoma Lipomatousum. Dr. Hilton Fagge: Distended Diverticulum of Intestine. Dr. Hilton Fagge: Pulmonary Embolism. Dr. Barlow: Tubercle of Pancreas. Mr. Marsh: Tumour in Upper Jaw. Mr. Wagstaffe: Double Cancer of Male Breast. Mr. Fairlie Clarke: Tubercular Lupus of Tongue and Palate. Mr. Maunder: Fatty Tumour in Male Breast. Dr. Goodhart: Abscess in the Heart. Mr. Pearce Gould: Syphilitic Heart. Dr. Greenfield: Syphilitic Pneumonia. Mr. Clement Lucas: Paris after Tracheotomy. Dr. Ralfe: Aneurism of Aorta. Dr. Dowse: Ilio-Sarcoma of Brain. Mr. Lennox Browne: Syphilitic Disease of Pharynx and Larynx.
WEDNESDAY.—Royal Microscopical Society, 8 P.M. Mr. H. C. Sorby, "On a New Method of Measuring the Position of Bands in Spectra".—Obstetrical Society of London, 8 P.M. Dr. George Roper, "On Prolapse of the Funis during Labour"; Dr. Swayne (Clifton), "On a New Form of Blunt Hook and Sling for assisting Delivery in Breech Presentations"; Mr. Lawson Tait, "Case of General Dropsy in a Fetus"; Mr. Lawson Tait, "Note on a Diseased Placenta"; Dr. Heywood Smith, "Notes of a Case of Ruptured Vagina during Labour, with Recovery"; Dr. Wiltshire, "Spontaneous Rupture of the Vagina: Recovery"; and other communications.
THURSDAY.—Harveian Society, 8 P.M. Council Meeting, 7.15 P.M. Dr. Alfred Meadows, "On the Diagnosis and Treatment of the Curable Forms of Fibroid Tumours of the Uterus".

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with Duplicate Copies.

AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W. C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor: those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W. C.

"MEDICAL STUDENTS."

We are very sorry to see a police prosecution at Marlborough Street this week of some young men alleged to be "medical students", charged with rioting at a music hall, and raising a cry, "Guys to the rescue". It was alleged that "medical students had of late frequently misconducted themselves". We sincerely hope that these allegations may be groundless. If they prove to be true, we trust that the authorities at Guy's will take severe notice of such a course. Medical students in London have of late years deservedly earned a high reputation for gentlemanly conduct, and that character must not with impunity be injured by black sheep among them.

ERRATUM.—In the JOURNAL for October 16th, page 496, column 2, line 22, for "corpus callosum" read "corpus striatum".

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

MAUNSELL MEMORIAL FUND

Amount already acknowledged in this JOURNAL, £163 13s. 6d.

THE following subscriptions, in addition to those already acknowledged, have been received.

Table listing donors and amounts for the Maunsell Memorial Fund. Includes names like The Right Hon. Sir Michael Hicks-Beach, Bart., M.P., Chief Secretary for Ireland, and various other individuals and institutions with their respective contributions in pounds, shillings, and pence.

R. Perse White, F.R.C.S.I.	..	..	1	0	0
D. Petit, D. L. Asylum, Letterkenny	..	..	1	0	0
George R. Price, Esq.	..	..	1	0	0
The President of the College of Physicians	..	..	2	2	0
The President of the College of Surgeons	..	..	1	0	0
Dr. Seaton Reid, Belfast	..	..	1	1	0
Dr. James Ridley, Tullamore	..	..	1	0	0
Dr. Robinson Fintona	..	..	2	2	0
Dr. Rowan, Kilkee	..	..	0	10	0
Dr. Scully, jun., Hon. Sec. co. Tipperary Medical Association	..	..	1	1	0
Dr. W. Shaw, Lurgan	..	..	1	1	0
Dr. Sheridan, Wexford	..	..	0	10	0
Dr. Smith, Sheffield	..	..	0	10	6
Edward Smyth, Esq., Enniskillen	..	..	1	0	0
Dr. B. H. Spedding, Belfast	..	..	1	0	0
W. G. Smith, M.D.	..	..	1	0	0
Dr. W. G. Smith	..	..	1	0	0
Dr. W. T. Stoker	..	..	1	1	0
Robert Swan, F.R.C.S.I.	..	..	1	0	0
Moses Taylor, Esq. (per Dr. Chaplin)	..	..	1	0	0
Dr. Theford, Strangford (per G. St. G. Tyner, Esq.)	..	..	1	1	0
Dr. Todd, Newtownstewart	..	..	1	0	0
Dr. Todhunter, London	..	..	1	1	0
Dr. Toler	..	..	1	1	0
Dr. Twiss (per Dr. Rogers)	..	..	1	1	0
G. St. G. Tyner, Esq. Downpatrick	..	..	1	1	0
Dr. Ussher, Dundrum	..	..	1	1	0
Michael Webb, Esq.	..	..	0	10	0
Dr. Welsh, Ballyshannon	..	..	1	0	0
Dr. Weir, Rathmullen	..	..	1	0	0
Henry Wilson, F.R.C.S.I.	..	..	1	1	0
Dr. Wolsley, Dunfanaghy	..	..	1	1	0
Dr. Fben Watson, Glasgow	..	..	1	0	0
Dr. Whistler, Bray	..	..	1	0	0
Dr. Wharton	..	..	2	0	0
Dr. Stewart Woodhouse	..	..	1	1	0
Dr. E. P. Wright	..	..	1	1	0

Subscriptions will be received at the office of this JOURNAL, or by Dr. Joseph Rogers, 33, Dean Street, Soho, London.

TOTAL DESTRUCTION OF THE LUNG.
 SIR,—In the case of "Rapid and Total Destruction of the Lung," described by Dr. Cottew in the JOURNAL of the 16th instant, I should very much doubt if any such destruction had occurred. I would venture to suggest that if he had pursued his investigations a little further, he would have found the lung bound down by adhesions, and compressed and flattened against the vertebral column.

I am, sir, yours, etc., J. WALTERS, M.B.

Reigate, October 23rd, 1875.

C. K. S.—Mr. Holthouse's temporary home for inebriates is at Balham.

W. G. K. (Gloucester) should address M. le Doyen de la Faculté de Médecine, Paris, asking for any further information which he may require.

THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH AND THE ADULTERATION OF DRUGS.

A CORRESPONDENT writes:—It may possibly astonish some of the physicians of the Royal College of Physicians of Edinburgh to find at the present time, when adulterations of every kind are being put down by Acts of Parliament, that they have been neglecting their duties (*sic*) as expressed in the charter granted to the College in 1685 (quoted by Hugo Arnot in *History of Edinburgh*, 1779, p. 322), as follows:—"The physicians of the Royal College shall at least twice a year visit all the apothecaries' shops within the city and liberties of Edinburgh, and destroy all insufficient and corrupted drugs." So it seems that adulteration of drugs was not quite unknown two centuries ago.

W. H. F.—Messrs. Hawkins of Savile Row, and Rouse of Wilton Street, are the honorary secretaries of the Hewett Testimonial, to either of whom subscriptions may be sent.

MR. WORTH—The discussion is ended for the present, as we have no further space to give to it.

CLUB ELECTIONS.

SIR,—Having seen in the BRITISH MEDICAL JOURNAL several letters about medical men advertising, I beg to forward you the enclosed, which was exposed in the window of a public-house, and I think needs no comment.—Yours truly,
 October 1875.

A MEMBER.
 "Election will take place on Monday, November 15th, 1875.—L.A.I.O.O.F. Sick and Burial Fund.—Appointment of New Surgeon.—Vote for Dr. Axham, L.R.C.P.E., L.M., and M.R.C.S., London (Registered), 1, Brewer Street, Golden Square, Surgeon to the Hearts of Oak Benefit Society. The highest practical Testimonials.—Dr. Axham has had the pleasure of supplying medicine to, and acting for Dr. Reeve to, upwards of a hundred members of the above fund."

AN ASSOCIATE.—As to the authorities to be consulted in reference to the subject-matter of our leader of March 27th, on Pyrexia and Apyretics, the chief are: Leyden (*Deutsches Archiv*, vol. v, p. 273); Rosenthal (*Zur Kenntniss der Wärmeregulierung bei den Warmblütigen Thieren*, Erlangen, 1873); Liebermeister ("Zur Lehre von der Wärmeregulierung", Virchow's *Archiv*, vol. iii; Rohrig and Zuntz ("Zur Theorie der Wärmeregulation und der Balneotherapie", *Pflüger's Archiv*, vol. iv); Winternitz ("Beiträge zur Lehre von der Wärmeregulierung", Virchow's *Archiv*, 1872); Senator ("Untersuchungen über Wärmebildung und der Stoffwechsel", Reichart and Du Bois Raymond's *Archiv*, 1872); Milner Fothergill ("The Depressants of the Circulation", BRITISH MEDICAL JOURNAL, January 1874); Wunderlich's *Medical Thermometry*; and H. C. Wood's excellent work on *Therapeutics and Materia Medica*, Lippincott and Co., Philadelphia, 1874.

LAHORE SCHOOL OF MEDICINE.

C. A. B. asks: "1. Is there a medical school at Lahore? 2. How many students are annually educated there? 3. Does it grant degrees? and are its degrees recognised in England? 4. Is it connected with the University of the Punjab?"

* * * 1. Yes. 2. From one hundred to one hundred and forty. 3. No. The degree of Licentiate in Medicine and Surgery is granted by the Punjab University College. 4. There is no "University of the Punjab". There is a "Punjab University College".

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

MRS. MONCKTON (Rugely) and Mr. NETTLESHIP (London, should have addressed the General Manager, 36, Great Queen Street, W.C.

THE PREVENTION OF HYDROPHOBIA.

SIR,—Some years ago I read, in the library of the Athenæum Club, in a book or periodical, an account of some interesting experiments conducted for the purpose of ascertaining whether it were possible to produce hydrophobia in dogs by artificial means. The experiments, I remember, were made upon three dogs, who were treated in some respects differently, but were all exposed to a hot summer sun. I have since made repeated and wearisome attempts to find the passage. Can you or any of your readers help me? I should feel greatly obliged if any gentleman would send the information direct, to the address of "J. C. Athenæum Club, Pall Mall".—Your obedient servant,
 J. C.

MR. J. C. LEACH, B.Sc.—The last Act adds little or nothing new. It is a digest mainly, and hardly affects the actual law; only rendering the various Acts easier of reference.—2. There are *The Sanitary Record* and *Public Health*: our correspondent had better form his own opinion.

MR. WIGG (Derby).—The letter has been forwarded.

MR. EDMUND OWEN.—The proof arrived too late.

INJECTION OF PERCHLORIDE OF IRON IN POST PARTUM HÆMORRHAGE.
 SIR,—The case of *post partum* hæmorrhage reported in the JOURNAL to-day, and two cases (not fatal) in my practice lately, make me anxious to know from any of your readers who may have experience of galvanism in these cases, what success they have had, what battery has been found most useful and convenient, and how applied so as best to secure contraction of the uterus. There must, surely, be many who have tried it. Any information on the subject would much oblige yours, etc.,
 A BUSY PRACTITIONER.
 October 16th, 1875.

INQUIRER.—Should address Professor Liveing, University of Cambridge.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Bristol Daily Post; The Evening News; The Sheffield Post; The Metropolitan; The Blyth Weekly News; The Edinburgh Daily Review; The Glasgow Herald; The Western Daily Press; The Merthyr Telegraph; The Leighton Buzzard Observer; The Bristol Daily Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Sunderland Daily Echo; The Co-operative and Financial Review; The South Wales Daily News; The Macclesfield Courier; The Melbourne Argus; The Southampton Times and Hampshire Express; The Jarroo Express; The Birmingham Daily Post; The League Journal; the Sheffield and Rotherham Independent; The Derbyshire High Peak News; The Liverpool Daily Courier; The National Food and Fuel Reformer; The Worcester Herald; The Norfolk News; The Worcester Chronicle; The North British Daily Mail; The Social Science Review; The Carlisle Express; The Sussex Daily News; The Royal Leamington Spa Courier; The Bethnal Green Times; etc.

* * * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. Campbell De Morgan, London; Dr. Rutherford, Edinburgh; Dr. W. T. Gairdner, Glasgow; Mr. Nicholson, Hull; Mr. Steele, Bristol; Mr. Edmund Owen, London; Mr. Annandale, Edinburgh; Mr. Jonathan Hutchinson, London; Mr. Burdett, Greenwich; Mr. W. H. Spurgin, Maryport; Dr. Robert Barnes, London; Dr. Morris, Barnsley; Mr. F. W. Strugnell, London; Dr. Fox, Chelmsford; Mr. Jessett, Chatham; Dr. C. T. Williams, London; Mr. H. Crookshank, London; Dr. J. C. Macaulay, London; Dr. James Morton, Glasgow; Mr. M. Baker, London; Mr. St. George Mivart, London; Dr. Cobbold, London; Mrs. Monckton, Rugely; Mr. Nettleship, London; The Secretary of Apothecaries' Hall; Dr. J. G. Swayne, Clifton; Mr. W. Fairlie Clarke, London; The Registrar-General of Ireland; Dr. J. Milner Fothergill, London; An Associate; The Registrar-General of England; Mr. Eastes, London; Dr. Edis, London; The Secretary of the Pathological Society; Dr. Balthazar Foster, Birmingham; The Secretary of the Harveian Society; Dr. Copeman, Norwich; Dr. Corfield, London; Dr. J. H. Arbuckle, Wakefield; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. Macnaughton Jones, Cork; Mr. Sincok, St. Agnes; Our Edinburgh Correspondent; Mr. Worth, Nottingham; Mr. Cook, London; Dr. Vaudrey Lush, Weymouth; Mr. C. Hogg, Derby; The Secretary of the Royal Microscopical Society; Mr. J. V. Solomon, Birmingham; Dr. Farquharson, London; Mr. T. H. Wood, Boston; Dr. Walter Dickson, London; Mr. Teevan, London; J. P. C.; A Member of the Pathological Society of London; Dr. Snow Beck, London; Dr. Bree, Colchester; Dr. W. Hinds, Birmingham; Mr. A. S. Cooke, Stroud; Dr. Langmore, London; Dr. H. Barber, London; Dr. Baxter, London; Mr. Oliver Pemberton, Birmingham; Dr. Kelly, Taunton; Mr. Thurston, Ashford; Mr. Thomas Cooke, London; Dr. Wiltshire, London; Mr. W. R. Smith, London; Kilogramme; Dr. Carpenter, Croydon; Mr. Burdett, Greenwich; Dr. Morris, Barnsley; Dr. Joseph Rogers, London; Our Birmingham Correspondent; Our Dublin Correspondent; Mr. Garland, Yeovil; Dr. W. O'Hanlon, Manchester; Mr. Hamilton Cartwright, London; Mr. William Sykes, Sheffield; Mr. W. R. Reeves, London; Dr. Bishop, Edinburgh; Mr. Andrew Davies, Swansea; Dr. Murray Lindsay, Mickleover; Dr. Andrews, Bristol; Dr. Munro, Cupar Fife; Mr. Steele, Abergavenny; Dr. Humphry, Cambridge; Dr. Althaus, London; Mr. Hordley, Hartshill; etc.

INTRODUCTORY LECTURE

ON THE

PAST AND FUTURE OF THE SCHOOL OF MEDICINE OF EDINBURGH.

Delivered to the Students of the Edinburgh School of Medicine, on November 1st, 1875.

By JOHN CHIENE, F.R.C.S.Ed., F.R.S.E.,

Lecturer on Surgery; Assistant-Surgeon, Edinburgh Infirmary; and Examiner in Anatomy in the University of Edinburgh.

GENTLEMEN,—A great deal has lately been said against the continuance of introductory addresses. Surely, on the present occasion, I might be justified in upholding that view. I might dyspeptically give an introductory on the uselessness of introductory lectures. I might, in still worse taste, dilate on the folly of choosing medicine as a profession. I am too proud of my profession to do so. Perhaps, however, it is only right to tell you that, if your object in this life is to make money, the sooner you try something else the better. You must remember that a life of continual endeavour to benefit your fellow man is worth some worldly sacrifice. On the other hand, if you work honestly, you will have money sufficient for your wants—a sufficiency with happiness, as distinguished from riches with its accompanying troubles.

Your teachers, in asking one of their number to begin the session today, are of opinion that some little good may follow an introductory address. However imperfectly I may fulfil my task, I have an inward feeling that there is a certain value in the custom. The few words that I have to address to you to-day, appear to me like the bugle-call to the regiment; before it sounds, the men are standing here and there—a crowd. After it has sounded, the men are the same, but, instead of a crowd, they are now a well-ordered mass of soldiers, willing and ready to obey the word of command: such, I hold, to be the use of an introductory lecture.

I address you as members of the Edinburgh School of Medicine in the widest acceptation of the term. Some would divide this School in its interests, in its usefulness, and in its power for good, into two divisions—the University and the Extra-Academical School. Its strength lies in their combination; the division is only in name. There are professors, there are teachers; they are all one body, whose sole object is your training as efficient members of the medical profession. The remarks I have to make are in your interests, and with an earnest desire for your welfare as students of a School which knows no divisions.

I would ask, why are you students of this School, with its old infirmary and its shabby class-rooms? In order to answer that question, I must ask another. To what is the success of the Edinburgh School due? Sir Robert Christison, in an instructive and interesting history of the University of Edinburgh, delivered at the meeting of the British Medical Association in this city in August last, directs attention to certain of the reasons of the continued success of the Edinburgh School. It may not here be out of place to point out to you other reasons for the fact, that the School to which you belong holds a pre-eminent position amongst the training establishments in this country.

I believe one of the greatest causes of our continued prosperity is, that alongside of the University there is an efficient teaching staff, which acts, so to speak, as a tonic to the University professors, encouraging a friendly rivalry, which is constantly spurring them on to continued effort, and by insisting that they perform their work in a thorough manner, directly advancing medical science. Competition is the greatest incentive to good manufacture. Free trade in commerce has increased the mercantile position of this country. Free trade in the teaching of medicine has brought students to Edinburgh, and has sent them away well educated and well prepared for the practice of their profession. The presence of an Extra-Academical School of Medicine is, in my opinion, the principal reason why the Faculty of Medicine is more prosperous and more famous than the other Faculties in our University. The establishment of an Extra-Academical School in Arts and Law, with the same privileges as we at present possess as medical teachers, would be an advance in the right direction, and would, I feel sure, be followed by greater efficiency in the teaching in these Faculties, and by a marked increase in the number of students.

It must be matter of regret to all interested in the Edinburgh School that our professors are not endowed. I hope that some rich person may see his way to leave his money for this purpose. An endowment of the Chairs of the Medical Professors would necessarily soon be followed by an abandonment of the privileges which they at present possess. Their present privileges are their endowment. These privileges are against the teachers outside the University walls; and it may with truth be said that the endowment comes at present directly out of the pockets of the extra-academical teachers. It would, undoubtedly, be for the benefit of the University if all restrictions could be removed. Endow the professorial chairs, give the lecturers equal privileges and equal rights with their seniors inside the University, and the result would certainly be a still further increase in the prosperity of this School. In the meantime, it is for the advantage of the lecturers that these privileges of the University should be maintained; because they—or their equivalent, an endowment—are necessary for the well-being of the University, on which the welfare of this School principally depends. Without the University in a flourishing condition, the School must go down. While this is true, it is necessary also to remember, more especially as, at the present time, there seems in the minds of some a tendency to consider the University as the Edinburgh School, that, without a powerful extra-academical school, the University influence would necessarily decline. Neither alone can draw the students to Edinburgh. Both working together, with a well-regulated infirmary in common, have now, for many years, stood the test of time, and have seen the rise of many powerful schools in London and the provinces, but have, in consequence of their inherent strength, suffered but little in the competition.

Another reason which has a very material bearing on our success lies in the fact that here each teacher is free to choose his subject. He begins early as a lecturer on some particular branch. Anyone can, after obtaining permission from the Royal College of Physicians or Surgeons, and from the University Court, commence teaching; and, if he have the ability, he will certainly draw to his class-room a proportion of the students. An early and special training in teaching is the only way to true success. As Captain Webb says, "to be a good swimmer, one must begin young"; to be a good teacher also requires years of special study. Speciality in practice may degenerate into quackery, speciality in teaching never can. A teacher is always subjected to a scientific cross-examination, a practitioner is not. In this way, the future occupants of our professorial chairs are being thoroughly educated. Teaching is like a trade: in trade, a lengthened apprenticeship fits a man to turn out good work; in teaching, an apprenticeship served as extra-academical teachers make successful professors, and enables our University to turn out good students. But this is not a training-school for our Alma Mater alone; it not unfrequently supplies our sister universities. In every Scotch university, there are now professors who were once efficient lecturers in the Extra-Academical School of Edinburgh. Since the delivery of the Introductory Lecture of 1874, two of our lecturers have thus been promoted. Dr. Pettigrew has been appointed Professor of Anatomy and Medicine in the ancient University of St. Andrew's, and the University of Aberdeen has chosen Dr. Stephenson as Professor of Midwifery. I need not tell you how honestly these gentlemen worked as teachers in this school. I feel sure that they will faithfully represent and uphold the character they have earned here. While we, teachers and students, regret the loss to ourselves, we rejoice in their promotion, and heartily wish them success. Their places will be filled by men who feel that they are fitted for the task. There is no surer road to success than a belief in self. It is this self-belief, this individuality, which this School fosters. Anyone is free to try the experiment; the result, if he fail, will be disastrous only to himself; he will know if he succeed, when he draws to his class-room a few earnest students, who can only be attracted by himself; their progress his encouragement; his earnestness their best example.

It was this earnestness that endeared John Goodsir to his pupils. The noisiest spirit was quiet when Goodsir taught. His truthfulness hushed to silence the largest class in the University. As a teacher, he led his men onwards to a victory over ignorance. They followed, because they believed in their leader. An earnest man searching after truth was the secret of Goodsir's power.

This essential feature of our method—to allow each to choose his place on our teaching staff—directly encourages the individuality of the teachers, and this in its turn encourages the individuality of the taught. Individuality means freedom. You are free to choose your teacher, and in most branches you have an abundant choice. You choose your teacher on account of his individual worth. He may have certain peculiarities; it is desirable that he should ventilate them. He may believe in his methods of conveying instruction; he can put them to a

practical test, and, if he be a true prophet, his labours will be followed by well merited success. Glasgow, I am glad to see, is beginning the good fight; all success to those gentlemen who have obtained permission to lecture in the Royal Infirmary of that city. The results to themselves will be self-improvement, the result to their University will, I feel sure, be an increase in its efficiency.

The self-additions to our teaching staff, on the principle just laid down, are this year comparatively few in number. Dr. Underhill as a teacher on Midwifery, Dr. Andrew Wilson as a teacher of Natural History. The former branch has already many votaries. To Dr. Wilson is due the credit of filling up a blank in our curriculum. Dr. Underhill has to compete with his seniors; he has to fight an uphill friendly battle. Dr. Wilson has an open field before him.

It is a subject of congratulation that Dr. Wyllie, one of our lecturers on pathology, has been appointed Pathologist to the Royal Infirmary. It is right that the science and practice of pathology should be combined.

In order to true teaching, then, individuality and freedom must have the sway. In order to true learning, I believe the same rule holds good; to interfere with the individuality of a student appears to me the great mistake of the systems of the present day.

Carlyle, in his *Life of Schiller*, when describing the time Schiller spent at a school in Stuttgart, in consequence of a well intended act of patronage by the Duke of Württemberg, says:—"The Stuttgart system seems to have been formed on the principle, not of cherishing and correcting nature, but of rooting it out, and supplying its place with something better. . . . Everything went on by statute and ordinance; there was no scope for the exercise of free will, no allowance for the varieties of human structure. A scholar might possess what instincts or capacities he pleased; the regulations of the school took no account of this; he must fit himself to the common mould, which, like the old giant's bed, stood there, appointed by superior authority, to be filled alike by the great and the little."

The system of medical education of the present day has certain of these features. Rules, regulations, statutes, visitors of examinations, assessors, councils, are the order of the day. The result perhaps is a better training of the mass to mediocrity—a necessity, no doubt. Would that it could be attained without damaging and distorting the individuality and freedom of the student. There must undoubtedly be a certain amount of restraint, but let it be as little as possible. There must be examinations, but let them be more frequent and less formal. The student should be allowed to pass in any one subject, always supposing that he knows it thoroughly. To judge of this thoroughness, the standard the examiner has to remember is, that an extensive knowledge is not so much required as that the knowledge should be precise and accurate. A mistake is infinitely worse than an omission. The man who does not know has only to learn; the man who is in error has to unlearn and then to learn.

These remarks regarding the individuality and freedom of this School, cannot but recall to many present the recent death of perhaps one of the greatest of our teachers—John Hughes Bennett. The time has hardly come for a proper estimate of his character. His individuality was too marked, and the freedom with which he expressed his opinions too apparent, to enable us at present fully to estimate our loss. Professor Bennett was a teacher in the highest sense of the word; his love of his work, his natural talent for teaching, fostered by years of special study, the clearness of his lectures, the impress he made on the minds of his students, will not die. In our wards, where the essential features of his system of clinical instruction are almost universally adopted; in our laboratories for the teaching of practical physiology; in the privacy of our studies when at work with the microscope, Bennett still lives. His career of untiring industry, of ardent application to his professional work, were the characteristic features of his nature. Years will pass away before we can properly estimate the good work John Hughes Bennett did in the Edinburgh School.

I am now brought from the past to the future. What is the future of our School? To be successful we must go forwards. Our motto must be "Excelsior", and the new Infirmary and University buildings show that this is not forgotten. But in order that the new University buildings may bear proper fruit, we must soon have outside the University more appliances for the teaching of such subjects as anatomy and physiology. The efficient teaching of the so-called practical subjects, medicine, surgery, and midwifery, does not depend on appliances. A warm, comfortable class-room, with a self-made museum which no money can purchase, are the stock-in-trade of these lecturers. It is different with anatomy, physiology, pathology, and chemistry. For the well-being of any school, well paid demonstrators are required for these subjects. This is more especially true of anatomy. To teach physiology, it is absolutely necessary that there

should be a well equipped laboratory; so also with pathology and chemistry. These necessities cannot be attained in this building, and, in my opinion, the time has now arrived for building new class-rooms and laboratories for these subjects. But it is as reasonable to expect the professors to build their laboratories, as it is to ask our lecturers to build theirs. We cannot, I fear, expect the public to contribute. To whom, then, are we to apply? It appears to me that the Colleges of Physicians and Surgeons should undertake the work. There is a great deal of talk about the uselessness of such bodies, and there is at present a cry that their work should be taken from them. The result would be a feeble existence—a second childhood—reminding us of Paget's classical description of a natural decay. "For", he says, "it is natural to become feeble and infirm, to wither and shrivel, to have dry husky wrinkled skin, and greasy brittle bones, to have weak fatty hearts, blackened inelastic lungs, and dusky thin stomachs, and to have every function of life discharged feebly, and as it were wearily, and then, with powers gradually decreasing, to come to a time when all the functions of bodily life ceasing to be discharged, death without pain and distress ensues."

Such a picture is too painful to dwell upon—our relationship is too near. I will only say, that some apparent good done by these august bodies will be the best answer to their accusers. What could be more worthy of their existence than the strengthening of the School to which they belong, and on which, if the truth must be told, they live? The College of Surgeons started the Anatomical School, the College of Physicians the Royal Infirmary of this city. Let the same spirit now rule their councils, and let them see that before very long we owe to their joint efforts a well-equipped building, with well paid demonstrators, in which the scientific subjects may be taught with comfort to both teachers and taught. I lately visited the Medical Schools of Liverpool and Manchester, and the lesson I learned there is, that such Schools as these, with their splendid equipments for practical study, will, if we do not look to our appliances, dazzle and intercept many of our students. Lastly, am I asking the Colleges to run too great a risk? The College of Surgeons kindly built this class-room, I forget how many years ago, and they perhaps can give their sister College an idea of the interest they have received on their original outlay. A good rent, coupled with a good name, will, let us hope, ward off the evil day which, prophets say, is drawing nigh. In the name of the lecturers, and on behalf of the students, I ask this of the Colleges. I ask it in no spirit of rivalry to the University, for my firm belief is, that the better the appliances without, the greater will be the success within the walls of the University. I have not time to do more than mention certain other improvements which would, in my opinion, add to our efficiency.

We require a lectureship on Public Health—it is too important a subject to be tacked on to Medical Jurisprudence, thus injuriously curtailing the lectures on that important subject. I sincerely trust that some one will take up Professor Stephenson's mantle, and continue the lectureship on Diseases of Children. I would also wish to see the addition to our curriculum of a short summer course on Diseases of the Ear. Speciality in teaching is, as I have already said, a good thing. It is the only way to make thoroughly sound practitioners.

We are not now far distant from what must be to all of us an interesting event in the history of our School. We are soon to leave the old infirmary, which, for one hundred and fifty years, has done such signal service to medical science. A history of that institution would indeed be a record of medicine and surgery. It was at one time my intention to devote the time at my disposal to-day, to a short recapitulation of the important discoveries in medicine and the improvements in medical teaching, which have taken birth within its walls. I found, however, after considerable investigation, that, in the time at my disposal, even an abstract of the good work done was impossible. I trust that some one will undertake the task. A history of the Edinburgh Royal Infirmary will be a valuable work of reference in time to come.

If, however, I cannot even very hurriedly allude to the past, I may for a moment dip into the future. With new buildings, well-regulated wards, and clinical lecture-rooms, with increased facilities for clinical instruction, is there nothing that can be done still further to improve the bedside teaching?

Our managers are fully alive to the fact that the welfare of the patients and the well-being of the students are inseparably connected. The diagnosis and treatment of every case carefully sifted by a teacher in the presence of an intelligent, sharp-sighted, perhaps somewhat fault-finding audience, is the best guarantee for a judicious diagnosis and a careful treatment. There is no class of patients so carefully treated as the patients in any well-regulated infirmary attached to a large school of medicine. Take any hospital without students; go round

with the physician or surgeon; and the visit, instead of being a carefully performed duty, is generally a hurried run through the wards, and a general acquiescence in the treatment of the house-surgeon, on whose shoulders rests the greater part of the treatment. How different is the visit of the teaching physician or surgeon! With him, to teach is to learn; and the daily visit to his wards is to him both the most profitable and the most pleasant period in his daily work.

A studentless hospital reminds me of a private picture-gallery: splendid pictures, but no one to look at them. A hospital with students is like one of our national galleries, through which thousands yearly pass. The pictures sustain no harm from being looked at; and the chances are, that they are better cared for than even the most valuable private collection. Your interests, the interests of your teachers, the interests of the managers as representatives of the general public, are one—the welfare of the patients. The more thorough the system of medical instruction, the greater is the public fame of the Infirmary.

Is it right that, during three of the four years of your student-life, only one hour daily is given by the authorities to clinical study? The hours from twelve to two should be sacred to the hospital. The result, as the classes are at present arranged, is, that the student spends about three-quarters of an hour in the Infirmary. It will, I think, be generally allowed that this time is too short. By careful consultation between the University professors and the extra-academical teachers, the classes could be arranged in such a way as to meet this want. There are many ways in which the change could be made. This, however, is not the place to discuss the question.

Might not the out-patients be utilised more than they are at present for the teaching of the elements of medicine and surgery? There is surely a quantity of material running to waste, which might be made use of for the teaching of the junior students. Before visiting the wards of the surgical hospital, the junior student might learn the elements of practical surgery; so also, in the medical house, auscultation and percussion could be taught in the medical waiting-room. Such preliminary study would lighten materially the labours of the surgeons and physicians.

One of the weak points of our School is the small number of beds, as compared with the large number of students. Our wards are uncomfortably crowded. An organisation of the out-patient department would undoubtedly lessen the number of students attending the wards.

When the new Infirmary is opened, the Sick Children's Hospital and Chalmers's Hospital will be within easy reach. I sincerely trust that every encouragement will be afforded by these institutions for clinical study. Practically, at present, they are studentless hospitals. In this way, also, the crush of students would be relieved.

The appointment of a special professor of Clinical Medicine appears to me another improvement worthy of consideration. Glasgow has taken the lead in this matter. Surely it is an anomalous position to have a professor of Clinical Surgery and none of Clinical Medicine. The professor of Practice of Physic must have wards to illustrate his systematic lectures; but there should be one man who is the acknowledged head of clinical medical instruction. Such an appointment would, I believe, directly benefit our School.

I cannot help hoping that the managers will be able to allot special wards in the new buildings for the study of diseases of the throat, diseases of the ear, and skin-diseases. At present, our students have to go to the Continent for such special clinical instruction. It is also absolutely necessary that the department for the study of syphilis should be thoroughly equipped.

I think that the time has now arrived when these points should be discussed. My wish is your good, as long as it does not interfere with the welfare of the sick poor. I have tried to show that your interests and theirs are inseparably connected. These remarks regarding certain changes which might, in my opinion, be advantageous to our Infirmary, are made in no complaining spirit. We are governed by an enlightened board of management; we are proud of our hospital, proud of our clinical teaching; but I feel that, to keep our place as the leading medical school in this country, we must not stand still. Progress in the right direction will result in greater fame, will directly benefit the patients, and will, if possible, still further widen the range of the grand motto laid down by the founders of our Infirmary—"This Hospital will be open to all the curable distressed, from whatever corner of the world they come, without restriction."

I have to-day avoided offering you advice regarding your duties and your studies. Any recommendations as regard your duty to yourselves and to your teachers are unnecessary to the great majority present. I am addressing men who have begun the business of life. For the few who, perhaps, require to be told their duty to themselves, any words spoken in general terms would, I feel, have little good effect. I could

not be particular enough. The advice given would not exactly fit each recipient, and the result would be an abandonment of what really was applicable. Instead of advice as to your general conduct, I might speak regarding the proper methods of study, the order in which you are to take your classes, your text-books, note taking, etc. The objections to this are that general advice is rarely followed. The student has to drop his individual sense, and merge into the common run of humanity. Such advice would directly interfere with what, in my opinion, is above everything else to be encouraged—your individuality. Any interference with this essential to your healthy existence would be as disastrous to our School as would be the loss of that essential amongst your teachers. All of you, perhaps, wish some point cleared up. To-morrow, meet your individual teachers as individuals, and explain your individual wants. More benefit will be derived by a few minutes' conversation than by listening to an introductory lecture teeming with generalities.

In conclusion, I have simply to bid you all welcome. We, as teachers, will try to do our duty; we expect you to try to do yours. Our sincere wish for you all is happy honest work. The teacher is your steersman; you are the rowers. Remember that a single bad oar spoils the whole boat.

Junior students, you have chosen a School with a name and a fame, with a reputation for work. The maintenance of these qualities depends on you. You have in your seniors many bright examples of how that reputation is to be maintained. Follow in their steps, and be prepared to take their place when another introductory comes round.

To the senior students I say—Go on as you have begun; do not abate your efforts. More is expected of you, the more your opportunities. Be proud of your School; endeavour that your School may be proud of you; and when you leave us, may your chief pleasure be in the recollection that you were once Edinburgh students.

THE TREATMENT OF OBSTINATE VOMITING CONNECTED WITH PREGNANCY.

By EDWARD COPEMAN, M.D., F.R.C.P.,

Senior Physician to the Norfolk and Norwich Hospital; Vice-President of the British Medical Association.

SINCE the publication in our JOURNAL of the few cases which suggested to me the novel treatment I advise for obstinate vomiting connected with pregnancy, with its attendant effects of depression, emaciation, and all the symptoms of starvation, I have received promises, both at home and from abroad, that such an apparently valuable means of relief shall have a fair trial, and that I shall be duly informed of the results.

My paper in the JOURNAL has elicited from Dr. Graily Hewitt some valuable observations on the subject in a more recent number, in some measure corroborating my own views, although only partially according with my present ideas as to the cause of the disease; and, still more recently, Dr. Henry Bennet has been sufficiently attracted by it to repeat in the JOURNAL the valuable suggestions he had previously offered to the profession in his own published works. My paper has also been translated in a masterly style by M. J. Lucas-Championnière of Paris, and published in the *Journal de Médecine*, of which he is the chief editor; and in a private letter he says he was so struck with the great importance of it, that he translated it for the benefit of the readers of his journal, adding that he himself, as well as several of his hospital colleagues, intend to apply the treatment when opportunities offer, and communicate the results to me. Also, in a letter from Dr. G. Pacchiotti of Turin, he says, referring to my method of treatment of obstinate vomiting in pregnancy: "It is so simple and so extraordinary, that it is astonishing that it has not been found before. As soon as an opportunity comes, I will try it and tell you what happens."

I have always felt throughout my professional life that increased practical knowledge in the treatment of disease should be the principal aim of the physician, and that all other collateral studies should be ancillary to this chief object of the practice of medicine. No kind of work in our profession earnestly entered upon and diligently carried out can fail of doing good in some way or other, and producing beneficial effects directly or indirectly to suffering humanity; but the cure of disease is not only one of our primary objects, but one which has not been so carefully studied and worked out as its importance demands compared with some other branches of medical science.

Several different conditions of the uterus have been referred to as causes of sickness during pregnancy; for instance, Dr. Graily Hewitt

attributes it to version of the cervix, producing constriction of the inner os, and states that the rectification of these displacements will cure it. Dr. H. Bennett looks upon inflammation and ulcerations of the os and cervix as the cause, and the use of the proper remedies for these affections the cure. M. de Saint-Germain has related a case in which he used M. Tarnier's dilator for the purpose of producing abortion, and immediately afterwards the vomiting ceased and did not recur, although the expulsion of the ovum did not happen for many weeks after the sickness had subsided. My own opinions as to the cause or causes of this complication of pregnancy are not yet sufficiently matured to enable me with certainty to afford any positive explanation; but I am inclined to believe that in such cases there is always some irritating condition present which induces a strain upon the neck of the uterus, or perhaps also on other parts of the uterus, exciting that organ to a disposition, so to speak, to get rid of its contents. After further investigation of the subject, I shall hope to give my views more particularly, and meanwhile I will content myself with what further evidence I have had with reference to the value and certainty of the treatment.

Whilst I was waiting in the reception-room previously to the public dinner of the British Medical Association in Edinburgh, a gentleman introduced himself to me that he might relate a case of almost fatal vomiting during pregnancy which had recently occurred to him. He told me the case was an extreme one, that he thought himself that nothing but emptying the uterus would save the patient's life, and that her husband utterly despaired of her living many days. He then added: "I had recently seen your paper in the JOURNAL, and, in order to calm the utter despondency of the husband, I ventured, solely on the strength of your published experience, to promise him that, after a certain operation, his wife's life would not only be saved, but that she would be well in a few days. I dilated the os uteri as you recommend; her sickness immediately stopped; and, to the astonishment of the husband and to my own amazement, she went steadily on to recovery." This gentleman, whose name I forget, but think he lives at Swansea, promised to publish the case, and any others he might have; and, in our short conversation, I had not time to make out particulars as to age, duration of pregnancy, etc., but I hope they will appear in due time in the JOURNAL.

On my return home from Scotland, I found a letter awaiting me from Mr. Atkinson of Ripponden, near Halifax, to the following effect. "Dear Sir,—I think I have had a case during the last three days, the treatment of which carries out the idea of the good results of such procedure. It was a case of vomiting in a woman who has had eight children; and, during the last three days, had a fright from a sudden death occurring next door to her. I attributed the vomiting at first more to a bilious attack, and gave her the usual effervescent saline, with a dose of calomel, but the vomiting continued just the same. Forty-eight hours afterwards, I dilated the os with my fingers, left, and ordered a mixture of carbonate of soda, nitrate of potass, and dilute hydrocyanic acid. She has had no return; and now, two days afterwards, wants to get up. I may also state that she has never been troubled with vomiting before in her pregnancies, and has got up the day after her confinement. She had eight years ago two miscarriages; none since; and is now six months advanced. I do not attribute the allaying of the vomiting to the alteration of medicine so much as the manipulating the os, and I thought I would just mention it to you. I have no doubt it is a procedure which may be carried out without danger to the woman, and seems to be a remarkable antidote to vomiting occurring in pregnancy, primipara or multipara. Of course, this is only one case; but I am sure it may be put down to this treatment as being the means of relieving the vomiting."

I have recently had a case bearing strongly upon the subject in question. A lady, five months gone in her second pregnancy, caught a cold, had a chill, and was attacked with severe frontal neuralgia; at the same time, she became unable to retain her food, and for several days vomited everything she took. She is of a delicate, excitable habit, and had for some weeks previously been taking a great deal of exercise, rowing, etc. Latterly, she had been feeling her dress rather tight, but had not hitherto let it out, and remarked to me that no one would have known she was pregnant from her appearance. For her attack of neuralgia, she had taken aperients and quinine, which latter did not, as she said, agree with her; and she had had local applications over the brow of belladonna, aconite, and chloroform, none of which had relieved her. Hypodermic injection of morphia had been suggested, and, from the severity of the pain, I thought it very proper treatment in default of other remedies. I found the neuralgic pain intolerable, the left eye watering, and she was unable to bear even the pressure of the pillow upon the part. No local application appeared to relieve her. The constant vomiting after food (not a necessary result of neuralgia), coupled with what she described as a "riotous

motion of the child", led me to think the whole case might have an uterine origin. Perhaps the child was dying; but, on examination, I heard the fetal heart distinctly, and could mark out the position of the placenta by the peculiar *bruit*. I then examined *per vaginam*, and found the head low down in front, and the os uteri corresponding with the promontory of the sacrum; the pelvis was capacious; and it seemed to me that the uterus was anteverted, so as to allow the head to be felt below the level of the os uteri. The os was slightly patent, but there was no discharge and no particular feeling of bearing down, only a frequent desire to pass urine. By gentle continued pressure, I raised the protruding portion of the uterus with the head of the child out of the lower pelvis, and restored the os uteri to a more natural position; after which, I was bold enough to prognosticate that no further vomiting would occur. Some hours afterwards, I had a message to say that no further sickness had occurred, but that the pain in the brow was as bad as ever. On my visit the next morning, I found there had been no return of vomiting, that she had slept well during the night, and there was no pain, "only a feeling of having been bruised", as she expressed it, in the forehead. She had taken no medicine, neither had she used any local application, except warm water, since my visit the day before. She had taken simple nourishment and a little champagne to relieve the faintness which the excessive pain had occasioned. On visiting her the next morning, I found she had slept soundly all night, had neither sickness nor pain, had taken nourishment, partridge, etc., without any feeling even of nausea, and really appeared well, with a good pulse, healthy skin, clean tongue, and cheerful happy expression of countenance. After one day's interval, I have seen this patient again to-day (October 5th), and found her in every respect perfectly well and contemplating a journey into Scotland in the middle of next week.

I do not think I have a theoretical mind, and I have no belief in any theory that is not based on facts. I have not as yet appended any special theory to the subject under consideration, but have no doubt, as facts multiply, there will be found good reasons, both anatomical and physiological, for the phenomena observed. I am very sanguine that much good will arise from the discovery of this "novel treatment", as it is called, and that lives not a few, of both mothers and children, may be saved by its adoption.

P.S.—I have since been informed that the contemplated journey took place; that the patient travelled all night, arriving at her destination at four o'clock in the afternoon, and was so little fatigued as to be able to join the party at dinner the same evening.

HYDATID DISEASE:

AS ILLUSTRATED BY SPECIMENS CONTAINED IN THE PATHOLOGICAL MUSEUMS OF THE METROPOLIS AND IN OTHERS ELSEWHERE.

By T. SPENCER COBBOLD, M.D., F.R.S., F.L.S.,

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II.

THE museum connected with King's College contains at least a dozen good specimens of liver-hydatids, several of the cases being of special interest from a pathological point of view. There are two remarkably fine examples of hydatids contributed by Dr. Hooper; the parasites in one case affecting the spleen, and in the other involving the ovary and uterus. The spleen contained numerous encysted hydatids, whilst the uterine organs exhibited "an immense collection" of the same growths. In this place, also, I may refer to an hydatid-like entozoon, taken from a cyst in the ovary of a female who had been under the care of Dr. Johnson (December 15th, 1860). It is, apparently, a genuine example of the slender-necked hydatid (*Cysticercus tenuicollis*); and if so (as might be determined by dissection), is, so far as I am aware, the only specimen of the kind in existence from the human bearer. There is a renal hydatid (presented by Dr. Pass of Warwick) which was obtained from a lunatic, its presence being "quite unsuspected during life". Amongst the liver cases (the majority of which are from Dr. Hooper's collection), there is one enormous hydatid that was obtained from a young woman who had died during a fit of laughter. The tumour had pushed the diaphragm up to a level with the fourth rib; and it is stated that, on puncturing the cyst, the fluid contents were ejected "in a jet nearly two feet high". There is one case represented where numerous hydatids were expectorated after hepatitis, whence it was concluded that they were originally connected with the liver. There is a large solitary hydatid that was removed from a young female who died of phthisis, and in whom the consequent swelling had formed in the neighbourhood of the navel. Especially instructive, also, from

a clinical point of view, is a case of peritoneal hydatids where the tumours had been diagnosed to represent a case of extra-uterine foetation. It appears that there were two cysts, one of them being connected with the uterus. Two of the enormous hydatids taken from these cysts are preserved in the collection of the "Anatomy School of Oxford". Several of the preparations show to perfection the stages of natural cure produced by calcareous degeneration; and there is one liver showing three of these so-called ossified cysts. The disease in this case proved fatal.

Most of the entozoa displayed in the Charing Cross Hospital Museum have been contributed by Dr. Wiltshire; the series being particularly strong in tapeworms. There are four characteristic examples of hydatids of the liver, representing as many separate cases. Two were from abscesses of this organ. In one of these, Mr. Canton's case, the hydatid was, I believe, expelled after operation; but, in the other example (presented by Mr. Rose of Swaffham), the parasite was evacuated from an abscess which burst of itself, externally.

In the Museum at University College, I examined sixteen preparations of hydatid disease, representing almost as many distinct cases. One is a wax model. Eight of the specimens were from the liver, five from the abdomen (including those of the omentum and mesentery), two from the lungs, and one from the heart. The model displayed ordinary hydatids of the liver bursting into the lungs. The mesenteric example is particularly fine, whilst that from the omentum is undergoing calcareous degeneration. Probably the most interesting of all is the example showing an hydatid lodged in the septum of the heart. This was from a middle-aged female who died suddenly, whilst pursuing her ordinary domestic avocations.

The Museum of the Royal College of Surgeons contains a fine collection of parasites; its chief strength in this respect being due to the special series of entozoa. Were visitors to judge by the contents of the catalogue of this series (which I prepared some years ago at the instance of the Council of the College), they might be led to suppose that the hydatids were only feebly represented. Out of nine preparations of hydatids in this section, only six have come from the human body. However, scattered throughout the collection, I found that there were no fewer than thirty-five different preparations of hydatids belonging, apparently, to as many as thirty separate cases. Omitting, for the present, all mention of those derived from animals, I ascertained that, of the thirty human cases, thirteen were referable to the liver, four to the abdomen, three to the lungs (one of which was originally connected with the liver), and two to the brain. Five were of uncertain seat. With the abdominal cases, we may also include one case of hydatids of the spleen, and another where these organisms were found in the region of the bladder. There is a characteristic breast case. One of the original Hunterian cases (in which "a prodigious number of hydatids were found in the sac of the liver and dispersed throughout the cavity of the abdomen") appears, though it is not expressly so stated in the catalogue, to have been regarded as an ordinary example of abdominal dropsy. In one of the three lung cases, two small hydatids were separately expectorated at an interval of about a month. This occurred in a female.

I may here incidentally remark that many cases are on record where abdominal hydatids have been overlooked: the patient being supposed to be suffering from ascites. One such instance took place a few years ago at the Middlesex Hospital. I well remember, also, a case of supposed hydrothorax, where the *post mortem* examination revealed the presence of immense numbers of these formations occupying the right side of the chest. This last-mentioned case, however, occurred at the Norfolk and Norwich Hospital at the time when I was studying there, thirty or more years ago.

The pathological collection connected with St. George's Hospital displays several good hydatid preparations; the entire series representing at least twenty-two separate cases. Of these, fifteen are referable to the liver; that is, if we include Dr. Dickinson's case, already published, where hydatids were found within the hepatic duct. There are two renal cases; also one from the brain (Dr. Dickinson's case), and another where an hydatid was expectorated. Besides these, there are three other highly characteristic examples of echinococcus disease affecting the region of the neck, breast, and axilla respectively.

The Museum of the London Hospital Medical School contains a large collection of parasites. Out of fifty-seven preparations of entozoa, I found twenty-two referable to hydatids; and, so far as I could gather, all of them belonged to different cases. Only one case seems to have been published in detail. This, though a very old preparation, is a fine example of an hydatid, nearly three inches in length, occupying one of the cerebral hemispheres (*Edin. Med. Journ.*, vol. xv). There is a second brain case, where the vesicles were of small size, but very numerous. Of the other twenty cases, fourteen belong to the liver, two

to the spleen, one to the lung, one to the uterus; one being a very large hydatid of doubtful seat, and another being referable to the lumbar region, where it formed a tumour containing "a large number of small hydatids". Amongst the more remarkable specimens is that described in the MS. Catalogue as "a true hydatid cyst developed in connection with the broad ligament". This preparation, unique of its kind, shows no trace of the ovary, which, indeed, seems to have disappeared altogether. One of the liver cases should rather be classed as abdominal, since the large cyst is situated between the diaphragm and liver, pressing upon the latter organ below and also upon the lung above, but apparently not involving either of these viscera structurally. Another very striking case is that in which there is an external opening communicating with the cyst in the liver, and an internal opening through the diaphragm communicating with the lungs and bronchial tubes. The patient had actually coughed up liver hydatids by the mouth, and had passed others through the right wall of his abdomen. There is another liver case in which the hydatids, in place of escaping externally, had gained access to the inferior vena; and, if I understand the MS. record rightly, in the same patient, a second hydatid communicated with the portal vein, and a third with the hepatic vein. Lastly, I must add that there is yet another fine preparation of liver-hydatids, occurring in a lad nineteen years of age. He had, it seems, met with "a slight accident, and died with obscure head-symptoms"; but the odd part of the case is that, at the *post mortem* examination, there was positively nothing found that could explain the patient's death. He was under the care of Mr. Luke (1834).

FAILURES OF MEDICINE.*

By T. COLE, M.D., Physician to the Royal United Hospital, Bath.

It is acknowledged on all hands, and with some degree of justice, that medical science has of late made most wonderful progress. Never were her prospects brighter; never was her power of doing good and preventing evil more extended; never were her votaries more ardent, able, and illustrious. Her torch shines with unequalled brilliancy, and its healing rays illumine the darkest corners of misery and desolation. Her children are full of mutual congratulations, and those whom she benefits are not backward in their praise. The picture is pleasing, and we naturally view it with a sense of satisfaction and delight. We revel in all its bright touches, and, charmed with the general aspect of pleasure which it presents to us, forget the dark shadows which, equally with these touches, go to make up the whole. It suits us ill to compare them, when, by serious contrast, the shadows deepen and blacken; and we are forced conscientiously to confess, too, that the gay and splendid tints must, and do,

"Take a sober colouring, from an eye
That hath kept watch o'er man's mortality."

It is our business to keep watch "o'er man's mortality", and it is, therefore, our duty to allow nothing to interfere with that business; to permit no dazzling pictures to pervert our vision; to hinder every soft illusion from lulling us into a false and injurious repose. I willingly admit that our art has made much sure and steady progress in the past, and that it affords legitimate reason for rejoicing among the members of our profession. But are we not in danger of overestimating the degree of that progress, and of losing sight of our failures and retrogressions? Do we not pride ourselves too much on our advances in physiology, pathology, and therapeutics, and think too little of those ever-recurring scenes of agony which every death-bed furnishes, and which tell us, in terrible language, how ineffectual oftentimes are our best efforts, how feeble the weapons we employ? Should we not the rather calmly and seriously consider the reasons why our science proceeds with such slow and halting steps, and endeavour to find out how they may be quickened, and a more solid triumph ensured? The deep conviction that we are prone to lose sight of this, the graver aspect of the question, and a strong desire to obtain the matured opinions of those present upon it, must be my apology for intruding upon your time and patience to-night.

With your permission, I will briefly allude to a few of the more important causes which influence our failures. To understand the obstacles which impede our pathway, and the manner of surmounting them, is halfway to the end of our journey. Those which obstruct the road along which medicine travels are probably more numerous and difficult than any which lie in the course of other sciences. Some are peculiar to herself; others she shares with them. Moreover, her path runs close by and parallel with theirs. And, unfortunately, so scantily

* Read before the Bath and Bristol Branch.

furnished us hers with intelligible directing-posts, that she is often compelled to use those which they have furnished for themselves. But they speak their own languages, which she has to learn before she can advance; and even when learnt, they often lead astray, or give no information at all. She is obliged to employ the same methods of observation, yet has far more difficulty in escaping from the fallacies which surround every logical process; and has to rely for a great portion of her knowledge upon these very sciences. Frequently she has to accept on trust their theories and deductions, and build upon them. Not seldom these are false, and she builds in vain. This affords ample explanation why she has adopted so many systems of practice, and why each in its turn has blazed upwards to the zenith, and then fallen for ever to the nadir of oblivion. When it is thus considered that medical science is dependent to such a degree upon other sciences, it should excite no surprise that she lags so far behind. Some would even deny her the right of assuming the title at all, so imperfect are her claims to it. But astronomy, at the dawn of celestial discovery, was far less developed than our branch of knowledge now is. Besides, we can never attain to the exactitude and perfection of which the students of other sciences make boast. They work in the glorious fields of nature, comparatively unimpeded by the thistles and briars of abnormality that infest our toil. We labour in antinature. Although a curse has gone forth, at all events, over our little planet, yet stars, rocks, beasts, and birds, and flowers have, to a great extent, escaped its influence. But we, with all our race, the objects of the sad science of physic, are rendered so by the introduction of conditions antagonistic to our natural state, and, therefore, to our well-being. However, not only is medicine dependent upon and intertwined with other sciences, but it is also, in a certain sense, independent and isolated. With the exception perhaps of some portions of the moral sciences, it alone deals with conditions of disease. Whatever light physiology may throw upon the functions of the healthy tissues and organs of our bodies, however great an insight organic chemistry gives us into the changes which take place in them during their normal exercise, our study alone can inform us of the alterations which disease produces in our system, and of the laws by which its processes are regulated and controlled. Not but that it is absolutely necessary for us to know the mechanism of the machine and its purposes before we can repair any injury to it. But it is equally essential to understand the injury itself before we can remove it. This brings before us the question, What is disease? Errors on this important point are so many *ignes fatui*, drawing us away from the true path of progress. Is, then, disease simply a derangement of the animal machine, or is it something superadded thereto which we can think and talk about, and work against, in the human economy?

First, let me remark that many conditions dignified as diseases, and named accordingly, are not so at all; for example, jaundice, paralysis, vertigo, and a host of others. Accurately speaking, they are only evidences or symptoms of widely varying diseases. As terms, we find them useful, serving as they do for cloaks to our ignorance of the real morbid states upon which they depend. Further, many conditions that have a more legitimate claim to the title are only effects of other complaints, and really stand in the relation of symptoms to them, and are not, as a rule, amenable except to treatment appropriate to the complaints themselves; for instance, gouty and syphilitic bronchitis, or epilepsy from an intracranial tumour. Of course, we are often compelled to treat symptoms for their own sake. Thus bromide of potassium might control the convulsions due to a syphilitic tumour in the brain or its membranes; but the only way in which we should hope to cure them would be by curing the tumour, as by iodide of potassium. If we thus eliminate such conditions as I have alluded to, we shall be in a better position to determine this important matter. Is, then, disease an entity which we can imagine as apart from the body that is the seat of its phenomena? The answer, I think, must be emphatically "No". Nevertheless, the definiteness and invariableness of the characters of the various diseases entitle them to an individuality no less real than that claimed by the objects of all other sciences. We cannot delineate them with such precision, it is true, as we can the subjects of the physical and more exact departments of knowledge. But this arises from the much greater intricacy in the chain of events, and our ignorance of factors too subtle and complicated for our present means of research. Were our powers of observation more extended, we should probably analyse the maladies already known to us into an infinity of clearly defined groups. However this may be, there is good reason to assume that the phenomena of properly defined maladies are constant enough to warrant the supposition of their dependence, in each given case, upon a certain physiologico-pathological process. Physical diagnosis lends additional countenance to this view, although we are in danger of looking too much at

the physical characters of diseases, and too little at the vitalistic phenomena which are equally essential to them. And, if there be any drawback to the utility of the various scopes and other instruments which modern science has invented, it is the tendency we all have, more or less, to treat what we hear, and see, and feel, rather than the particular departures from health, in their widest sense, that these signs only serve to indicate.

But however clear to us may be the fact that each disease, properly so-called, is distinct from every other disease, and is capable of definition, so far as the progress of our science permits, it must be confessed that the routine practice which follows too close an embrace of this doctrine is most illogical and pernicious. It is just as absurd to treat the disease and not the patient as it is to treat the patient and not the disease. Both ought to be the subjects of treatment: the disease in the patient. Nor ought we to lose sight of the causes of ill-health, which may fitly, in many instances, be called entities, and by their quality impart a specific element to most maladies of the utmost importance in regard to treatment. Thus, taking into consideration the varied causes of the diseases which attack us, as well as all the modifications they undergo in their different subjects from peculiarities of temperament, time, place, and other perturbing influences, we can institute a plan of treatment calculated either to remove the disease or restore the patient. Very important is it to determine which of the two we can attempt in each case. Sometimes we can remove the disease, as ague by quinine; more often, as in the continued fevers, we are obliged to be content with the humbler alternative of relieving symptoms, and tiding the patient over a certain period till the course of the disease has been brought to a natural termination. By this means, we shall avoid those false methods of treatment, such as homoeopathy and many others, which have had their origin in the fallacy that disease is an entity, a positive existence, to be sought out, fought against, and driven from the system. Granted that we have determined the nature of disease, an almost insuperable difficulty meets us in the subject of it. It is not merely a machine, of which we thoroughly understand the mechanism, that engages our attention; but it is a highly organised being, about whose structure and functions we know very little indeed, and whose body is not only under the control of the mind and higher faculties, but also reacts upon them. It requires all our ingenuity and skill to estimate the share taken by each of these in the production of disease; and we are often baffled altogether. There are thus causes at work so complex and obscure as to defy all our methods of research and calculation. A thousand refined influences, moral, mental, and emotional, are sufficient to perturb our analytical scrutiny. "What medicine can minister to a mind diseased?" expresses but one side of the truth. How little can medicines avail in diseases of the body, over which the mind and passions hold sway. Under ordinary circumstances, the intricacy of the matter is great enough; but, when we add to it idiosyncrasies of mind and body, we become more and more entangled in its meshes. We all meet with mental and moral idiosyncrasies. And, to touch upon bodily ones, how can we explain the fact that one person may be salivated by a grain of calomel and another cinchonised by a grain of quinine? On the other hand, we all of us know that some persons can take enormous doses of poisonous medicines with impunity. The laws that govern these uncertainties have not yet been elucidated, and, until they are, idiosyncrasy will ever be a stumbling-block in our way. The imperfect state of our physiological knowledge is another barrier to the advance of medicine. Great strides have been made in this direction; but as yet we are only on the threshold of the subject. The subtle working of the brain and central nervous system, and their mysterious influence over the functions of the different bodily organs, have scarcely been interrogated. But few of the outworks of this great citadel, which towers majestically above all our puny endeavours to capture it, have as yet been taken, and the fortress itself would seem to be well-nigh impregnable. The few brilliant discoveries which have been made only heighten the gloom with which our ignorance enshrouds this grand object of our contemplation. Yet hidden behind the laws which preside over the functions of these portions of our organism lies the explanation of innumerable phenomena of health and disease, which at present are utterly inexplicable. It is probable that the nervous system is the theatre of most of the diseases which afflict us.

This point deserves much more consideration than it has received. I believe a thorough understanding of it would elucidate the nature of nearly every morbid process. Glancing over the other structures of the body, how little is known of the work of the spleen, suprarenal capsules and other ductless glands, and even of the liver and the skin. That wondrous fluid the blood, ever flowing through the lanes and alleys of the body, requires profounder investigation than has been bestowed upon it. Conveying health and sustenance to every organ, how often is it compelled at the same time to carry destruction and

death. Poisons we introduce of our own accord, or which pass into us unobserved, wander in its rapid stream, polluting and destroying the fair fabrics with which they meet. Surely much more needs to be known about this life-liquid. I believe spectrum-analysis would be a great source of knowledge in this direction. Physiology must indeed be wonderfully improved before medicine can obtain from her that aid which is necessary for the scientific treatment of disease. One word with regard to diagnosis, probably the most advanced department of our art; yet how far from perfect it is. Take skin-diseases as an example. It is very easy to say this is eczema, this psoriasis, and so on; but that is a very superficial distinction. Look at herpes. To say a person has herpes zoster is no diagnosis at all. We must unravel the mystery of the complaint, and discover its seat in the nervous system, and the peculiar change there, before we can diagnose the disease satisfactorily. Why the affection of the eye in herpes frontalis? why the lingering agony after an attack of zona? Here is a remarkable case. A lad has a large crop of herpes labialis on the left side of the lower lip, great darting pain in the lower part of the left cheek, and intense inflammation of the left tonsil. Will any gentleman interpret this for me? All came together, and gradually subsided together, and were doubtless connected pathologically. An accurate system of diagnosis means a thorough revision of the groups of diseases: a thing impossible at the present stage of pathology, about which I will now say a few words.

No branch of medicine is more important. It forms the rational basis of all treatment. The nature of a disease is the key-note to its management. If we have but a small insight into the laws which govern any pathological process, small indeed will be our power to arrest it, or render it harmless to the subject in whom it occurs. The only exceptions to this rule are the merely empirical means which experience has taught us to be useful in a few diseases, as quinine in ague, iodide of potassium in certain stages of syphilis, and arsenic in psoriasis. Of course, we indulge in a vague kind of way of combating all manner of complaints, and use for this purpose all manner of remedies, and we frame hypotheses to enable us to do so. But such is the state of pathological science, that it would be difficult to prove any or very few of these to be true. The inherent difficulties of the subject are very great. The simple determination of the gross anatomical features often defies us. Still more do the minute changes which take place in the affected tissues. Sometimes we are able to enumerate the microscopical characters of a diseased part with tolerable precision; but, having done this, how seldom can we arrange the tiny links thus presented to us into a well ordered chain of sequences, and so discern what are causes, what effects; from what source the disease sprang, and what are the ravages resulting from its destructive working. The structure of cancer and tubercle is fairly made out; but we have only to refer to the discussions on their nature at the London Pathological Society's meetings to find how imperfect is our knowledge of these diseases. Are they constitutional or local in their origin? What is meant by the former? Does it imply a general predisposition in the system to any special departure from health, or a mere tendency to special local change arising from some hereditary or acquired defect in the particular tissue or organ? Each speaker seemed to have his own pet theory, the product of his imagination rather than a true deduction from the bare facts at present known to us. These discussions, admirable in themselves, appeared especially able in rendering confusion worse confounded. But the light the microscope furnishes fails us when we have most need to long for its glimmering assistance. What is the pathology of hydrophobia, cholera, syphilis, and a host of others? It affords no real answer here. Who can furnish a rational explanation of the phenomena of acute rheumatism? One says it is a neurosis, whatever that may mean; another that it essentially consists in the presence of lactic acid in the blood. If we had to choose between these two hypotheses, we should be comparatively happy. But the speculative habit will not let us off so easily, and generates a profusion of smaller ones to plague us. Not much harm would result were our treatment uninfluenced by these theories; but built upon them are the quinine, the alkaline, the blister, and peppermint-water plans advocated with such energy. Do we know more of the "nova cohors februm" than we did years ago? The beneficent fact that small-pox, the most virulent of the band, has the poison of its sting destroyed by previously tainting those who may be exposed to its malignant power with a mild dose of that poison is a wondrous discovery; yet we cannot explain it, and seem almost as far off as ever from an accurate theory of the fevers as a class. Do they ever arise *ab initio* in the body, or always attack it *ab extra*? If the latter, does the poison act principally on the blood, or nervous system through the blood? Does it propagate fresh poison while in the system? Does it seek to pass out of the body by the various natural outlets, thus causing the changes in the skin, lungs, kidneys, and intestines, till all

has escaped, to begin anew its evil work, or are all the symptoms mere results of the poison, which, having immediately affected the system, is at once powerless for further mischief there, though still powerful to affect another? These and a thousand other questions must be answered before we can attempt to write a true account of the nature of these diseases. How subtle are the alterations in the brain and nervous system which constitute their different maladies. Some we recognise, others are quite beyond our ken, and probably ever will be. Look at the different changes found in fatal cases of epilepsy; why, they are all found in other cases of brain-disease which we believe to be totally different from epilepsy. Therefore, they cannot be essential to its existence, but are probably only results produced by the special disturbance from which the disease arises.

Time will not let me do more, however, than indicate in this imperfect manner the comparative failure of this branch of medicine. The great aim and object of our profession is the rightful use of medicines, and thereby the control and cure of disease. It must be confessed that therapeutics is in a very unsatisfactory condition. An army may be in the highest state of discipline, led by the most prudent and experienced generals, and brave to a degree; but without weapons it would be useless. The medical army is certainly not weaponless, but its armoury contains many implements of warfare which have become rusty and neglected, not a few of questionable utility, and some of very modern design and pattern scarcely tested as yet. There are fashions in drugs, as in everything else, and we are not philosophical enough to escape the contagion. Therapeutical Sniders are constantly being invented, warranted to slay every disease at which they are aimed; but how often they disappoint by hitting wide of the mark, or by bursting after being used a few times. Sometimes they are so unskillfully handled as to kill either the reputation of the medical man or the unfortunate patient himself. Take bromide of potassium for example. In what diseases has it not been used, and with signal success, too, according to its advocates? Some time ago, I collected notes on this drug, and was astonished to find what a panacea it was. I almost felt we had found something as valuable as potable gold; but I also discovered that its many virtues were denied by very competent persons, and my heart melted within me, and the golden dream vanished. The fact is, we do not appreciate the various fallacies which surround observations on the action of remedies. Experiments with drugs require a peculiarly philosophical mind in the investigator. Too severe a scepticism, on the one hand, and too eager a belief, on the other, have to be avoided. A calm and judicious summing up of the most intricate and dubious evidence must be made. Idiosyncracies must be remembered. How difficult is it to find cases identical in all their important particulars from which to draw reliable conclusions.

Diseases vary in severity and type. Climate, season, the presence of other diseases must be considered. The drugs should always be introduced with the same rapidity into the system, and equally transmitted. An antagonist, of whose existence we are unaware, may neutralise the remedy, or it may be impure. The time of administration, the doses, and the intervals between them must be taken into account. Then, what is Nature doing all the time? How can we estimate her share in the result? Our knowledge of the natural history of diseases is very defective. We are afraid to give up any case to Nature's care; and are, therefore, incapable of judging how far she would be equal to the task. Some are bold enough, it is true, to suppress all artificial aid and watch what will happen, and a few are thorough champions of the so-called expectant plan. But life is so valuable, and the medical adviser's responsibility so great, that most men shrink from relying solely on Nature's power; but bring to her assistance the various means which theory or experience prompts them to adopt. This inability to estimate the part which Nature takes in the cure of disease is a great source of error in experimental inquiries into the action of remedies, and seriously retards the development of therapeutical science. It renders it almost impossible for us to use any of the ordinary methods of research. The composition of causes introduces the greatest intricacy into the investigation; and this is increased by the intermixture of effects. We cannot eliminate conditions, of the existence of which we are ignorant; and there are many which we recognise, but which are so essential to life that we could not suspend them without frustrating the design of the experiment altogether. Conclusive as the following instance seems to be, and well nigh approaching the accuracy of the logical method of difference, yet, without a number of confirmatory instances, it scarcely passes beyond the range of the probable. Subacute nephritis, with great hæmaturia, continued for many weeks in a lad who had suffered from the acute form after scarlet fever. The hæmorrhage resisted all kinds of treatment. In despair, I tried oxide of silver, which I had found valuable in other hæmorrhages. Three half-grain doses stopped the bleeding; and it never returned. I am morally sure of it.

But how seldom can we find a case so favourable even as this as an experiment. So seldom that, according to Mr. Mill, the experimental methods of investigation are but little worthy of attention in this line of research. We are thus compelled to fall back on the deductive method. Even this is not available, except to a very limited extent. For every deduction must start from a previous one, or some induction. If we wish to find out under this method whether any particular medicine is useful in a certain malady, we must discover first of all the laws of all the causes implicated in the result. We must clearly determine the properties of the drug. These, of course, include its physiological action. This part of the process is beset with a thousand fallacies. We must then determine the pathological laws which govern the said malady; and who could assert that he thoroughly understood the natural history of any malady at all? Take croupous pneumonia. The physical signs and peculiar pulmonary changes are well known. But, why should the disease commence sometimes with acute gastro-enteric catarrh? What is the significance of the little crop of labial herpes so often accompanying it? Why should the general symptoms abate so remarkably just when the lung becomes solidified? Why should the chlorides desert the urine. These are but a few of the queries which must be answered before we know what pneumonia really means. And when all this is done, and we have become fully acquainted with all the particulars essential to the elucidation of the subject, and are in a position to draw our deduction as to the value of our drug, we must verify it by past experience or by some other evidence. Mr. Mill ably discusses this matter, and justly points out the small amount of success likely to be obtained in such intricate investigations. Suppose we took a case of chorea and made a series of inductions with regard to the causes of the disease, we should find some cases induced by fright, etc., some in connection with rheumatism, and many other apparent causes. But how difficult to connect the causation with the disease. If rheumatism be concerned, some will say it is the rheumatic element; some that it is an embolic state of certain parts of the brain, from detached valvular vegetations; some that the rheumatism is a mere coincidence. These are only hypotheses, of but little value till proved true. Take the various drugs used in this disease, we know little more about them than that they are so-called nerve tonics mostly. Bring them to the test, they fail as often as they succeed. One vaunts arsenic, another praises zinc, a third juice of conium. Some cases resist all. I remember a boy, on whom bark and ammonia acted like magic, when all other means had been tried in vain. Another case of very severe unilateral chorea in a girl, with anemia and valvular mischief, resisted iron and arsenic, with chloral at bedtime. The patient was very sleepless; and, at the end of three or four days, was quite worn out. Three or four one-scruple doses of chloral at two hours intervals sent her to sleep, and she awoke well. The next case I had derived no benefit from chloral. Can we generalise from such facts as these. The results, perhaps, depend on the varying causes or the different conditions of the patients. But the general conclusion must be that none of the drugs mentioned are *bona fide* curers of, or at all events specifics against, chorea. Want of success depends in many cases, no doubt, upon our ignorance of certain essential conditions in them, and thus our want of skill in combating these. Time would fail if I were to touch upon general principles of treatment, such as the use of bleeding, counterirritation, and a host of others; and I must pass by many minor impediments, such as the inaccuracy of names and classifications, and the fallacies of statistics and averages as guides to treatment.

I will allude very briefly to two other points. 1. There can be no doubt that we are too prone to slight the labours of those who have gone before us. We despise their antiquated notions, in which lie concealed from our superficial notice truths of the greatest value. Our brethren in all ages have performed their part in leaving us rich legacies of knowledge. But we are not willing to claim or make use of them, because they are encumbered with much that is absurd, useless, and untrue. Each generation, instead of adding to the great fabric whose foundations were laid thousands of years ago, prefers to pull the edifice to pieces and rebuild it after its own fashion. There is thus a perpetual change in theory and practice by no means conducive to progress. 2. Valuable stores of knowledge, accumulated by individual thought and experience, often perish with those who possessed them. How many have amassed most useful materials during their years of practice, and never given them the publicity they deserved. The consequence is that hundreds of able cultivators of our art leave the world without contributing in the least degree to the advancement of their science. Certainly much more is done than heretofore in this direction. But a great Association like ours ought to develop some plan, by which this most important means of spreading medical knowledge could be more successfully carried out than at present.

Having sketched very roughly and imperfectly the main causes of

the backwardness of medicine, I will say one word in conclusion on her future. It were idle to imagine, so long as the state of the world and men's passions and frailties exist, as at present, that diseases will cease from off the earth. Some may disappear; but their place will probably be taken by others. The pangs and terrors of most will very likely be mitigated. But there will ever be the need of the labours of men like ourselves. The dreams of the optimist are worse than useless. Let us, then, note down every fact, however trivial; sift every piece of evidence, however insignificant; and test every theory by the most scrutinising experience; thus furnishing broad and sure bases for greater deductions than even the brilliant discoveries of Jenner, Marshall Hall, and other worthies; deductions which will throw clearer floods of light upon the nature of disease, and therefore upon the treatment of it. It falls to the lot of but few

* To leave a name,
A light, a landmark on the hills of fame;

but we can, at least, hand down to another generation the torch, dimmed by no want of care or zeal, but burning more strongly and brightly in the cause of humanity.

ON INTRAUTERINE INJECTIONS.

By ROBERT BARNES, M.D.,
Obstetric Physician to St. George's Hospital.

THE cases of injection of perchloride of iron to restrain *post partum* flooding, recorded in recent numbers of the BRITISH MEDICAL JOURNAL by Mr. Boddy and Mr. J. C. Clark, together with the comments of Dr. Swayne and Mr. G. F. Hodgson, induce me to offer a few observations upon the subject.

In Mr. Boddy's case, the injection was followed by death. The severity of the hæmorrhage and the reduced state of the patient are attested by the fact that "several large doses of ergot and two injections of cold water into the uterus" produced only a "temporary good effect". Under such conditions, reflex action failing, the resort to styptic injection is, in my experience, generally indicated. I cannot doubt that Mr. Boddy was justified in using it in this case. But the mode in which he used it seems to be open to some objection. The instrument employed was an "ordinary enema-syringe"; the styptic consisted of "four ounces of liquor ferri perchloridi fortior to twelve of water. The nurse worked the syringe. . . . The hæmorrhage ceased immediately on the injection of the solution; and, during the first part of the process, the patient made no complaint, and the uterus began to firmly contract. But, during the latter part of the process she began to be uneasy, complained of pains in the belly; then severe cramps of the flexors of the legs occurred; next she gave a shriek, crying out 'Oh my belly'; a general convulsion took place, the skin became blue, the pulse ceased, and she expired. All this took place during the last two or three strokes of the enema-syringe. The uterus was firmly contracted round the injection-tube, some little force being required for its withdrawal."

I do not question the correctness of Mr. Boddy's conclusion "that the injection of the perchloride of iron was the immediate exciting cause of death". But his opinion that "the hæmorrhage could not be the cause, because the injection was used before the loss of blood had begun to affect the nervous system" is at variance with his previous statement "that ergot and injections of cold water failed to induce active uterine contraction". When the reflex function is impaired to the degree indicated by this test, a very serious effect has been produced upon the nervous system, under which it is peculiarly susceptible to the influence of shock. Shock was caused by the iron injection; and from the narrative it may be concluded that it was mainly due to the mode in which the injection was made. Mr. Boddy misunderstood my directions, if he thought that the whole quantity of sixteen ounces must be injected; and the use of an enema-syringe worked by a nurse is no part of my instructions.

At page 472 (*Obstetrical Operations*, second edition) are the following directions: "You have the Higginson's syringe, adapted with an uterine-tube, eight or nine inches long. Into a deep basin or shallow jug pour a mixture of four ounces of the liquor ferri perchloridi fortior of the *British Pharmacopœia* and twelve ounces of water. Pump through the delivery-tube two or three times to expel air, and insure the filling of the apparatus with the fluid before passing the uterine-tube into the uterus. This, guided by the finger of the left hand in the os uteri, should be passed quite up to the fundus. *Then inject slowly and steadily.*"

Without insisting unduly upon the probability that a nurse under exciting circumstances cannot be trusted to pump slowly and steadily,

I must insist that this part of the operation should be done by the surgeon himself, and that an enema-syringe is calculated to pump the fluid into the uterus with unnecessary and even dangerous force. From this risk the Higginson's syringe is comparatively free. The propelling force, even when the ball is firmly compressed, is small.

Further, if the finger guiding the injection-tube be kept in the os uteri, information is given as to the effect produced in checking the bleeding, and the closure of the os upon the tube is obviated. As I have explained in my work on the *Diseases of Women*, when the os uteri is closed, the uterus, contracting concentrically upon fluid contents, tends to drive the fluid along the Fallopian tubes. Dr. Swayne's comment to this effect is perfectly in accordance with observation. It is an imperative condition to preserve patency of the cervix for the outflow of the injected fluid. In the work referred to, and in the third edition of the *Obstetrical Operations*, which will shortly be published, I have discussed with some care the subject of intrauterine injections in the puerperal and non-pregnant woman. In the first work, I have given an example similar to that of Mr. Hodgson of severe collapse, following an ordinary vaginal injection of sulphate of zinc in a non-pregnant woman suffering from prolapse, with patency of the cervix uteri.

Mr. Clark's case is an excellent illustration of the beneficial use of iron-injection in *post partum* flooding. Here again, as in many other cases, it acted after the failure of grasping, ergot, firm pressure on the abdomen, and the injection of cold water. It is not unworthy of remark, that Mr. Clark had previously injected a solution of permanganate of potash. It did no good; although, had the uterus been excitable, the cold might have been expected to act. I have recently been informed by an excellent provincial practitioner that, in a case where previous experience had led him to anticipate flooding, when he had consequently given ergot and used all other means of prophylaxis, hæmorrhage occurring, he injected permanganate solution with apparent advantage. But the uterus relaxed again, filled with blood, and death ensued. He has since trusted to the iron-injection in similar cases, and always successfully. He believes that, had he not been deterred from using it in the case described, the woman would have been saved.

ON THE CAUSE OF DEATH AFTER USING PERCHLORIDE UTERINE INJECTIONS FOR *POST PARTUM* HÆMORRHAGE.

By EDWARD JOHN TILT, M.D.

UNDER the head of "Obstetrical Memoranda", in last week's JOURNAL, Mr. Hodgson of Brighton relates how, while making a vaginal injection, a patient of his passed the tube into the cervix, and thereby caused a solution of zinc to flow from the womb through the Fallopian tubes into the peritoneum, thereby producing what he calls "short-lived peritonitis". I doubt this explanation, unless Mr. Hodgson ascertained that, in this patient, the cervical canal was sufficiently patulous to freely admit the tube of the instrument.

I should not presume to doubt the validity of his explanation, had I not met with half a dozen cases during the last thirty years, in which the use of a vaginal injection was suddenly followed by pelvic symptoms sufficiently acute to suggest peritonitis; symptoms yielding to appropriate treatment in one, two, or three days. In these cases, I had found more or less trouble to introduce the uterine sound, so I cannot suppose that my patients could have possibly passed into the cervix an elastic tube ten times the size of the uterine sound. I should add that, in these cases, the liquid injected was a weak solution of acetate of lead, and that the women had been in the habit of using injections. I submit that a better way of accounting for such cases is to admit that the patients have been awkward, and roughly jammed the extremity of the tube against the sore extremity of the cervix, the concussion being sometimes intensified by the patient, in her fright, pressing the instrument farther in, instead of withdrawing it. Those who so frequently explain the sudden advent of formidable symptoms in disease of the unimpregnated womb, by the passing of a fluid through the Fallopian tubes into the peritoneum, should remember that any surgical treatment of the womb, or even the rough use of the uterine sound, may cause the most formidable pelvic symptoms, and leave traces of pelvic peritonitis even if these symptoms soon abate. They should also bear in mind that Dr. Fontanes has published an account of various experiments in which he found it impossible, by distending the dead womb, to make fluids pass through the Fallopian tubes into the peritoneum. Neither should it be forgotten that the unimpregnated womb has often been injected with various fluids; that the patients have sometimes died and been examined; and that, as far as I am aware, in no case has the fluid in-

jected into the womb been found outside the fimbriated extremities of the Fallopian tubes, except in two cases mentioned in the discussion of my paper on Pelvic Lymphangitis, at the Obstetrical Society of London; one by Mr. Ross Jordan of Birmingham, the other by Dr. Falfrey—cases which have not been published, I believe. It would be singularly illogical to let these occasional untoward results of using injections weigh against their great value in the treatment of diseases of the sexual organs; the more so as these accidents can be prevented by telling the patients to use a flexible tube, and by showing them how to bend it, and how to introduce it into the vagina so that the nozzle of the tube may not run any risk of touching the os uteri.

Dr. Swayne of Bristol has lately explained a death that occurred after the injection of a solution of perchloride of iron into the womb to check *post partum* hæmorrhage by supposing that the solution had passed into the peritoneum. I am not aware that this explanation is warranted by the finding of the perchloride outside the fimbria in similar cases when the bodies have been opened. During the last few years, in the Paris hospitals, a solution of carbolic acid has been often injected into the womb soon after parturition. Many of these patients have died and been examined; but it was not found that the carbolic acid had passed through the Fallopian tubes into the peritoneum. I do not, therefore, think the fear of such an occurrence should bar the use of Dr. Barnes's method of checking incoercible *post partum* hæmorrhage; but I think it would be advisable to use tincture of iodine instead of the perchloride of iron, for reasons that I have given elsewhere.

A CASE OF GENERAL EXFOLIATIVE DERMATITIS (PITYRIASIS RUBRA), ACCOMPANIED WITH FEVER AND GENERAL PROSTRATION.

By EDWARD I. SPARKS, M.A., M.B. (Oxon.), M.R.C.P.,
Physician for Diseases of the Skin in Charing Cross Hospital, etc.

THE report in the BRITISH MEDICAL JOURNAL of March 13th, 1875, page 359, of a case of pityriasis rubra exhibited to the Glasgow Pathological and Clinical Society by Dr. Gairdner, has induced me to publish an account of a case in which the temperature was also elevated, which was under my care in 1873, and to which I had previously been unable to find a parallel. The history is as follows.

M. A. D., aged 48, was admitted into Charing Cross Hospital, under my care, on August 9th, 1873. She was brought in a cab, and was too ill to walk. All that could be discovered about her previous history was, that she had for some years been subject to rheumatic attacks. She was in Guy's Hospital twelve years ago with rheumatic fever, and, five years ago, was laid up with another attack for nearly five months. She had had eight living children, the youngest now four years old. Her husband was a strong healthy man. She had lived at Woolwich several years; but, two months ago (June 13th), she moved to New Cross, and had not been well since. She had ailed all the year, and had pains in her elbows and knees, and her joints had been swollen sometimes, but not so much as to prevent her from getting about. Her skin had been for some time rough and dry, but without scaldiness, until about two months ago, when it became somewhat redder than natural, and inclined to peel in the bends of the elbows and in the axillæ. About a month ago, her hands were rough and scaly, and she believed that the redness and roughness of her body became much worse about a week before her admission. For some time, she had slept badly, and been thirsty and scarcely able to satisfy her thirst. Her bowels had been much confined; her appetite had been bad for some time. The remainder of the history will be given *verbatim* from the daily notes.

State on Admission, August 9th.—She complains of pains in her knees and shoulders on movement; but the joints are not swollen nor tender. Tongue very white on the dorsum, with red edges. Pulse, 120; temperature, 102.5 deg. Fahr. (4 P.M.). The most striking thing about her is the condition of her skin. There is a diffused redness of the chest and arms; but the legs are less affected, except the inner parts of the thighs, which are of a very deep red colour, and at first sight suggest the idea of scarlet fever. The skin is at the same time considerably thickened and dry, especially below the clavicles and over the front of the chest, and there is a large amount of scaly desquamation about the popliteal spaces, outer sides of the hips, both shoulders, and the front of the chest. The face is unaffected, except that there is a slight patch of redness inclined to scale on the left of the nose. The hands, to the tips of the fingers, are red, dry, and shiny, and there is desquamation in the flexures of the finger-joints. There are three or four flat pustules, of the size of small peas, over the lower end of the sternum. The patient is very weak, and unable to sit up.

right. Her heart and lungs are perfectly healthy. Bowels confined. Ordered a saline mixture (one ounce) every four hours, and spoon diet.

August 11th. The skin is in much the same state as on the 9th, but perhaps a little less red. Morning temperature, 101 deg. Fahr.; and the evening, 102.5 deg. Fahr.; pulse, 120; tongue dry. She is very thirsty, and is continually wanting to drink. She sleeps very badly. The abdomen is not tender. She still complains of pains in the shoulders when she moves.

August 12th.—The evening temperature to-day reached 102.6 deg. (its highest point), and her urine contained a trace of albumen. Her lungs and heart were again carefully examined, and found healthy.

August 13th. The skin is peeling freely; the redness is decidedly less. The urine is passed involuntarily. Pulse, 116, full and soft, very weak; lips dry; tongue fairly moist; no sore-throat.

August 14th. The temperature is still high; it has not been below 101 deg. Pulse, 120; tongue dry and brownish; but her general aspect is somewhat improved. She rambled a good deal last night. The abdomen is not tender anywhere; there is no tympanites, no enlargement of the spleen. The bowels are very confined. She was ordered to have an enema of warm water, and to omit the saline mixture; to have six ounces of wine, and a draught containing four grains of sulphate of quinine every six hours. The skin is less red, but just as scaly. The pustules on the sternum have died away. A curious appearance was noticed at this time on her tongue, for the description of which I am indebted to the notes of my friend and colleague Dr. Bruce, then medical registrar. He says: "On the left border, about one inch from the tip, is a very peculiar group of white bodies. They are in three masses; one is single and circular in outline, and smallest; the second and third apparently compound (each of two), and more irregular. In colour they are almost pure white; they are distinctly raised above the general surface, and so appear as boldly defined tubercles of about the size of a split pea. They are firm and resisting to the finger, and are not to be removed by scraping. No other similar tubercles on the mucous membrane of the mouth are to be seen. They are somewhat painful."

August 16th. Temperature at 2 P.M., 101.2 deg. She seems decidedly better. She can turn on her side, and has not passed her urine under her since yesterday. She is quite sensible, and has slept much better the last two nights. The skin over the chest is still pale red, dry, and desquamating. The back is nearly free from scaldiness, except over the sacrum and buttocks. She has been for several days on a water-mattress, in consequence of a tendency to bed-sores.

August 19th. The skin of the legs is now only dry and rough, thickened and parchment-like, and there is only slight desquamation in the popliteal spaces; the greatest amount of scaldiness occurring about the hips. The whole of the trunk and arms are dry and thickened. Desquamation is going on about the axillæ and shoulders. The skin of the face is slightly thickened. The colour of the skin is deepest over the chest; but even there it is much less than when she was admitted. Temperature—morning, 101.2 deg.; evening, 102 deg. During the last three days, a crop of papules and pustules has been coming out on the front and back of the left forearm and on the back of the arm, as well as on the back below the level of the scapula; there are also a few on the face. They begin as slightly raised red elevations about the size of a small pea, and, while some never go beyond this stage, others become converted into flat pustules. There are none on the right arm or on either hand, and they are of the same character as those which she had on the sternum when admitted. The quinine is reduced to two grains three times a day, and the enema is to be repeated, as her bowels are very confined. The skin is to be washed with soap and water every day, and well greased afterwards.

August 21st. Temperature, 100 deg.; pulse, 90; tongue quite moist, but covered with white fur. She still has pains on movement in the shoulders; but the joints are not swollen. The pustules are more numerous to-day on the back and face, but their characters are the same. The skin generally seems more thickened to-day, and there is a good deal of redness and desquamation in the bend of the elbows.

August 22nd. Temperature, 98.6 deg., morning; 100 deg., evening. There are no fresh pustules anywhere except on the face; there are none on the scalp or inside the mouth, and there have been none on the lower extremities. The patient's appetite is better.

From the time when this note was taken, she continued to improve; the pustules dried up, leaving a red stain, without scabbing, and the tongue began to clean and the appetite returned. Desquamation was free over the sacrum in large flakes, and also about the root of the neck, the shoulders and the forearms, and on the latter patches of smooth normal skin began to be visible as the scales fell off.

August 27th. The quinine was discontinued, and she was ordered fifteen minims of tincture of perchloride of iron three times a day.

August 30th. Pulse, 84; temperature, 99 deg. The face is now nearly clear of scales, and there are three or four hard red papules on the brow and cheeks, and one pustule on the brow. The skin of the chest and back, and of the arms above the elbow, as well as that of both legs, is dry and shining, parchment-like and tough to the feel. It is slightly thickened, and, especially on the back and chest, is thrown into creases and wrinkles, the edges of which on the back are reddened, so that it is crossed by raised red lines. There is considerable desquamation, in papery flakes of the size of the finger-nail, on the forearms. The skin of the legs below the knee seems more thickened and wrinkled than before, and desquamation is going on over the back of the toes and the dorsal surface of the feet to a considerable extent. The colour of the skin is deepest in the bends of the elbows. The patient is in rather a stupid state, but is quite sensible if roused. Her temperature is normal, and her appetite improving.

September 4th. The skin of the forearms has almost regained its natural colour. There are a few very thin scales on the palms of her hands. The amount of general desquamation is considerable; so much so, that the nurse talks of the scales in the bed as "a nuisance". The back and front of the chest are dry and wrinkled, "like a hide". The patient can now raise herself in bed and sit up without help, and she is more cheerful. There are still a few indolent pustules and papules on the forehead.

From this time, no special note was taken, as I was away for my autumn holiday; but I was informed that she steadily improved, though desquamation continued very abundantly for some time, so that, as the nurse expressed it when I saw the patient again on October 2nd, "she peeled all over again in the last three weeks". At this date, however, she appeared to have almost entirely recovered, and the notes state that "she eats and sleeps well, and her bowels, which, during her illness, were obstinately confined, are now regular. The skin of her whole body is now normal, and of natural colour and texture, and all thickening has disappeared. Her hair is coming out rather freely, especially in the middle of the scalp. She still has a few stains where the pustules were, on the left forearm; but there is no trace of scars. The patient has taken no medicine except the iron mixture for more than a month." She left the hospital the same day.

On October 14th, she came up again to show herself, looking much fuller in the face and generally more healthy than when she went out. She still felt rather weak, and was easily knocked up by her household work. She complained of "crampy pains" in the right shoulder and arm in the mornings, and of stiffness in the hip-joints, so that she could not stoop well. The skin was quite normal, and entirely free from scaldiness or thickening; but her hair was coming out in large quantities. She volunteered the statement that "she did not remember anything about herself in the first fortnight she was in the hospital". She did not come up again until April 30th, 1874. She had then had no return of the eruption, and was looking healthy and well. As she was suffering from dyspepsia, the result of mental shock caused by the attempted suicide of her husband a few days before, she was transferred to my colleague Dr. Green. In March of the present year, in answer to my inquiries, she wrote me that she had had no return of the skin-affection since she saw me.

REMARKS.—I have called the disease above described exfoliative dermatitis (pityriasis rubra), because that is the only subacute affection of the skin which corresponds with the phenomena observed. It is the only disease in which the whole surface of the body is affected with simultaneous redness and desquamation in flakes. That the disease was not eczema, was proved by the absence throughout of any kind of moist discharge, of crusting, or of pruritic irritation; besides which, as Devergie has pointed out, eczema never involves the whole skin at once. That we had not to deal with one of those cases of general psoriasis which had assumed the aspect of an exfoliative dermatitis such as have been described by three or four observers, is at once clear from the patient's history, as she had never had any of the characteristic patches of psoriasis on the knees and elbows, or on other parts of the body, previously to the general eruption. No two observers have given an exactly similar description of the symptoms of exfoliative dermatitis; and the present case differs in one or two important points from others which I have found recorded. The high temperature and the severity of the general symptoms (dry, brown tongue, mild delirium, and incontinence of urine) made me at first suspect that the skin-affection was not the essential feature of the disease, but that there was some other abnormal process underlying it, and perhaps independent of it. The pains in the joints, however, which at first suggested the presence of rheumatic fever, were found to partake more of the character of chronic rheumatism than of the acute form. There was no implication of the smaller joints, no shifting of the pain from one joint to another; tenderness on pressure was completely absent; nor was there the slightest

swelling in the right shoulder-joint, which was the most painful. Typhoid fever could be excluded, after a few days' observation, by the absence of splenic enlargement, tympanites, and diarrhoea; and no disease could be detected in the other organs of the body after repeated examinations. The course of the disease further showed a close relation between the general symptoms (temperature, pulse, etc.) and the hyperæmia and desquamation of the skin, both appearing to reach their height and to subside *pari passu*. I may also say that the diagnosis of exfoliative dermatitis or pityriasis rubra was acquiesced in by others who saw the case. The most remarkable features in Mrs. D.'s illness were the attendant fever and the extreme prostration in the first two weeks, accompanied by blunted condition of intellect and other nervous symptoms. The maximum temperature did not reach quite as high a point as in Dr. Gairdner's case (103.8 deg. Fahr.); but the morning temperatures were much higher, never falling below 101 deg. for seven successive days after admission; while the evening temperatures ranged from 102.2 to 102.5 deg. from the 7th to the 16th of August. On the 17th, the morning temperature was 100.2 deg., and that in the evening 101.2 deg.; and, on the 18th, there was a further fall, the morning temperature being 99 deg., and the evening 100 deg.; and this range continued pretty uniformly until the 24th, when the evening temperature reached 99.2 to 99.5 deg., with a nearly normal morning temperature, until September 9th, when the thermometer was no longer used.

Dr. Gairdner's is the only other case (but see Postscript) which I have found reported, in which any special mention is made of the temperature in connection with exfoliative dermatitis. Hebra (*Lehrbuch der Hautkrankheiten*, zweite Aufl., 1874, erster Band, s. 399, article Pityriasis Rubra) merely says: "The temperature of the affected skin is somewhat raised." Devergie (*Traité pratique des Maladies de la Peau*, 1857, p. 443) only seems to speak of the patient's own sensations when he says "dans la période d'acuité, le malade brûle dans son lit, il ne peut supporter qu'un drap même en hiver". There can be little doubt that in the chronic cases, such as Hebra and Professor Wilson describe, fever, if present at all, is so extremely slight as to pass unnoticed; in the present case, as in Dr. Gairdner's, this symptom seems attributable to the rapid onset of the inflammation of the skin, for we can understand that an acute interference with the functions of so large an area of skin would be, *à priori*, more likely to be followed by constitutional symptoms than a chronic one; for example, a diffused psoriasis, which, as we know, may be associated with perfect health. I hope that, now attention has been called to this point, all those under whose care any example of this rare disease may come will make as careful observations of the temperature as they are able, and publish the results. In this way, we may be able eventually to deduce the law followed by the fever in exfoliative dermatitis, and to prepare a typical tracing.

I am unable to explain the development of crops of indolent pustules on various parts of the arms and body, unless they were due in some way to obstruction of the ducts of the sebaceous or the sweat-glands by the inflammatory process around them. They have not been noticed, however, by other observers. Those on the face had, in their early stage, a great resemblance to the shotty papules of small-pox; but there the resemblance ceased, for the resulting pustules had no definite duration, were always flat, and non-umbilicated, and dried up without crusting, and there was no relation between their appearance and the general condition of the patient.

I question whether the treatment adopted had much, or any, influence over the disease, except in so far as it tended to maintain the patient's strength. She got quite well without any specific remedy, such as arsenic, with the simple use of tonic remedies; no external application was made to the skin, except soap and water and simple ointment.

POSTSCRIPT.—Since the above was written and ready for publication, my attention has been called by a notice in the *Gazette Hebdomadaire*, No. 12, 1875, to an essay, entitled *Dermatite Exfoliative Generalisée* (Thèse Inaugurale, Paris, 1875), by Dr. E. Percheron, in which nearly all the recorded cases of exfoliative dermatitis, or pityriasis rubra, are collected and commented on in a very careful and lucid manner. To me, Dr. Percheron's essay has a special interest; for in it he describes a case in which a considerable amount of fever existed for several weeks, and the temperature (a chart of which he appends) was accurately taken. It is curious that, like Dr. Gairdner and myself, he was under the impression that his was the only case in which the thermometer had been used. The highest temperature noted was 40.4 deg. cent. (104.7 deg. Fahr.), and there was often a difference of from 2 to 3 deg. cent. (3.6 to 5.4 deg. Fahr.) between the morning and evening temperatures, owing to considerable morning remissions. The trace also shows the existence of short periods of several days characterised by a gradual rise in the evening temperatures, and which corresponded to the presence of complications (endocarditis, bed-sores, etc.); but, as Dr. Percheron re-

marks, there is no indication of a cyclical course, such as we find in pneumonia and the specific fevers.

Dr. Percheron finds, from a view of the literature, that it is not, as Dr. Gairdner seems to think, the exception, but the rule for the nails to be affected. He says the hair and nails are generally lost; the latter are raised by an accumulation of epidermic scales beneath them, so that the finger-tips are surmounted by a kind of coarse shell (*carapace grossière*). I did not observe any alteration of the nails in Mrs. D.'s case, but her hair came out in great quantity towards the end of her attack.

The curious spots which formed beneath her tongue are paralleled, to some extent, by two cases to which Dr. Percheron alludes, in one of which "plaques diphtheroides" occurred on the lips and the mucous membrane of the cheeks; and in the other "the papillæ and tongue seemed quite destroyed, and the surface had a varnished look".

Without entering into any further account of Dr. Percheron's essay, the perusal of which I can strongly recommend to anyone interested in the subject, I will make one observation, in conclusion, on the title which he gives to the disease under consideration, namely "generalised exfoliative dermatitis". Most writers—Devergie who first described it, Hebra, Dr. Tilbury Fox, and others—call it pityriasis rubra, a name which has the advantage of brevity, but which is nevertheless inaccurate. The objection may seem pedantic; but, considering how dermatology is already overlaid with unmeaning terms (lichen, syçosis, herpes, etc.) when new ones have to be coined, it is as well to select a correct title. Pityriasis (*πίτυρις*) implies that the scales thrown off are small like bran; whereas, in "pityriasis rubra", a striking feature is their size and abundance. For this special reason, I agree with Dr. Percheron, that Professor Erasmus Wilson's name "general exfoliative dermatitis", although somewhat long and cumbersome, is preferable for scientific purposes to that of "pityriasis rubra".

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

LONDON HOSPITAL.

FRACIURED PATELLA: ANKYLOSIS OF KNEE-JOINT: SUBCUTANEOUS OPERATION: GOOD RESULT.

(Under the care of Mr. MAUNDER.)

[Reported by Mr. BRAMWELL.]

GEORGE W., aged 33, was admitted into the London Hospital on May 12th, 1875. The patient stated that rather more than three years ago he fell and broke his right patella into three pieces. He was taken to a metropolitan hospital, and remained in bed upwards of three weeks. He was soon discharged, wearing a plaster of Paris bandage. He wore this bandage for some weeks, when it was replaced by a leathern knee-cap. The joint remained stiff ever since this accident. On two other occasions he sustained an injury to this joint, and on both he went into hospital.

Amputation had been suggested, but this not according with the patient's views, he came to the London Hospital for relief.

On admission, the patient was found to walk like a man with a wooden leg, swinging the limb in a half circle as he progressed. The right knee-joint was the seat of fibrous ankylosis; it was extended and stiff. The slightest possible passive flexion of the leg could be made, but not without causing pain. The patella was in three pieces, having been fractured transversely. These fragments seemed to be connected by a fibrous band, which was drawn backwards into the joint. Mr. Maunder believed that the synovial and cartilaginous constituents of the joint had been more or less destroyed, and a false ankylosis had resulted. To overcome this, it was determined to try the effect of forcible flexion.

May 19th. The patient being under the influence of chloroform, Mr. Maunder slowly bent the leg, and the adhesions broke down audibly. There was considerable swelling at once, and ecchymosis soon followed. This attempt having failed, Mr. Maunder determined to try another plan.

June 2nd. The patient being again under the influence of chloroform, the blade of a strong tenotomy-knife was entered just above the inner side of the superior fragment of the patella, and, having been insinuated between this and the femur, was made to divide subcutaneously the fibrous tissue which united the fragments of the patella and their bond

of union on the one hand, with the femur and the fibrous tissue in the recesses of the joint on the other hand. About a dessertspoonful of blood was lost; and, the knife having been withdrawn, the wound was closed, as after tenotomy, by a compress and strapping. The limb was now forcibly bent to a right angle, and then secured in the extended position by a back splint. Ice-bags were applied to the knee.

June 6th. The wound had healed by primary union, and there was very little pain about the knee. The splint was removed, and passive movements were commenced. The patient was desired to move the limb occasionally as he lay in bed.

June 10th. The patient was ordered to get up and to make repeated efforts to extend and flex the leg.

July 20th. The patient had daily exercised his leg, gradually increasing both the angle of flexion and power of extension. When standing, he could raise the foot and bring the leg to an angle of about 107 degrees with the thigh. When he was seated in a chair, no difference could be perceived in the two limbs, as each knee was flexed to an angle of about 95 degrees. On extending the leg, the atrophied quadriceps could be felt, by the hand placed upon it, to contract. The upper patellar fragment could be moved laterally, and could also be felt to move when the patient bent his leg. He walked with a scarcely perceptible halt. He was greatly pleased with the result of the operation, and confident of still further improvement.

In undertaking the operation, Mr. Maunder said that he had very little anxiety with regard to any possible injurious consequences, because it must be remembered that he proposed to introduce a knife and divide certain structures, in the site of a joint it is true, but which joint, with its usual susceptibilities to inflammation, no longer existed. He was uncertain as to the result, and had explained this to the patient. Success had exceeded his anticipation.

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.

DISEASE OF RIGHT KNEE-JOINT: OLD AND RECENT SYNOVIAL MISCHIEF: CHRONIC OSTITIS: ULCERATION OF CARTILAGES: EXCISION: RECOVERY.

(Under the care of Dr. J. WARD COUSINS.)

G. S., AGED 11, six years ago, had an attack of measles. Soon afterwards, his right knee became painful and swollen, and for those symptoms he was admitted to the Royal Portsmouth Hospital. He was re-admitted on May 10th, 1874. His mother then stated that his leg had been much worse for six months. The boy looked pale and delicate, and had recently lost flesh. The leg was useless. The knee was enlarged and tender. It was flexed at an angle of 90 deg., and any attempt to straighten it caused much suffering. The patella was fixed, and tender when pressed against the joint. His nights were often disturbed. The condyles of the femur were much enlarged, and likewise the head of the tibia, but the enlargement of this bone was not so marked.

Excision was performed on May 23rd; and, after the operation, the limb was securely fixed in a Liston's splint. The joint contained a few teaspoonfuls of thin pus. The synovial membrane was universally thickened and vascular, and overlapped the articular surfaces. The adhesions between the bones were readily broken down. The greater part of the cartilages had disappeared, and several worm-eaten spots were visible in them. Some old ulcerations which allowed the probe to pass to soft bone were found at the intercondylar notch and in the outer condyle. The patella was extensively softened; and it was, therefore, entirely removed. About an inch-and-a-half of bone was taken off the femur, and three-quarters of an inch from the head of the tibia. At the time of resection, the cancellous tissue, especially that of the femur, was so soft and fatty that it could be broken down with slight pressure with the finger, and this raised a reasonable doubt as to the possibility of recovery.

Very little constitutional disturbance followed the operation. The process of repair favourably progressed: firm fibrous union was at length established, the swelling of the joint subsided, and the wound healed.

He was discharged on November 24th, 1874, with a very useful limb. August 31st, 1875. The patient continued well, and could walk several miles at a stretch with ease. He still wore a back leather splint. Some movement existed at the joint, and the limb was shortened about three quarters of an inch.

REMARKS.—The case was interesting, because, at the time of resection, the cancellous structure of the bones was soft and unhealthy; still the progress of the case was very satisfactory. Cases have been reported in which the bones presented the same vascular and unfavour-

able appearance, and yet very favourable results were obtained by resection. The free division of the osseous tissues seemed to arrest the inflammatory process within the cancellous structure, and to promote induration and repair. In the treatment of diseases of the knee-joint, it is often an anxious question for the surgeon to decide between amputation and excision. The above case in every respect appeared favourable for the latter procedure. The disease was essentially chronic, with hopeless destruction of the joint, malposition, and fibrous ankylosis; at the same time, the constitutional powers of the patient were tolerably good. He was not worn down with suppuration and irritation. He looked able to bear the shock of the operation, and to submit to the tedious after-treatment, which, under the most favourable conditions, is generally prolonged through many months.

REVIEWS AND NOTICES.

ZOOLOGY FOR STUDENTS. By C. CARTER BLAKE, D.Sc. Daldy, Isbister, and Co. 1875.

THE long solitary reign of Rymer Jones's *Animal Kingdom* has been succeeded by the struggle for existence of a variety of zoological handbooks of very different degrees of merit. The youngest of these, by Dr. CARTER BLAKE, is very modest in its claims, and avowedly intended for mere students only. The book comes out with Professor Owen's *imprimatur*: a fact which will recommend it strongly in the eyes of the majority, though it will evoke no little hostility amongst some of an opposite school. Feeling, as we do, that deference and respect are due to Professor Owen's judgment now, as well as gratitude for his many labours in the past, we avow ourselves as belonging to the former category. The author tells us in his preface: "I have been careful to exclude from a manual intended for the student all unproved facts or problematical classifications"; and, in so doing, we think he has done wisely.

Of the whole book, 228 pages are devoted to the Vertebrata, and 154 to the Invertebrata. In such a space, of course, so vast a subject as the zoology and structure of the lower animals can be treated of in a fragmentary manner only. Nevertheless, the student who reads them carefully will acquire a mass of information, and will find the task a pleasant one, calculated to whet his appetite for the acquisition of more special knowledge than the handbook itself pretends to furnish. The classification adopted by the author is mainly that of Professor Owen, and therefore diverges from that which has become more generally adopted. There are some omissions we see with regret in a work having so many merits. Thus the little group of *Rhinocephala* is passed over in silence. A more serious defect is the omission of an index: a want likely to be specially felt by the student who has not yet formed acquaintance with the zoological terms of the table of contents. For all this, however, we can cordially commend Dr. Blake's *Zoology* as a work containing a mass of useful information conveyed in an agreeable and attractive form.

NEW BOOKS AND NEW EDITIONS.

The Royal London Ophthalmic Hospital Reports for September contain some important papers. Mr. Hulke gives a summary of 192 cases of Astigmatism. Mr. Jonathan Hutchinson's continuation of his report on the Forms of Eye-Disease which occur in connection with rheumatism and Gout contains the results of much careful observation. Some peculiar cases of eye-disease are contributed by Messrs. Swanzy, Henry Wilson, and Priestley Smith. The Curator's Pathological Report, contributed by Mr. Brailey, and the copious Periscope, add to the varied interest of this well-conducted periodical.

A second, revised, and cheaper edition of Dr. LEISHMAN'S *System of Midwifery* (Maclehose, Glasgow) shows that professional appreciation of this handbook has been even more active in exhausting the first issue than could have been expected.

Dr. LEARED'S little monograph on *Imperfect Digestion* (Churchill) has reached its sixth thousand. It is pleasantly written, and, though devoid of striking novelty, there are few who can read it without "getting a wrinkle" likely to be useful.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, NOVEMBER 6TH, 1875.

THE VALUE TO MEDICINE OF EXPERIMENTAL
OBSERVATION.

IN an excellent address delivered at the opening of the session to the students of the Edinburgh Royal Veterinary College, Dr. McKendrick, himself a distinguished worker at the progress of the fundamental processes by which the medical art is advanced, dwelt with emphasis on the importance of experimental investigation. An abstract of his remarks will at this juncture be especially interesting. He pointed out that nearly all the knowledge which we at present possess regarding many of the processes occurring in the living body has been obtained by observation on the lower animals. Without the frog, the pigeon, the rabbit, and the dog, we would have known very little indeed regarding the functions of our own bodies. Observations made on these humbler animals have given us information regarding the functions of almost every organ of the body, and of the muscular and nervous systems. Knowledge of this kind is the foundation of the medical art; without it, we could have no right conception of many of the phenomena of disease. Disease is simply a disturbance of the normal functions of the various tissues and organs which form the body. It is impossible to understand these disturbances until we have ascertained what the normal functions are; and this knowledge has been derived from many of the humbler animals. It may be safely said that nine-tenths of the facts taught in a course of lectures on the physiology of the human being have been thus acquired. So much as regards physiology. He proceeded to inquire how the matter stands with reference to pathology.

He observed that the changes occurring in organs and tissues, visible to the naked eye or by means of the microscope, constitute what is usually known as pathological anatomy. Pathology, again, is the department of medical science which describes the phenomena occurring in living tissues and organs which are the seat of disease. Its province, strictly speaking, is not to tell how the organs look to the naked eye after death, or even what is revealed by the microscope, but to describe the changes in function which produce these appearances which we say are diseased. Pathological anatomy is now a department of knowledge possessing an immense number of well ascertained facts. Many thousands of *post mortem* examinations have been made in our public hospitals by skillful persons and under the eyes of critical observers; and the size, form, naked-eye appearances, and even the microscopical structure of diseased organs, have been carefully recorded. It may, he thinks, be confidently asserted that little more, except with regard to microscopical structure, has to be done in this direction. With regard, however, to the causes of these morbid appearances, and the history of the processes which precede these pathological effects, comparatively little has been ascertained. The human pathologist usually sees the organ after disease has done its worst; but he has rarely any opportunity of watching the processes by which the organ has been impaired or destroyed. Here, of course, he alluded to the graver diseases which tend to destroy life. There are numerous minor ailments, both in man and in the domestic animals, which occupy the attention of practitioners in the daily routine of their professional life. In these, pain

may be relieved or recovery accelerated, but they tend to recovery without the use of any remedies. It is not, therefore, a matter of such importance to investigate these thoroughly. It is true that, in the wards of the public hospital, the patient labouring under a serious malady may have been under the care of a skillful physician who has recorded all the signs and symptoms of the disease; but even he often sees the disease after it has passed into a stage when little can be done, except to alleviate the sufferings of the patient. Regarding the earlier stages of the disease, during which only minute alterations of the tissues are taking place, we know little. The reason of this is quite obvious. Men rarely apply to the physician for assistance until graver diseases have been well established. This is especially true of those who enter our hospitals or infirmaries. Not unfrequently diseases originate without the manifestation of symptoms calculated to arouse feelings of anxiety; consequently the patient does not present himself until morbid changes have occurred which are almost, in the present state of knowledge, beyond the powers of the healing art.

A very slight consideration, he said, will show that a knowledge of the preliminary stages of diseased action is necessary to carry out any mode of treatment by which we may hope absolutely to cure the disease. It is almost impossible to expect this kind of knowledge from observations on the human being in our present state of civilisation. For example, how little do we know regarding the origin of tubercle or of cancer, or of the mode of action of those poisons which produce the various fevers. It is true there is an enormous amount of information regarding each of these scourges of the human race; but the essential nature and properties of the predisposition or virus which causes each are still in the region of dim uncertainty and speculation. While this is the case, so far as remedial treatment is concerned, the efforts of the physician are directed towards the prolongation of life and the relief of suffering.

Our knowledge of the influence of drugs in the treatment of disease is also unsatisfactory. Many alter symptoms and relieve suffering, and so far have a curative effect; but the exact action of any one remedy, more especially in diseased conditions, has by no means been accurately ascertained. It is next to impossible for the practitioner in human medicine to ascertain precisely the action of various remedies. Hereditary predisposition, social influences, and even personal considerations, may often prevent him from arriving at the exact value of any supposed remedy which he may administer. It is impossible for him also to vary the conditions both of the disease and of the remedy without subjecting the patient to discomfort or inconvenience, and consequently of risking his own professional reputation. Dr. McKendrick did not forget that valuable therapeutic inquiries may be made on large numbers of men in as nearly as possible the same conditions; but these must be preceded by careful preliminary researches on animals.

During the last few years, a department of inquiry, termed experimental pathology, has been established in various parts of the Continent. The object is artificially to establish diseased actions, and to observe these under various conditions. By this method, we may hope to obtain an insight into the origin of such diseases as pulmonary consumption, of cancer, and of the various fevers, which destroy in Great Britain alone more than half a million of people annually. Diseases of the same class, more especially those of the latter group, cut off tens of thousands of our domestic animals. Surely it is worth sacrificing many animals, if by this means some knowledge could be attained by which we may arrest the ravages of these fearful maladies. By the mere observance of cases of disease, by the most elaborate *post mortem* and microscopical examinations, little more can be done than to arrive at a knowledge of a physiological explanation of symptoms and of the effects seen after death. Only by careful experimental inquiry, conducted on the same principles as in any other objective science, conjoined with the results arrived at by observations of diseased animals and the facts ascertained by careful *post mortem* examinations, can we hope to gain a knowledge of the cause and earlier stages of these maladies; and only when we have done so can we found any rational

treatment which may either prevent them or quickly arrest their progress.

As an example of the kind of investigations which might be carried on in connection with a veterinary college, Dr. McKendrick alluded to the systematic study of the intimate pathology of the morbid infections now being carried on at the Brown Institute, London, under the superintendence of Professor Burdon Sanderson. This Institution is for the cure of diseased animals, and for the furtherance of any work having this end in view. The results have been embodied in a series of papers, published in the reports of the medical officer of the Privy Council. As is well known, certain diseases are remarkably contagious. No better example of this could be given than what is termed foot-and-mouth disease, now very prevalent in this country. Contagion has always been supposed to consist of matter of some kind or other capable of being communicated through the air or by direct contact. It is evident that the identification of the infective matter peculiar to each contagious disease, and the changes which it effects when introduced into the living body, would be valuable both for the prevention and for the probable cure of the disease.

The first distinct information regarding the identification of contagia was recorded by Dr. Lionel Beale of London so recently as 1865, when he drew attention to the existence in the fluids and tissues of animals which had died of rinderpest, of innumerable minute organic particles. These particles Dr. Burdon Sanderson soon afterwards showed to be the true matters of contagium. He pointed out that the animal juices might be separated from them, and thus rendered non-infective, Professor Chauveau, of the Veterinary School, Lyons (one of the ablest physiologists of the present day), demonstrated the existence of similar particles in vaccine lymph, and showed that on the introduction of these successful vaccination depended. About the same time, Hallier, Professor of Botany in Jena, announced the discovery of numerous varieties of minute organisms in various kinds of disease. The appearance of Hallier's communications excited great attention among men of science, and not a few of his statements have been refuted. The particles discovered in various diseases are found to be living organisms, capable of multiplying with enormous rapidity, and of exciting changes in living tissues. They resemble some of those which are engaged in the ordinary processes of fermentation and putrefaction.

Following up this line of research, Dr. Burdon Sanderson has recently made important contributions to a history of the contagia and morbid processes of diphtheria, erysipelas, relapsing fever, and of the splenic fever (*Milzbrand* of the Germans); while Dr. Klein, the assistant professor at the Brown Institute, has identified and described the effects of the contagium-particles of the *variola ovina* or sheep-pox.

It appears to Dr. McKendrick that these researches indicate a line of inquiry likely to lead to great results. It is work which ought to be prosecuted with all diligence. Every contagious disease among the domestic animals must be thoroughly examined. Where can this be better done than in connection with a veterinary college, provided with proper arrangements for keeping diseased animals, on which both before and after death careful observations may be made? No doubt there are practical difficulties to be met and overcome. Animals suffering from contagious maladies cannot be brought to the building of the College, but it would not be difficult to maintain suitable accommodation for them in an isolated building beyond the confines of the city. Here the investigator might work with all needful appliances. Certainly such a scheme would involve expenditure of money; but it would be well expended by the discovery of facts in the history of disease of the highest practical importance. We can never hope to take efficient action regarding the prevention or the cure of contagious diseases until more is known regarding their intimate nature. When accurate knowledge of this kind has been arrived at, precautions may be taken which will effectually stamp out the disease. Many will probably consider such a state of matters to be Utopian, but the march of scientific discovery is bringing us daily nearer to it.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

ON Monday was held the adjourned meeting of Governors of the Queen's Hospital, Birmingham, to which we last week referred, to consider a report which recommended the abolition of the privileged system of admissions.

Mr. Muntz proposed an amendment, which, however, admitted substantially the principles of free admission, and registration fee, and inquiry, but was directed especially towards modifying objections on the last point. It proposed "that this inquiry shall be regulated on the basis of the principle usually adopted by the sick societies of working men to ascertain the fitness of members to receive club benefit"; also, "that printed forms of 'certificates of fitness' be supplied in any number to any subscriber who may desire to recommend cases for consideration".

Certain gentlemen, who would probably have advocated other views, and certainly objected to the "registration fee", were held by the Chairman (in accordance with the custom of the House of Commons) to be disqualified from speaking on this occasion, as they had already spoken at the previous meeting; some differences of opinion were expressed, though but little supported by the meeting, which was a large and influential one. Mr. Bunce, Chairman of the Subcommittee, ably summarised the general principles involved in the change, and the following resolution was ultimately carried by a majority in the ratio of at least 4 to 1.

"That this meeting approves generally of the recommendations of the Subcommittee's report, and instructs the Committee to consider and decide on the mode and time in and at which such recommendation shall be carried out."

It may be worth while to quote a portion of the report thus approved—an able document. In order to equalise income and expenditure, it propounds three alternatives.

"1. The closing of some of the wards.

"2. Raising the price of the tickets.

"3. The abolition of the privileged system, the cessation of notes, and the working of the hospital on the basis of free admission—regulated solely by the needs and fitness of the applicants, and by the means at the disposal of the charity. This is the method which the Committee unanimously recommend for adoption by the Board, and for submission to a special meeting of Governors. They propose, in conjunction with it, the adoption, in the case of all patients excepting accidents and urgent cases, of a registration fee of one shilling for each patient, such fee to be renewed at the expiration of a month. A registration fee is already required at the Children's Hospital and the Women's Hospital, where it is found to work satisfactorily, and the Committee believe that, at the Queen's Hospital, it will constitute a large and steady source of income.

"If this plan be adopted, it will be necessary to arrange a careful and efficient system of inquiry into the fitness of patients, in order to prevent the hospital from being, on the one hand, burdened by those who should properly be treated at the parish infirmary, and, on the other, to prevent imposition by those who can afford to pay for medical attendance, and who, therefore, are not fit objects of benevolence.

"It may also be necessary to deal with the number of new admissions by fixing a limit for each day, excepting as regards accidents and urgent cases. This is a subject which should be referred to the Medical Board for their consideration and advice.

"The Committee do not think it necessary in this report to discuss the arguments in favour of a free system. They may, however, point out that it has two great merits: it gives absolute freedom to the medical staff in deciding as to the medical fitness of applicants for relief; and, at the same time, it gives absolute power of control to the Board as to the number of patients to be received, and the amount of expenditure to be incurred. Under a ticket system, no such power exists, because it is part of the implied contract with the subscribers that, accidents, etc., excepted, applicants presenting tickets shall have priority over those who apply without them.

"The Committee do not believe that any loss of income from subscriptions at all worth considering will result from the adoption of the free system; and whatever loss will be temporarily incurred will, in their opinion, be very largely exceeded by the produce of the registration fee. They also believe that it will be possible to appeal with con-

AUTOPSY.—The rhubarb had extended along about a third of the small intestine. There was no unusual redness of the mucous membrane, and there was only slight evidence of purgative action.

Experiment 17. Dog weighing 13.4 kilogrammes.—The artificial respiration, which was deficient at the commencement of this experiment, was improved at *a*, Fig. 17. This was followed by an increase in the secretion of short duration: 5 cc. of the same infusion of rhubarb as that used in the previous experiment were injected into the duodenum three times in succession (*r*, *r'*, *r''*, Fig. 17). The biliary secretion was augmented within half-an-hour after each injection.

AUTOPSY.—The rhubarb had extended along four-fifths of the small intestine. There was no unusual redness of the mucous membrane. The portion of intestine through which the rhubarb had extended contained 120 cc. of a thick yellowish fluid: there was, therefore, decided evidence of purgative action.

Experiment 18. Dog weighing 22.7 kilogrammes.—In this experiment, it was proposed to test the action of rhubarb upon the exhausted liver. The artificial respiration being defective at the commencement of the experiment, was improved at *a*, Fig. 18. At the middle of the fourth hour, a remarkable increase of secretion took place, and lasted for two hours. The cause of this was not apparent until it was observed that a warm July sun shone full upon the abdomen, from the middle of the fourth

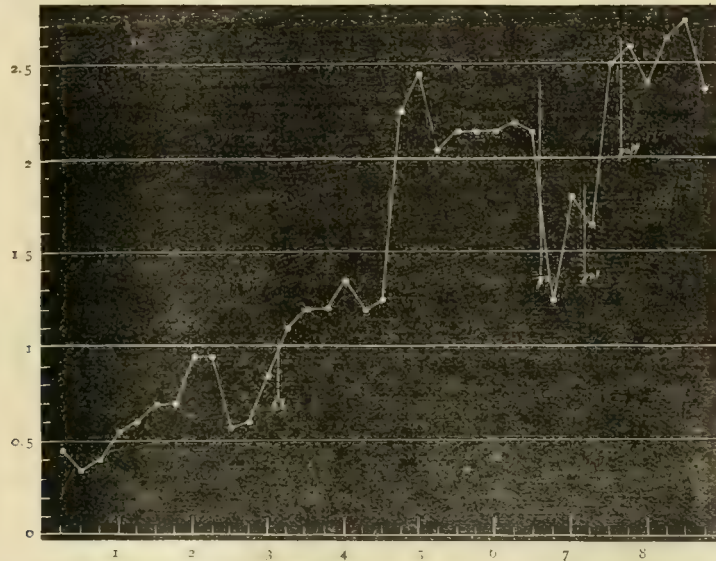


Fig. 18.—Secretion of bile in a dog that had fasted eighteen hours. Respiration improved at *a*. 1 cc. of the concentrated infusion of rhubarb injected into duodenum at *r*; and 5 cc. at *r'* and *r''*.

to the middle of the sixth hours of the experiment: the increase in the secretion was, therefore, probably due to a rise of temperature: 5 cc. of the concentrated infusion of rhubarb, given in the previous experiment, were injected into the duodenum three times in succession (*r*, *r'*, *r''*), and, notwithstanding the very high secretion shortly beforehand, the rhubarb increased it still further.

AUTOPSY.—The rhubarb had extended along two-thirds of the small intestine. There was no unusual vascularity of the mucous membrane. The upper portion of the intestine contained 87 cc. of a yellowish-green liquid, whereas only 20 cc. of water had been injected. Purgation had, therefore, evidently been produced.

In these three experiments, it appears that an infusion of seventeen grains of rhubarb was given nine times, and on one occasion twice this quantity, and that none of these doses ever failed to increase the biliary secretion within half-an-hour after administration. The amount of water given was so trivial that its effect may be entirely disregarded. It is to be noted, that the excitement of the liver produced by rhubarb was accompanied by far less intestinal irritation than was the case with podophylline and aloes.

Composition of the Bile before and after Rhubarb.—The bile secreted before and after the administration of rhubarb in all the three experiments was analysed. Tables VI, VII, and VIII show the result.

TABLE VI.—*Rhubarb.*

Experiment 16.	Before.	After the second dose.	At the close of the Experiment.
Water	88.80	89.28	88.98
Bile-acids, pigments, cholesterine, and fat	9.60	9.60	9.60
Mucus	1.00	0.60	0.80
Ash	0.60	0.52	0.62
	100.00	100.00	100.00
Velocity of bile-secretion per half-hour	1.9 cc.	2.95 cc.	2.55 cc.

From the foregoing analysis, it appears that the percentage amount of the special biliary matter was not diminished by the action of rhubarb, although there was so great an increase in the amount of bile. This result, which corresponds to that observed in the case of podophylline, is confirmed by the following analyses.

TABLE VII.—*Rhubarb.*

Experiment 17.	Before.	After.
Water	85.47	86.23
Bile-acids, pigments, cholesterine, fat	11.59	11.03
Mucus	1.87	1.72
Ash	1.07	1.02
	100.00	100.00
Velocity of bile-secretion per half-hour	1.45 cc.	3.95 cc.

TABLE VIII.—*Rhubarb.*

Experiment 18.	Before.	After.
Water	85.35	85.52
Bile-acids, pigments, cholesterine, fat	12.07	11.98
Mucus	1.53	1.49
Ash	1.05	1.01
	100.00	100.00
Velocity of bile-secretion per half-hour	4.32 cc.	5.37 cc.

It therefore appears that rhubarb, like podophylline, excites the liver to secrete bile, having a composition similar to that secreted under normal conditions.

Results of Experiments with Rhubarb.—1. An infusion of seventeen grains of Indian rhubarb, when placed in the duodenum, never failed to increase the secretion of bile. 2. The bile, although secreted in increased quantity, had the composition of normal bile as regards the biliary constituents proper. 3. The doses which so powerfully excited the liver had in one case no marked purgative effect, but in other two cases the purgative effect was considerable.

ACTION OF SENNA.

Senna excites the liver, but not so powerfully as rhubarb. The ordinary infusion of senna of the *British Pharmacopœia* was prepared and concentrated until 5 cc. contained the active part of forty-five grains of senna: a small dose for a man.

Experiment 19. Dog weighing 22.3 kilogrammes.—5 cc. of the concentrated infusion of senna, prepared as above, were injected into the duodenum twice in succession (*s* and *s'*, Fig. 19). After the second dose the secretion rose rapidly, but, unhappily, the animal died from asphyxia, owing to the accidental closure of the expiration aperture of the bellows-tube.

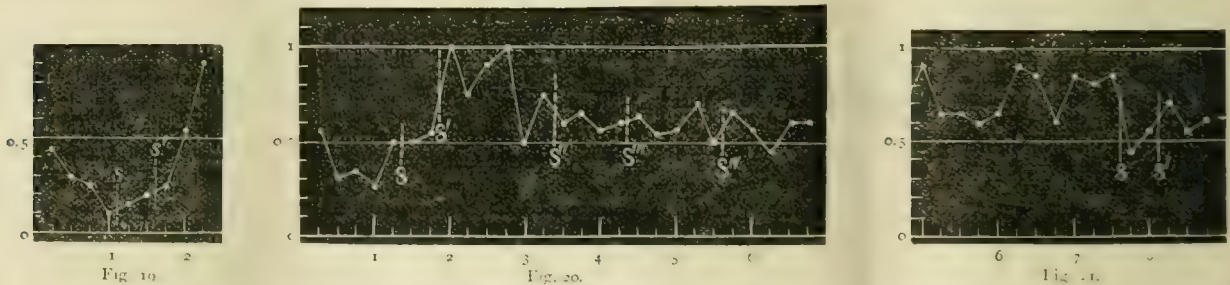


Fig. 19.—Secretion of bile in a dog that had fasted fifteen hours. 5 cc. concentrated infusion of senna injected into duodenum at *s* and *s'*.

Fig. 20.—Secretion of bile in a dog that had fasted nineteen hours. 5 cc. concentrated infusion of senna injected into duodenum at *s*, *s'*, *s''*, *s'''*, *siv*.

Fig. 21.—Secretion of bile in a dog that had fasted eighteen hours. 7 cc. concentrated infusion of senna injected into duodenum at *s* and *s'*.

Experiment 20. Dog weighing 8 kilogrammes.—5 cc. of the above-mentioned concentrated infusion of senna were injected into the duodenum five times in succession (*s*, *s'*, *s''*, *s'''*, *siv*, Fig. 20). The secretion of bile rose rapidly after the second dose, as in the previous experiment, but it soon fell again; and the third, fourth, and fifth doses did not increase it.

AUTOPSY.—The senna had extended along three-fourths of the small intestine, which contained 80 cc. of liquid. Seeing that the amount of fluid injected was 25 cc., considerable purgation had been produced. There was a considerable increase in the vascularity of the duodenal mucous membrane, but elsewhere there was no unusual redness.

It appears from this experiment that, although the amount of senna given was sufficient to distinctly act on the intestine, it did not produce any very marked effect on the liver. The purgative effect was greater than in the case of rhubarb, in Experiment 16, but less than in Experiments 17 and 18. However, the effect on the liver was less than in all the rhubarb experiments.

Experiment 21. Dog weighing 5 kilogrammes.—In this case it was proposed to test the action of senna on the exhausted liver. Accordingly, at the middle of the eighth hour of an experiment on an animal that had fasted for the usual period of eighteen hours, 7 cc. of a concentrated infusion, containing the active part of ninety grains of senna, were injected into the duodenum twice in succession (*s* and *s'*, Fig. 21). No noteworthy effect on the biliary secretion ensued.

AUTOPSY.—The senna had extended half-way along the small intestine, which contained about an ounce of viscous fluid, thus affording slight evidence of purgative action.

Röhrig, from some experiments with rhubarb and senna (*lib. cit.*, p. 253), concluded that in their activity as cholagogues they stand much on the same level; and, although far inferior in power to aloes, their infusions are nevertheless more powerful than water. The defective method of experiment employed by him is the probable cause of this statement. The estimate of the action of senna is indeed correct; but the foregoing experiments show that rhubarb holds a much more important rank as a hepatic stimulant than senna, and this is still further seen when we compare the analysis of the bile before and after senna with that of the bile before and after rhubarb.

TABLE IX.—Composition of Bile before and after Senna.

Experiment 20.	Before.	After.
Water	90.63	91.31
Bile-acids, pigments, cholesterine, fat	7.20	6.75
Mucus	1.30	1.20
Ash	0.87	0.74
	100.00	100.00
Velocity of secretion per half-hour	0.82 cc.	1.136 cc.

It appears from this analysis, and from the velocity of secretion, that although senna causes the liver to excrete more biliary matter, its power is far below that of rhubarb.

Results of the Experiments with Senna.—1. Senna is a hepatic stimulant of feeble power. 2. It renders the bile more watery.

ACTION OF COLCHICUM.

Colchicum has been recommended as a cholagogue in cases of gout, but its action on the liver has not hitherto been tested by direct experiment.

Experiment 22. Dog weighing 23.5 kilogrammes.—Sixty grains of the aqueous extract of colchicum of the *British Phar-*

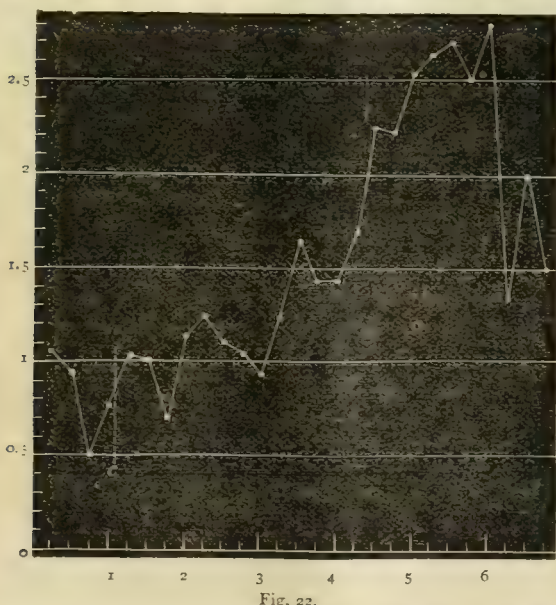


Fig. 22.

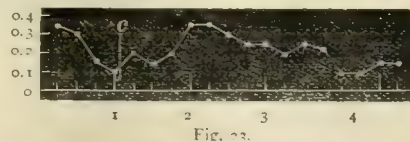


Fig. 23.

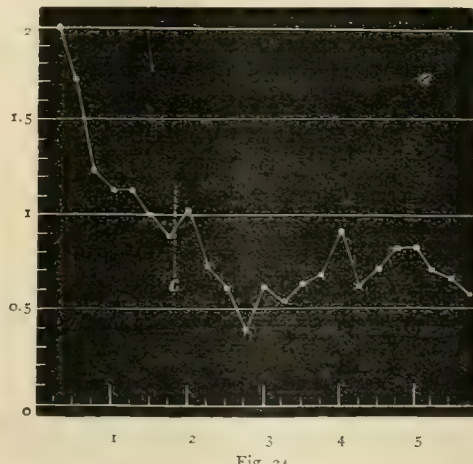


Fig. 24.

Fig. 22.—Secretion of bile in a dog that had fasted sixteen hours. Sixty grains of aqueous extract of colchicum in 10 cc. of water injected into duodenum at *c*.

Fig. 23.—Secretion of bile in a dog that had fasted twenty hours. Twenty grains of aqueous extract of colchicum in 5 cc. of water injected into duodenum at *c*.

Fig. 24.—Secretion of bile in a dog fed on liver fifteen hours before the experiment began, but food was still found in the stomach at the close. Forty grains of aqueous extract of colchicum in 8 cc. of water injected into duodenum at *c*.

macoparia in 10 cc. of water were injected into the duodenum (c, Fig. 22). In an hour the biliary secretion began to increase, and five hours after the injection it was nearly five times more than before the drug was given. The secretion then fell, and just at the close of the experiment a large quantity of liquid fæces was discharged.

AUTOPSY.—There was great vascularity of the upper four-fifths of the mucous membrane of the small intestine. The vascularity of the duodenum was intense. The mucous membrane of the large intestine was also unusually vascular. The gastric mucous membrane was pale. There was evidence of considerable hydrocatharsis in the small intestine. The large intestine was empty, owing to the recent discharge of fæcal matter.

Experiment 23. A somewhat weak dog, weighing 7 *kilogrammes*.—Twenty grains of aqueous extract of colchicum in 5 cc. of water were injected into the duodenum (c, Fig. 23). The effect on the biliary secretion was evident at the end of an hour; but throughout the whole experiment the animal secreted only a small quantity of bile, and by the fifth hour the pulse was so weak that the experiment was closed.

AUTOPSY. There was somewhat increased vascularity of the mucous membrane in the upper fourth of the small intestine. There was no distinct evidence of purgative action.

Experiment 24. Dog weighing 9.9 *kilogrammes*.—Forty grains of aqueous extract of colchicum in 8 cc. of water were injected into the duodenum (c, Fig. 24). The effect on the bile secretion was not very marked; for, although, after the lapse of an hour, the falling of the secretion was arrested, it did not, under the influence of the colchicum, rise to any very notable height. At the close of the experiment, a quantity of partially digested food was found in the stomach. On this account, it was impossible to be sure whether or not a small amount of fluid in the upper part of the small intestine was due to cathartic action. The mucous membrane of the duodenum was intensely red.

Experiment 25. Dog weighing 23.6 *kilogrammes*.—Sixty grains of aqueous extract of colchicum in 10 cc. of water were injected into the duodenum (c, Fig. 25). Although the biliary flow thereafter varied much, a decided increase was evident an hour and a half after the administration of the drug. The increase lasted about four hours, after which the secretion gradually fell.

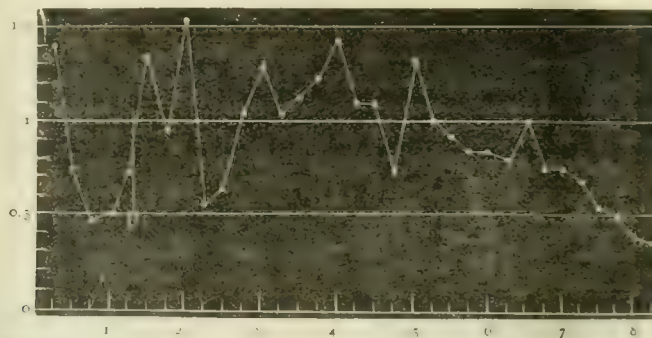


Fig. 25.—Secretion of bile in a dog that had fasted eighteen hours. Sixty grains of aqueous extract of colchicum in 10 cc. of water injected into duodenum at c.

AUTOPSY.—There was increased vascularity of the mucous membrane of the upper three-fourths of the small intestine. The whole small intestine contained evidence of powerful cathartic action.

These experiments show that the aqueous extract of colchicum in large doses increases the biliary secretion.

TABLE X.—Composition of the Bile before and after Colchicum.

Experiment 25.	Before.	After.
Water	88.434	90.63
Organic Bile-solids	10.616	8.75
Ash	0.950	0.62
	100.00	100.00
Velocity of bile-secretion per half-hour	1.2 cc.	2.24 cc.

It appears from the above analysis, that colchicum rendered the bile more watery; nevertheless, owing to the increased velocity of secretion, more biliary matter is excreted by the liver under its influence.

Results of Experiments with Colchicum.—1. Sixty grains of the aqueous extract of colchicum powerfully excited the liver, and produced hydrocatharsis; forty, and even twenty grains, also increased the biliary secretion, though less powerfully. 2. Colchicum, while it increases the amount of biliary matter excreted by the liver, renders the bile more watery.

fidence to the public on the simple basis of the work done by the hospital, and to appeal especially to those persons who might be disposed to give small subscriptions, but who do not now give them, because such subscriptions carry no privileges.

"Even as it is, the hospital is, to a very great extent, a free institution, so that it endures all the restraints and satisfies many of the claims of that system, without possessing the control insured by the complete adoption of it.

"At the end of 1873, there were 135 patients in the wards. During the year 1874, 1,683 were admitted; and of these, 345 were admitted by ticket, and 1,338 were admitted free. Of the out-patients—a total of 15,259—8,169 were admitted by ticket, and 5,535 were admitted free, to which must be added 773 in the obstetric department, 330 ophthalmic cases, and 459 dental cases; thus making the free admissions 7,090, or nearly one-half, in the out-patient department, while in the in-patient department they were two-thirds.

"That the majority of the Governors do not very keenly value the advantages of the ticket system is evident from a return laid before the Committee, which shows that 141 life Governors, entitled to 186 in-patient notes, used only 74 of them; and that 728 subscribers of £2 2s. and upwards, entitled to 844 in-patient notes, used only 271, in addition to which 181 in-patient notes were exchanged for out-patient tickets.

"The Committee believe, therefore, that the assent of the Governors would readily be given to the proposed change; they believe that it would increase the confidence of the public in the charity; that it would tend to the reception only of the cases fittest for relief; that it would give a larger means of income, and a power of control now deficient; and, therefore, they recommend it for general adoption."

The collection of Hospital Sunday (October 31st), which was made this year in due course for the benefit of the Queen's Hospital, and which amounted to the very handsome sum of £3,200, may fairly be taken as evidence of the interest and of the confidence of the public in the abovementioned scheme and in the present management of the hospital.

THE Medical Society of London will henceforth meet on Mondays at 8.30, instead of 8 o'clock.

A MEETING of the Executive Committee of the General Medical Council was held last week. The business was principally of a private character, without any special public interest.

DR. GUSSENBAUER, the able clinical assistant of Professor Billroth in Vienna, has been appointed Professor of Clinical Surgery in the University of Liège in Belgium.

AT the meeting of the British Medical Association at Brighton in August 1876, the Address in Medicine will be delivered by Dr. Sieveking; the Address in Surgery, by Mr. Wheelhouse of Leeds; and the Address in Public Health (State Medicine), by Dr. Carpenter of Croydon.

It is announced that Dr. Irving, who recently stated that he had been stabbed on the road between Thirsk and Kilvington, was found dead in his bed, having died suddenly. An inquest was held; when it appeared from the evidence that he had committed suicide by taking prussic acid.

MR. H. R. FOX BOURNE, it is announced, is about to publish a new life of the illustrious John Locke, to which will be prefixed a curious collection of medical memoirs and notes, showing how extensive were his studies and practice as a physician, and connecting him as a joint-worker with Thomas Sydenham, "the father of English medicine".

DR. PARKES will give the Harveian Address at the Royal College of Physicians, London, next year; Dr. Habershon, the Croonian Lectures; Dr. Dickinson, the Lumleian Lectures; Dr. Shepherd, the Goulstonian Lectures. We hope to be able, by arrangement with the lecturers, to publish these lectures *in extenso* in the pages of the BRITISH MEDICAL JOURNAL.

WE shall also have the pleasure of publishing Dr. Sibson's forthcoming lectures on Bright's Disease and its Treatment at the Harveian Society of London.

MR. MACNAMARA has been elected Surgeon to the Westminster Hospital by a large majority of votes. Looking to the high reputation which Mr. Macnamara earned in India, and the favour with which his surgical writings have been considered in this country, we cannot but consider this a very judicious choice, and one which is likely to add to the reputation and usefulness of the Westminster Hospital. A good deal of warmth had been imparted to the contest, owing to the fact that Mr. Cooke, the senior assistant-surgeon of Westminster Hospital, resented Mr. Macnamara's candidature as an infringement on his natural right of promotion. No such natural right, however, exists: many precedents in the best hospitals exist for importing external surgeons and physicians of capacity to fill vacancies, where it is thought that their assistance will give desirable *prestige* and value to the hospital service. Recent instances at University College, St. George's, and St. Thomas's Hospitals are quite in point. Conceiving himself otherwise affronted by the action of his colleagues, Mr. Cooke has shown a very unnecessary and undesirable vigour in the discussion of purely personal topics. He must be warned that such a course rarely fails to affect injuriously the reputation of any one who employs it. He has at a comparatively early age achieved an honourable position as the senior assistant-surgeon at a great metropolitan hospital; he has many years before him in which to vindicate his professional fitness for yet higher appointments; and he has also, we believe, the capacity to do it. The first element in such success is deference to the feelings of colleagues, and the power and the will to work harmoniously with them. There is, in the record of the proceedings, some evidence of a tendency of the staff to form a "cabal" against one member; and of this we think Mr. Cooke, as the probable victim, had reason to complain. The policy of suppressing and professionally tabooing some one member of their body, with whom they do not agree, is a very objectionable one; and we are not altogether sorry that Mr. Cooke's very vigorous proceedings have shown the staff that individuals have rights and claims which must not be lightly disregarded. Each party has, we hope, received a lesson; and we trust that all will now work in amity and for the good of the hospital and school; and that we shall hear no more of discord at the Westminster, or of any attempt to get rid of individuals by the action of cliques.

THE Royal Commission to inquire into the practice of subjecting live animals to experiments for scientific purposes have again held daily meetings during the week. Nearly all the more eminent persons having cognisance of the subject from any point of view have now been examined, and we believe that the meetings of the Commission for the collection of evidence will shortly come to an end.

IS COWPOX PREVENTIVE OF FOOT-AND-MOUTH DISEASE?

M. FELIZET of Elbeuf has observed that, while epidemics of cowpox and foot-and-mouth disease have been prevalent simultaneously in his vicinity, no beast affected with cowpox has, up to this date, been attacked by foot-and-mouth disease. Following out this observation, M. Felizet has during the last four months vaccinated thirty oxen, and not one of the twenty-five beasts effectually inoculated has, up to this date, shown any sign of foot-and-mouth disease, although living among animals largely infected with it. M. Felizet communicates this observation to the *Recueil de Médecine Vétérinaire*. The editor, M. Bouley, suggests with reason that, in order to ascertain if cowpox is preservative against foot-and-mouth disease, the experiment should be reversed, and animals which have had the foot-and-mouth disease should be vaccinated; for foot-and-mouth disease ought, conversely, to be prophylactic of cowpox. If a beast which has had foot-and-mouth be still vaccinable, the question is settled against M. Felizet. It is certainly a question very well worth investigation.

A MEDICAL NIGHT SERVICE.

PARIS will probably soon have a medical night-service, from which possibly we in this country may take a hint, and such as we have already described as existing at St. Petersburg. The Pr^{ef}et de Police, in his memorandum on the budget of 1876, expresses himself thus.

"*Public Succour.*—We arrive at a question often discussed: that of medical succour to persons attacked during the night by sudden accidents or ailments. The cases in which the absence of this help has been fatal to sick persons are happily rare; but one painful occurrence (often, moreover, exaggerated) suffices to give rise to recriminations against the medical body, which, however, taken as a whole, holds cheaply enough its repose, its health, and, yet more so, its interests. The strength of medical men is not without limits, and their fatiguing and perilous profession makes repose at certain hours an imperious necessity for them. On the other hand, the exaggerated disquietudes of patients and their families often lead to useless summonses. Finally, more than once, under pretext of an urgent visit, physicians have been led into ambushes, not to speak of ungrateful and dishonest clients, who refuse the legitimate remuneration due to the service rendered."

To remove these inconveniences for the benefit of the public, the Pr^{ef}et of Police recommends the following arrangements, which will necessitate the inscription on the budget of the city of a sum of only 10,000 francs (£400). In every quarter, medical men will be invited to declare whether they are disposed to attend to requisitions addressed to them in the night. The names and domiciles of those who may be willing will be inscribed on an official list posted in the police-stations of the quarter. The person who may require a doctor will go to the neighbouring police-station, and will select from the list the practitioner whose aid he desires. A police-officer from the station will accompany him to the house of the medical man, will follow the latter to the house of the patient, and will, when the visit is over, reconduct him home. On leaving him, he will give him an order on the police treasury for ten francs. According to the pecuniary position of the patient, the administration will reclaim the fees paid, or will assume the cost of them.

ARSENICAL POISONING BY A GREEN LAMP-SHADE.

At a recent meeting of the Medical Society in Bonn, Professor Zuntz brought forward a case, in which a gentleman who had for several years been subject to migraine observed that for some days he had headache late in the evening, which, without interfering with sleep, continued in the morning, and was accompanied with loss of appetite and *malaise*. In about a fortnight, the symptoms became more severe, and lasted the whole day. At the same time, similar symptoms, but much less severe, appeared in two students who sat at the same table in the evening. The green shade of the petroleum lamp was suspected to be the cause of the mischief; and, on chemical examination, it was found to contain arsenic. Its use being discontinued, all the symptoms ceased in the three individuals. It was evident that the heat of the lamp had set free the arsenic; and the greater severity of the symptoms in the first mentioned individual was due to the fact that he was near-sighted, and therefore sat nearer the lamp than the others did. Professor Zuntz said that he himself was some years affected in a similar way, though less severely, while using a green lamp-shade, in which arsenic was found.

MANCHESTER PROVIDENT DISPENSARY ASSOCIATION.

IN another part of our columns will be found a letter from Mr. O'Hanlon, the Honorary Secretary of the Manchester Provident Dispensary Association, in answer to some statements made by a correspondent on October 16th. It was said that friendly societies had been admitted to the benefits of the provident dispensaries, and that this was "a direct violation of the terms of the original scheme". Mr. O'Hanlon replies, that the resolution to admit friendly societies was passed with strict regularity, after full consideration; and that the medical men connected with the Association had ample opportunities of expressing their opinions upon it. Again: our correspondent stated that the dispensaries offered "a miserable remuneration for an eminently extensive and unceasing expenditure of time and labour". But Mr. O'Han-

lon shows that the work done under the Association is at least as well paid as any practice among the same class of people, and that the rules laid down are such as to minimise the doctor's labour. The whole of Mr. O'Hanlon's letter is well worthy of the careful study of all who are interested in this important question, and the temperate reply which he makes to our correspondent cannot fail to carry great weight. The experiment which is being made at Manchester is the most important practical reform which has been introduced into our profession for many a year. That it cannot be carried out without exciting some opposition and disturbing some vested interests, we can well believe; but it seems to us so certain that, when once fully established, it will be beneficial both for the working classes and also for the medical profession, that we wish it all success.

THE BRITISH MEDICAL DEFENCE ASSOCIATION.

THE East London Branch of the British Medical Defence Association recovered last week another penalty of £20 and costs from a person who was illegally practising at the East End of London. As in the two recent cases in which like penalties were recovered, so in the present instance, registered medical men endeavoured to shield the defendant in his practice. The Provisional Committee have decided to call a general meeting of medical practitioners for the 30th instant. The time and place of meeting will be duly advertised in the medical papers.

THE UNIVERSITY OF VIENNA.

FROM a report on the condition of the University of Vienna just issued by a committee of professors appointed in the beginning of the present year, it appears that the teaching staff in the faculty of medicine consists of 111 persons; viz., 22 ordinary and 32 extraordinary professors, and 57 private teachers (*privat-docenten*). Of the 111 individuals, 24 are Bohemians, 18 Viennese, 17 Hungarians, 9 Moravians, 6 Lower Austrians, etc. The only two professors who are foreigners are Brücke and Billoth. It is indeed true that Professor Meynert is a native of Dresden, Dr. Monti of Italy, and Dr. Lott of Göttingen; but all three came to Austria in very early life, and studied and obtained their diplomas in Vienna. The report refers to the abundance of clinical material, and points out that in the means of teaching, the University is behind the demands of the times, and recommends the building of the honorary institutions for teaching of the several departments of science. There are in the four German Universities of Austria five chairs of Anatomy, and four each of Physiology, Pharmacology, Pathological Anatomy, and Forensic Medicine; and the aspirant to each of these chairs—who, moreover, gets very little practice—is obliged to abandon his pursuit after some years, or to wait fifteen or twenty years for a professorship, unless he find a post in some foreign state. The reporters recommend: 1. An increase of the German medical professorships in Austria; 2. An increase in the number of assistantships in the various institutions, so that the persons appointed may be able to remain longer and do more work. They further observe that, "If so great a medical faculty as that of Vienna is to keep its place in the first rank, it must keep the whole nation in view so as to be able to place the best men in the first places when vacancies occur. Such men can be found and obtained, if the government and the faculties consult together and treat each other with mutual confidence." The statistical view of the attendance of students shows a steady decrease since 1870, while from 1865 to 1870 there was as steady an increase. From 708 students in the winter of 1864-65, the numbers rose to 1,470 in 1869-70, and then fell to 877 in the winter session 1874-75. The number of first year medical students also shows a falling off; being 155 in 1864-65, 246 in 1869-70, and 133 in 1874-75. In the medical faculty, 171 students have stipends amounting to about 35,000 florins (about £3,645 yearly). In the winter session 1873-74, 44 students applied to be relieved from payment of college fees; these were entirely remitted to 13, and half to 11. In 1874-75, of 40 applications, 20 were successful.

THE "CORNWALL" OUTBREAK OF TYPHOID.

A FEW more cases of typhoid have occurred during the week on board the *Cornwall*—making, we believe, a total of 89 out of 235 boys in the ship. Of these, 37 have been sent to the *Rhin* at Gravesend; 9 remain at Purfleet, being unfit for removal at present; 9 others are at St. Bartholomew's; and 24 out of the original 34 are still under treatment at the Seamen's Hospital, Greenwich, the remainder having been discharged convalescent. The virulence of the outbreak has greatly diminished; and strong hope is entertained that it will be speedily brought under control. We understand that a considerable proportion of the cases in the *Rhin* are of a very mild description; and that some of those at St. Bartholomew's are of a doubtful kind. At the Seamen's Hospital, as we before stated, the majority have been of a pronounced, and several of a severe, character.

THE BROWN INSTITUTION.

It is most gratifying to hear that some arrangement is likely to be made between the Royal Agricultural Society and the Brown Institution for investigating the very serious diseases to which cattle are now subject in almost all the agricultural districts of England. Of course, such an inquiry could not be placed in better hands than those of the Professor Superintendent of the Brown Institution, who did so much for the investigation of the cattle-plague.

PUBLIC HEALTH APPOINTMENTS.

THE faith of the public and of the legislature in the desire of local boards to elect their medical officers of health from a pure regard to their special qualifications, will not be strengthened by what has just occurred in the parish of St. Giles. The board has recently lost the services of a most able and accomplished sanitarian, Dr. Ross, whose premature and sudden death is the subject of universal regret. The filling of his office unquestionably involved a serious responsibility, for it is hardly possible to name a district which stands in greater need of the services of an experienced and highly informed sanitarian at the present juncture than the parish of St. Giles. There were many highly qualified candidates, men who had won their spurs in public sanitary work, graduates of the great universities, and others of eminence. From the list of thirty candidates the board has selected a gentleman of whom, however capable he may be otherwise, it can only be said in this relation that his special recommendation appears to have been, that he was a member of the local board which elected him. Occurrences such as this are to be regretted, not only for the sake of those specially concerned, but for the example which they set.

METROPOLITAN MORTUARIES.

EVERY week makes more evident the necessity for the provision in all the districts of London of mortuaries to which may be removed from the crowded habitations of the poor the dead who have fallen victims to infectious disease. We are glad to learn that the Strand Board of Works will not quietly acquiesce in the recent extraordinary decision of the Metropolitan Board of Works declining to entertain the consideration of measures necessary for facilitating the erection of such mortuaries. A notice to the following effect has been placed on the minutes of the Strand Board by Dr. Rogers, for the next meeting:—That this Board has learned with astonishment and regret that the Metropolitan Board of Works has declined to accede to the prayer of a memorial of this Board on the question of the establishment of mortuaries in the metropolis, although the Chairman of the Works Committee of the Metropolitan Board, in bringing up the report on the memorial, acknowledged the validity of the facts set forth in the memorial indicating the necessity of such mortuaries, and the difficulty experienced by district boards in providing them. That the Strand Board do, therefore, direct their clerk to write to the President of the Local Government Board, requesting an interview, with the object of pressing upon him the desirability of introducing a Government measure next session or the provision of such accommodation in the metropolis. In the

event of this resolution being adopted, that the clerk be directed to write to Sir C. Russell, M.P., and Mr. W. H. Smith, M.P., members for the borough of Westminster, asking them to attend, and to introduce and support the views of the deputation. There is, we hope, little doubt that this resolution will be carried and acted upon. This is unquestionably a subject which may desirably occupy the early attention of the Government.

A PHYSIOLOGICAL TEST OF CHEMICAL PROPERTIES.

AT a meeting of the Californian Academy of Sciences, August 2nd, reported in *Nature*, Dr. Blake referred to some physiological experiments he had performed to determine the molecular relations of beryllium. Neither the specific heat of the metal, nor the vapour density of its chloride had been determined, and chemists were undecided as to whether it was a bivalent or quadrivalent element. Its physiological reactions, when introduced directly into the blood of living animals, so closely resembled those of alumina, that there can be no doubt that it belongs to the same isomorphous group, and that it is a quadrivalent element. There is also a close relation between the intensity of physiological action of this substance and its atomic weight. When compared with aluminium, as in a series of experiments conducted expressly to determine this point, the quantities of Be_2O_3 , under the form of sulphate, required to kill a rabbit weighing 2,270 grammes, when injected into the veins in divided doses (three injections), were .059, .061, .050; the quantities of Al_2O_3 , introduced into the veins under the same conditions, were .021, .023, .022; and the smallest quantity required to kill, when introduced in one injection, was, of Al_2O_3 , .016, and of Be_2O_3 , .038, showing a marked increase in the physiological action of these substances with an increase in the atomic weights, the atomic weight of aluminium being 27.4, and of beryllium 14. This, the author believes, is the first occasion on which physiological reactions have been used to determine the chemical properties of a substance. Should, however, the carbon compounds follow the same laws in their physiological reactions as the inorganic elements, living matter must offer a valuable reagent in investigating their molecular properties. The interesting experiments of Messrs. McKendrick and Dewar, published in the twenty-third volume of the *Proceedings of the Royal Society*, would indicate that such may be the case, as these gentlemen found, in experimenting with the compounds of the chinolin and pyridin groups, that the physiological actions became stronger in going from the lower to the higher members of the series. They also observed that in the pyridin group, when the base became doubled by condensation, not only was the physiological action more intense, but its character was completely altered, agreeing in these respects with the salts of iron with which analogous changes take place, both in the character and intensity of their physiological action, when the molecule is doubled in the change from ferrous to ferric salts, as Dr. Blake has shown in the *Journal of Anatomy and Physiology*, vol. iii, p. 24.

ST. ANDREW'S GRADUATES' ASSOCIATION.

UNDER this name, the St. Andrew's Medical Graduates' Association has been reconstituted. The Council of the Association is actively engaged in promoting the re-election of Dr. Richardson, F.R.S., as assessor of General Council in the University Court of St. Andrew's; an office which has fallen vacant by the resignation of Patrick Anderson, Esq. Dr. Paul is Honorary Treasurer, and Dr. Sedgwick Honorary Secretary. Dr. A. Watson Wemyss has also been a candidate for some weeks for the appointment. He grounds his candidature on "the great interest he entertains for the prosperity of the University, together with the experience he acquired as one of the patrons of the Edinburgh University before the passing of the late Parliamentary Act, and on his connection with the Medical School of Edinburgh". On these grounds, and on the ground that "he has at all times done what lay in his power to aid the medical profession and for the advantage of the public", he claims the support of the graduates in England as well as in Scotland.

THE HOSPITAL FOR SICK CHILDREN.

THE new building in Great Ormond Street is now nearly ready for the reception of patients, and will be opened at the end of the third week of this present month. In consequence of the increased accommodation for patients which will be afforded, it has been found necessary to appoint a third physician; and we are pleased to learn that Dr. Cheadle, who has held the office of assistant physician for eight years, has been promoted to the higher post. The vacancy thus created in the junior staff has been filled by the appointment of Dr. Lees, a graduate of Cambridge, where he was a scholar of Trinity College, and a wrangler in the mathematical tripos of his year.

ACCIDENTAL POISONING BY A DISINFECTANT.

THE great increase of these cases of late will inevitably necessitate some legislative enactment compelling the manufacturers to put disinfectants up in bottles of such a distinctive shape and colour as to at once proclaim the nature of their contents, or the invention and use of some disinfectants devoid of poisonous qualities. The last death reported from swallowing carbolic acid was at Bolton, where a char-woman drank some carbolic acid in the cellar of a hotel where she was employed, thinking it was some other liquid. Shortly afterwards, she became unconscious, and died in half an hour.

WORCESTER INFIRMARY.

AT a special meeting of the governors held at the Infirmary on October 29th, Alderman Webb proposed, as an addition to rule 59: "But in case of the unavoidable absence of the honorary medical officer and of his substitute, the house-surgeon shall attend to the patients of such absent officer, and shall record the fact of his having done so in a book to be laid before the Executive Committee; and the honorary medical officer, when called upon to do so, shall furnish such explanations, not in violation of professional confidence, as the Executive Committee may require." Sir E. Lechmere seconded the motion, which, he said, would promote that cordial co-operation between the governing body and the medical staff which was essential to the successful working of the institution. In answer to the Rev. W. Thorne, Dr. Strange said the medical staff would cordially accept the motion. The motion was carried unanimously. We understand that the present staff acquiesce in the resolution, which accords with the practice of most of the metropolitan hospitals.

HOSPITAL SUNDAY FUND.

ON Monday, the 1st inst., a meeting of the Council of the Hospital Sunday Fund was held at the Mansion House, for the purpose of receiving and considering the Report and awards of the Committee of Distribution for the present year. The report stated that the applications had been 13 in excess of those which were accepted in 1874. The Committee recommended that £22,945 12s. 11d. should be granted to 70 general and special hospitals and 4 institutions, and £2,531 os. 2d. to 47 dispensaries. Two claims were altogether disallowed; and in 27 instances, conferences were held with the managers of charities before the awards were finally fixed. These conferences arose out of the conditions under which the Committee worked this year; for they were not empowered to give any institution less than its arithmetical basis without previously holding a conference with the managing body in regard to the points upon which it was open to criticism. This is an excellent rule. It gives managers an opportunity of pleading their own cause; and it gives the Committee a means of bringing into the light any circumstances which they consider unsatisfactory. The result of the conferences this year was that, in some cases, the arithmetical basis was allowed to stand; but in others, and they formed the majority, it was reduced. Some discussion arose at the meeting as to whether the awards of the Distribution Committee were to be regarded as final, or whether the hospitals and dispensaries should have a right of appeal to the Council. If (as appears to have been the case) no draft of the report was circulated among the members of the Council, and if there was no appeal to them, the Council were only called together to dis-

charge a perfunctory duty, to pass a vote of confidence in the discretion and justice of the Committee. After some conversation upon this subject, the report was adopted, with the understanding that, in future, documents of such importance should be circulated among the members of Council a week before the meeting. The awards were then ordered to be paid. We observe that, as last year, the London Hospital heads the list, with a grant of £2,404 13s. 4d., followed by St. George's with £2,175, and the Middlesex with £1,741 1s. 8d. These sums are considerably smaller than those which were received by the same institutions last year.

CONTUMELIOUSNESS OF THE CORONER'S COURT.

WE are able to give a very simple and satisfactory explanation of the paragraph with the above heading which appeared in the daily papers on Thursday. So far from having "refused to give evidence", Mr. Collyns, the house-surgeon referred to, never received the slightest intimation that an inquest was about to be held. The coroner's beadle left a verbal message in the morning with the hall-porter, who unfortunately forgot to deliver it; and Mr. Collyns heard nothing on the subject until he returned from his walk, and found that, to use Mr. Samuel Weller's expression, he had been accused of "making the coroner's court contemptible". The beadle's remarks, also, about the fees, were altogether untrue; it is perfectly well understood that no fees can be claimed in the case of a patient who dies in the hospital; and although the law has always been considered somewhat hard on hospital officers, it has long been quietly acquiesced in, and there has been no recent agitation respecting it.

THE CONJOINT SCHEME.

THERE appears to be a probability that the negotiations which have so long delayed the settlement of the conjoint scheme are at length likely to end in a successful realisation of the wishes of its supporters. It will be remembered that the members of the Apothecaries' Company were prevented, by the peculiarities incidental to their Act of Parliament, from giving their adhesion to the scheme; but by their Enabling Act, passed last session, they are now no longer prevented from a general acceptance of the terms. Another serious difficulty in the completion of the scheme arose with respect to the appointment of examiners, notably of those in surgery. We are pleased, therefore, to know that the President of the Royal College of Surgeons has now invited the various medical examining boards in England to send each two delegates to a conference. The College of Physicians, at a meeting of the Fellows last week, appointed the President, Sir George Burrows, and the Registrar, Dr. Pitman, to represent its interests at such conference. The University of Oxford has appointed Drs. Acland and Rolleston to be its delegates; and the University of London has nominated Drs. Quain and Storrar for the same purpose. We have not yet heard who will represent the other examining bodies. It may be hoped, therefore, that, before the commencement of another session, this valuable project will be in complete operation.

WINTER QUARTERS IN ALGIERS.

A CORRESPONDENT writes to us from Algiers:—"I send you a few short remarks upon Algiers, with regard to the means of transit there, and the accommodation there, in the hope that it may prove of service, as I find that there are many who look upon Algiers as a sort of *Ultima Thule*. There are two excellent lines of steamers which cross twice a week from Marseilles, the average passage being thirty-six hours. These steamers are most comfortably fitted up, and the table is good. They carry the mails, which come with the utmost regularity, so that one can reckon on having the London newspapers of Friday in Algiers on Monday morning. The hotel accommodation is very fair (if not with all the comforts of home), quite equal to that of the hotels of Cannes, Nice, and Mentone. There are three large hotels in the town, which are all pretty equal in merit, though they differ slightly in prices. The latter naturally depend on the size and exposure of the rooms required. Speaking roughly, a

single man can live very well at the rate of from ten shillings a day upwards. For those who do not care to reside in the town, there is a small hotel kept by a Maltese out in the suburb of Mustapha Supérieur. In this latter quarter are the numerous villas of the richer citizens of Algiers; who, however, only reside in them during the summer, and let them during the winter season, at prices varying from 2,000 to 8,000 francs (£80-£320) for the season of six months, which may be reckoned as lasting from the beginning of November till the end of April; though up to the end of May it is quite possible to remain at Algiers, and, indeed, it is more enjoyable and beautiful at that time than at any other. The weather here during the last fortnight has been most perfect: a cloudless sky and warm sun, but still with enough air to prevent the heat being oppressive. The thermometer has marked 75 deg. in the shade pretty constantly every day, and has never fallen below 58 deg. at night. Of course, it will not remain so high long; but at present it shows no sign of change. The country is much in want of rain, hardly any having fallen since April. Very few English have as yet arrived, except those who own villas and reside here every winter. One of the objections hitherto with regard to Algiers has been the absence of any resident English physician here. This deficiency has been remedied this winter, as Dr. W. Thomson of Edinburgh has now settled here. With regard to the climate of Algiers, I hope to be able to send you a few notes on it from time to time."

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE usual general meeting of the Society was held on the evening of Friday, the 29th ult., by the liberality of the Fellows of the Royal Medical and Chirurgical Society, in their library. Sir George Burrows, Bart., President, occupied the chair. The attendance was very limited; out of more than four hundred members, only ten were present to support the President; and, of the ten, four were officers of the Society. Although it may be very complimentary to the officers, as showing how satisfied the members are with the management, still it would be more gratifying to them if the members would attend at the general meetings, and manifest an interest in the working of the Society. From the half-yearly statement of accounts read, it appeared that, during the last half year, 58 widows and 20 children had received grants amounting in the aggregate to £1,236 10s.; the expenses had been £130 11s. 5d., which sum included the cost of the circular sent in the beginning of the year to all members of the profession eligible to become members of the Society. The total receipts of the half year available for payments had been £1,598 10s., and the payments £1,367 1s., leaving a balance of more than £200. A legacy of £1,500, less duty, had been received from the executors of Alexander Barker, Esq., and a legacy of £100, less duty, from the executors of T. F. Chilver, Esq., a member of the Society; and another legacy of £1,000, duty free, was reported from the Rev. H. C. Morgan. Sir Thomas Watson, Bart., and Dr. Billing, were elected vice-presidents in the places of Dr. Latham and Sir Charles Locock, Bart., both deceased; and Mr. Streatfield was elected a director in the place of the late Mr. Sercombe. It was announced at the meeting that the directors intended, out of the balance in hand, to make a present at Christmas of £4 to each widow, £1 10s. to each child, and £4 to each of the recipients from the Copeland Fund. The meeting closed, at about half-past nine o'clock, by a vote of thanks to the President for his attendance at the meeting. It is much to be regretted that the members of the profession who are eligible for membership, and who comprise the four thousand medical men resident in the London Postal District and the extra-metropolitan parts of Middlesex, do not more fully avail themselves of the very great advantages which this society offers. For an annual subscription of two guineas only, a young man may secure to his wife and children after his death a sufficiency to keep the wolf from the door. But, as appeals are being continually made to assist the widows and orphans of our professional brethren who are in absolute penury, nothing but reckless improvidence can explain that state

of things, for which the above society offers a complete remedy. The funded property standing in the names of the trustees—the results of legacies, donations, etc.—amounts to more than £70,000, the interest on which (about £2,500) is added to the yearly subscriptions of the members (about £500 only) for distribution to the widows and orphans of deceased members. Last year, £2,930 were thus distributed in grants, whilst the working expenses did not exceed £250. The Secretary, Mr. J. B. Blackett, attends at the office, 53, Berners Street, every Wednesday and Friday, from 4 to 5 P.M., from whom all required information, with prospectuses, etc., may be obtained.

SCOTLAND.

DR. JOHN WYLLIE has been elected Pathologist to the Royal Infirmary, Edinburgh, *vice* Dr. Bell Pettigrew, appointed to the Chair of Anatomy and Medicine at St. Andrew's.

THE mortality of Glasgow has now remained for a month at the low rate of twenty-one. We believe that there is no record of such a long continuance of such a low rate in Glasgow; but, with the coming-in of cold weather, doubtless there will soon be a rise.

THE winter session commenced in Edinburgh on Monday last, on which day inaugural addresses were delivered, the one at the University by Sir Alexander Grant to the whole body of students; that at the extra-academical school by Mr. Chiene. We publish it on another page.

GLASGOW MEDICAL SCHOOL.

THE medical classes in connection with the Glasgow University were opened on the 27th, when the usual opening address was delivered by Professor Buchanan. It was devoted principally to advice to the students as to their general conduct in and out of the lecture room. Regular and constant attendance on the lectures was advocated as the best means of utilising the opportunities afforded of acquiring knowledge. The session at the Andersonian University commenced on the day following, Dr. Alexander Lindsay being the lecturer.

POISONING BY GAS.

ANOTHER poisoning by gas has occurred recently. A tinsmith, named McLeish, and his two children, who all occupied the same room in a small house in Arbroath, were found suffocated in bed on Friday morning; the children were dead, but the man was still living, though unconscious. The room in which they were sleeping was about twelve feet square; the gas had escaped from the lead-hole of the meter, the temporary plug which had been inserted into it having fallen out. Every effort was made by the medical men of the town, several of whom saw McLeish, to restore him to consciousness, but without avail; and he died in the course of the following night.

UNIVERSITY AFFAIRS.

AT the meeting of the Edinburgh University Court on the 27th ult., besides other business, the court adhered to their objections to the alterations proposed by the University of Aberdeen with reference to additional examiners in medicine. It was also proposed some time since, by the same University, that Greek should be made an optional subject for the M.D. degree; that the examination in clinical surgery should be taken at the end of the third year of study, with some further changes. The Edinburgh court had already sent in answers objecting to these changes; and now a committee was appointed to prepare and send in a further answer. Mr. Andrew Wilson was recognised as a lecturer on natural history in Edinburgh, whose lectures should qualify for graduation in medicine in the University; and Mr. Millen Coughtrey, Professor of Anatomy, University of Otago, New Zealand, was recognised as a lecturer whose lectures should qualify for graduation in medicine in the University.

FAREWELL DINNER TO PROFESSOR DEWAR.

ON the 27th, Professor James Dewar was entertained at dinner by a number of scientific and other friends on the occasion of his leaving Edinburgh to fill the Jacksonian chair of Natural Philosophy in the University of Cambridge. Professor Crum Brown was in the chair; and was supported by Sir Robert Christison, Professor Tait, Dr. Matthews Duncan, Dr. McKendrick, and many others. In proposing Professor Dewar's health, the chairman referred to his distinguished career as a student, as assistant to Dr. Lyon Playfair, and as an original investigator in chemical science. The toast was very heartily responded to; and, after a number of other toasts, the evening was brought to a close by wishing Professor Dewar every success in his new position.

THE WATER-SUPPLY OF EDINBURGH.

FROM the usual returns of the state of the reservoirs, we learn that Loganlea remains empty; and that all the others have fallen more or less, except Chutterdean, which has risen a foot and a half; the stock of water now stands at 29,700,000 cubic feet, as compared with 56,000,000 at the corresponding date last year; the delivery continues at the rate of 26.24 gallons a head to a population of 275,000. The rainfall at Glencorse has been considerably less than at a corresponding period of last year or the year before.

THE NEW BLIND ASYLUM AT EDINBURGH.

THE directors of the Royal Blind Asylum held their first meeting in the new institution, Craigmillar Park, on the 26th. The chairman, Mr. Cowan, M.P., delivered a short address of congratulation on the progress and extent of the new buildings. The new asylum, he said, was built rather in excess of the present demands; but there was little doubt it would soon be fully occupied. He hoped that now that the new buildings were completed, the increase in the subscriptions of the friends of the blind would be considerable; but was glad to learn that the directors, in undertaking this important work, had not seriously burdened the existing funds of the asylum.

SCARLET FEVER IN EDINBURGH.

SCARLET fever continues to be very prevalent in Edinburgh; and, again, all the deaths from zymotic diseases (seventeen in number) which occurred last week in the city are, with one exception, due to that cause—the one excepted case being due to whooping-cough; apart from this, the general health is very good, the mortality, in spite of the number of scarlet fever cases, being at the rate of twenty in the thousand.

IRELAND.

DEATH OF DR. JOHN HAMILTON.

AFTER a painful illness of some months' duration, this gentleman died at his residence in Dublin on last Tuesday, in his sixty-seventh year. Dr. Hamilton was a surgeon of considerable eminence, and was much esteemed for his skill, combined with great courtesy and kindness of disposition. He was Vice-President of the Royal College of Surgeons in Ireland, Visiting Surgeon to Swift's Hospital for the Insane, Surgeon in Ordinary to the Queen, Ex-President of the Pathological Society of Dublin, and late Surgeon to the Richmond Hospital, etc. Dr. Hamilton had a very extensive practice, and was the author of some works on syphilitic affections.

DUBLIN MAIN DRAINAGE.

AT a special meeting of the Corporation of Dublin held on the 27th ult., the draft of a Bill intended to amend the Dublin Main Drainage Act was brought forward, and it was determined that the necessary steps should be taken for bringing forward the Bill in the ensuing session. During the sitting, a communication was read from the Lords of the Treasury, stating that they were not at present in a position to answer the question of the additional security that will be required for

the advances to be made for the main drainage of Dublin; and, looking to the large amount of public money which will be advanced for this work, as well as to the amount contributed out of public moneys, they consider it an imperative necessity that the Government should be represented on the Committee charged with the responsibility of carrying out the works, by two officers who should possess the same right to vote and take part in the proceedings of the Drainage Committee as every other member of that board. This decision of the Treasury has met with the approval of the citizens, but has much annoyed the Corporation and their friends.

HOW DISEASES ARE SPREAD.

IN the police-court at Cork, last week, one of the parties interested in a case was a woman who had a child in her arms affected with scarlatina, and almost in a dying condition. No punishment was awarded by the presiding magistrate, who merely made an order that no woman with a child in her arms should be admitted into the court for the future. The police-court at the time was densely crowded; and, consequently, it is to be expected that more than one of those present at the time may be affected with a disease so terribly infectious as scarlatina, by the imprudence of this woman.

AN ATTEMPTED NUISANCE.

THE Corporation of Dublin attempted lately to construct in one of the leading thoroughfares of Dublin a public latrine, and a few days since had several men excavating, as a preliminary for its formation, a hole in the centre of the street in question, which was to contain a trough fifteen feet long, to be filled with water, and the contents removed day by day. The residents bitterly complained of this unjust procedure, deteriorating as it would the value of property in the immediate vicinity, and also in a sanitary point of view against a nuisance of the kind. They waited upon the Corporation, who, at a meeting held last Monday, finally determined to stop the objectionable measure. One of the local papers in commenting upon this matter, said that they would dissuade the residents from having recourse to anything like Lynch law; yet it would be a fitting judgment to shut up the whole Committee who attempted to perpetuate the job in their own cloaca for twenty-four hours: a sentence from which few outside the Corporation would dissent.

SURGICAL SOCIETY OF IRELAND.

AT a meeting held on the 1st inst., the following gentlemen were selected by ballot members of Council for the ensuing year. *President:* Edward Hamilton. *Vice-President:* John Hamilton. *Council:* Charles Benson, M. Harry Stapleton, Philip Bevan, Richard G. Butcher, James H. Wharton, George H. Porter, J. Stannus Hughes, William Colles, Albert Walsh, Rawdon Macnamara, John Barker, Joliffe Tufnell, John Morgan, Edward D. Mapother, Henry Gray Croly, Edward H. Bennett, Anthony Corley, William Stokes, Benjamin F. McDowell. *Honorary Secretaries:* Benjamin Wills Richardson, Humphrey Minchin.

ULSTER EYE, EAR, AND THROAT HOSPITAL, BELFAST.

THIS institution was opened in January 1871, and since then, the annual number of patients receiving benefit from it has increased so rapidly that the expenditure has been in excess of the income, and there is at present a debt on the hospital to the amount of £500. The building itself was a gift of the late Mr. Edward Benn, but the cost of the inmates has incurred this debt, the managers of the charity being desirous to meet the many pressing claims of the poor that applied for treatment. It is intended to raise the sum required by a bazaar, which will be held in a few months, and we trust its success will meet with the expectations of its promoters. The Ladies' Committee, in a circular lately issued, drew attention to the fact that fully one half of the patients in the intern department have been country people, but on looking over the reports, they find an entire absence of support from the country gentry.

MEDICAL ADVERTISING.

At the last meeting of the Bath and Bristol Branch of the British Medical Association, it was proposed by Dr. FALCONER, President of Council of the Association, seconded by Mr. MASON, and carried unanimously—

“That, in the opinion of this meeting, the practice of advertising medical books in the public newspapers is derogatory to the interests and dignity of the profession, and likely to occasion social inconvenience and annoyance, and should, therefore, be discontinued.”

At the annual meeting of the Shropshire Ethical Branch, on October 27th, the following resolution was adopted unanimously—

“That, in the opinion of the meeting, the system of advocating medical works in non-medical papers, is highly objectionable, and incompatible with the honour and dignity of the profession; alike reprehensible, also, is the practice of giving written testimony in favour of articles of commerce, and tacitly or otherwise sanctioning its publication.”

OUTBREAK OF TYPHOID FEVER IN THE
UPPINGHAM SCHOOL.

WE regret to put upon record particulars of a severe outbreak of fever at this school, under circumstances indicating grave neglect of ordinary sanitary precautions.

In June last, Lord Hawke's son was seized with enteric fever, and died on the 24th, just at the commencement of the Midsummer holidays. This was the first case. On September 21st, another boy was seized in the same house, that of the master of the lower school. This house is quite isolated, and has no connection with the general drainage of Uppingham; in fact, all the sewage is received into cesspits, which are close to the water-supply. The cisterns supplying the water-closets in nearly all the houses (infected) are supplied with lifts, from which the dormitories are supplied with water. After this second case, the fever began and continued to spread in other masters' houses in the neighbourhood of the lower school, the boys of which were in the habit of going from one house to another to take their lessons. Up to October 13th, no intimation whatever was given to the sanitary authority of the state of things within the masters' houses, and the fact that enteric fever was prevailing in these houses was quite accidentally made known in Liverpool on the 9th, where many parents of the boys reside. These parents met and telegraphed on the 11th to the head-master, and demanded that an investigation should be made. He replied, that action had been taken. It was, however, by the evening post of the 11th. The sanitary authority were made aware of this fever on October 13th; then there were over thirty boys down, and some expected to die. There have been no fresh cases. There have, however, been five deaths in all—four since October 13th, and one in June last.

The medical officer has been eight days investigating the cause of the outbreak, and has no doubt that it originated within the house of the lower school. At a meeting on October 27th, the medical officer of health read a preliminary report on the cause of the outbreak, and recommended that notices should at once be served on four of the masters to remove the nuisances caused by their cesspits. On the 3rd instant, another meeting took place, and the medical officer of health reported further; the result being, that the head-master and others were served with notices the same afternoon to remove nuisances arising from cesspits, etc. At the same meeting, a vote of censure was passed on the masters in whose houses the fever had occurred, for not having immediately communicated with the sanitary authority, instead of allowing the disease to increase as it did from September 21st to October 13th. The medical attendant (who is the only medical practitioner in the town allowed by the head-master to attend the boys) was also blamed for not attending a meeting of medical men of the town convened by the medical officer of health, and for withholding information from him.

The medical officer of health called in on Monday last Mr. Roger Field, C.E., to consult him as to some engineering difficulties connected with the drainage; and that gentleman was on the 3rd inst. appointed by an unanimous resolution to report on the sewers, etc., of the town, with the view of making the drainage-system, both public and private, as complete as possible.

Mr. Haviland, finding that the healthy boys were allowed by the head-master still to go to the infected houses, immediately wrote to

him, on his own responsibility, to prohibit the practice. A meeting of the trustees was called for the next day, last Friday; and it was decided that the school should be dismissed. The boys left for home on Tuesday, the 2nd. The boys in the hospital are doing well. One boy, however, is still seriously ill.

The house in which the outbreak took place is a splendid mansion; but the architect seems to have never entertained the idea of its being necessary to provide for the health of its inmates. Gigantic cesspools lie in close relation to the water-supply, and every arrangement is made for the pollution of the air by regurgitation of gases from them.

The school-register contains the names of about 375 boys.

EXAMINERS AT THE ROYAL COLLEGE OF
SURGEONS OF ENGLAND.

A MEETING of the Council of the College was held on the 1st instant to receive the report of the Committee appointed to consider and report on the best means of giving effect to the new Bye-laws relating to Examiners and Examinations in Anatomy and Physiology. It was found convenient by the Committee to arrange the subjects of which they treated under four heads. The following are the more important details.

I. With respect to the mode of appointment of the Examiners in Anatomy and Physiology, hereinafter called the Board of Examiners in Anatomy and Physiology, the Committee recommended to the Council the adoption of regulations for the formation of a Board of Examiners in Anatomy and Physiology for the Membership and Fellowship, of which the following are the more important. 1. The Board of Examiners in Anatomy and Physiology shall consist of nine Members to be appointed by the Council to conduct the Examinations in Anatomy and Physiology for the Membership and Fellowship of the College. 2. The Examiners shall be elected from the Fellows of the College. 3. One Member, at least, of the Board shall be a Member of the Court of Examiners, and shall act as Chairman of the Board. 4. The Examiners in Anatomy and Physiology shall be elected annually. 5. An Examiner in Anatomy and Physiology shall not hold office for more than five consecutive years; but, after an interval of one or more years, shall again be eligible for election. 10. Notice of intended elections to the Board of Examiners in Anatomy and Physiology shall be advertised in the medical journals not less than six weeks prior to the date of those elections; and Candidates shall be invited to send in their applications to the Secretary not less than one month prior to the date of election.

II. As regards the mode of payment of the Members of the Board of Examiners in Anatomy and Physiology and of the Members of the Court of Examiners for the Membership, the Committee adopted the principle that Examiners shall be paid according to work done, *i.e.*, by a capitation fee divisible between the Examiners present at each Examination; and from calculations based upon the receipt and expenditure of the last five years, recommended the Council to sanction the following regulations for payment of Examiners for the Membership, whereby each Examiner in Anatomy and Physiology will receive about £140 per annum, and each Member of the Court of Examiners about £200 per annum, *viz.*: 1. The Members of the Board of Examiners in Anatomy and Physiology for the Membership shall be paid by an equal division, amongst those present at each Examination, of £2 per Candidate. 2. The Members of the Court of Examiners shall be paid by an equal division, amongst those present at each Examination for the Membership, of £4 4s. per Candidate, the time occupied in the final Examination being twice as much as that allotted to the Examination in Anatomy and Physiology. 3. Each Member of the Court of Examiners shall, in accordance with the provisions of the Bye-laws, receive the fee of £1 1s. for each attendance at a meeting, over and above the sum received by him as his share of the Capitation Fee.

III. Regarding the mode of payment of the Members of the Board of Examiners in Anatomy and Physiology and of the Members of the Court of Examiners for the Fellowship, the Committee took into consideration the small amount now received from Candidates for the Fellowship, and the very inadequate payment to Examiners for the Examinations for the Fellowship; and, with a view to remedy this state of things, recommended to the Council that immediate steps be taken to obtain a Bye-law enabling the College, in accordance with the provisions of Section 7 of the Charter of the 7th Victoria, to require that a Candidate for the Fellowship by Examination shall pay a fee not exceeding Thirty Guineas over and besides any stamp-duty on his admittance or diploma. The Committee, in anticipation of such a Bye-law being obtained, recommended the Council to adopt regulations for the payment of the Examiners in Anatomy and Physiology and of the

Court of Examiners for the Fellowship, which, based upon calculations extending over the last five years, will give to each Member of the Board about £30 *per annum*, and to each Member of the Court (including his fee of £1 *is.* for each attendance on a meeting of the Court) about £45 *per annum*, the time expended in the conduct of the final Examination of each Candidate for the Fellowship being rather more than three times longer than that employed for each Candidate in the Examination in Anatomy and Physiology for such Fellowship.

IV. With respect to the Degrees, Diplomas, Licenses, or Certificates to be recognised as exempting Candidates from the necessity of passing the Examinations in Anatomy and Physiology for the Membership and Fellowship respectively, the Committee had had under consideration this subject, together with Mr. Quain's letter of the 14th of January last, calling the attention of the Council to the existing regulations for the Membership of the College, as affecting the eligibility for admission to Examination of Graduates in Surgery of Scottish Universities, and suggesting to the Council whether it might not be expedient to grant greater facilities than they at present possess to Graduates in Medicine and Surgery of the British Universities desirous of obtaining the Diploma of this College. The Committee were not prepared to make any recommendation to the Council on this subject, but proposed to defer it for a future report.

The report having been agreed to, a meeting of the Council will be held on the 11th instant to confirm the same; and, as will be seen in our advertising columns, notice has been given that the Council will, in December next, proceed to the election of Examiners in Anatomy and Physiology; and Fellows of the College are invited to send in their applications for the appointments.

PROVINCIAL MEDICAL SCHOOLS.

THE official return of the number of gentlemen pursuing their professional studies at the eight recognised provincial hospitals, has just been made to Dr. J. W. Ogle, the Government inspector of the anatomical schools in connection with those hospitals, from which it will be seen that there is a considerable falling off from the number quoted last session.

1. Manchester, Owens College	175	174	187
2. Liverpool Infirmary	11	14	8
3. Birmingham, Queen's College	63	72	84
4. Leeds School of Medicine	5	7	9
5. Cambridge University School	4	4	4
6. Durham University College	3	3	3
7. Bristol Old Park Medical School	11	20	24
8. Sheffield Medical Institution	17	15	10
Totals	207	219	239

It will be seen that there is an increase in the number of students at the two smallest schools. Leeds remains stationary, but at the large schools there are in some cases a considerable decrease. The gross numbers showing the diminution will be seen above.

The following comparative table will, no doubt, be read with considerable interest, not only by the metropolitan and provincial teachers, but by the profession generally, as showing the number of medical students in town and country respectively during the past decade.

Years.	Metropolitan.	Provincial.	Totals.
1865	113	200	313
1866	107	200	307
1867	105	207	312
1868	104	200	304
1869	102	197	299
1870	107	197	304
1871	147	197	344
1872	119	197	316
1873	115	197	312
1874	135	197	332
1875	179	197	376

It will therefore be seen that at our eleven recognised metropolitan schools there is an increase of twenty-four students over the number of last year, including dental students, and that this increase has been progressing since 1865, whereas there is a decrease of fifty-five students at the eight recognised provincial schools since last session.

* It will be seen that there is a slight increase in the number already published in this JOURNAL, of gentlemen pursuing their studies in the metropolitan schools; this includes also five more new entries, viz., one each to the following schools: St. Bartholomew's, St. George's, University College, Middlesex, and the Westminster.

ASSOCIATION INTELLIGENCE.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

THE next meeting is appointed to be held at St. Bartholomew's Hospital, Rochester, on Wednesday, November 10th, at 4 P.M.: ROBERT ROSS BROWN, Esq., in the Chair.

Dinner will be provided at the Bull Hotel at 6 P.M. Papers on clinical subjects have been promised by the Surgeons of the Hospital.

FREDERICK J. BROWN, M.D., *Honorary Secretary.*
Rochester, November 1st, 1875.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

THE next meeting of the above District will be held in the Library of the County Hospital, Canterbury, on Thursday, November 11th, 1875, at 3 o'clock; FRANK WACHER, Esq., in the Chair.

Dinner will be provided at the Fleur-de-Lis Hotel at 5 o'clock precisely. Charge, 6s. 6d., exclusive of wine.

Notices have been received of the following communications to be read at the meeting.

1. The Report of the Ethical Committee will be submitted for adoption.
2. Mr. Clement Walter: A few remarks on Diabetes.
3. Mr. Rigden: The comparative Birth-rate and number of Conceptions at different periods of the year at Canterbury.
4. Mr. Rigden: A case of Spinal Fracturation in which the arm had been prolapsed during fifteen hours.
5. Dr. Housby Wright: A case of Empyema treated by Aspiration. Gentlemen who intend to be present at the dinner are particularly requested to inform me on or before Tuesday, the 9th instant.

EDWARD WILKINSON, Esq., *Honorary Secretary.*
Ashford, November 3rd, 1875.

THAMES VALLEY BRANCH.

THE first meeting of the above Branch will take place at the Board Room of the Richmond Infirmary, on Wednesday, November 17th, at four o'clock.

Papers will be read by—

1. Dr. Milner Fothergill: On the use of Digitalis in Aortic Disease.
2. Dr. Donkin: On the Nomenclature of Bright's Disease, clinically considered.
3. Dr. Wiltshire: On the Pathology, Diagnosis, and Treatment of Uterine Polypi.
4. Dr. Fenn: On the Pathology and Treatment of Acute Rheumatism.

There will be a dinner afterwards at the Greyhound Hotel at six o'clock. Charge, 7s. 6d. each, exclusive of wine.

F. P. ATKINSON, M.D., *Hon. Sec.*
Kingston-on-Thames, November 2nd, 1875.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE next meeting will be held in the Council Room of the Midland Institute on Thursday, November 11th, 1875. The Chair will be taken by the President at 3 o'clock P.M. precisely.

The following papers will be read.

1. Mr. Furneaux Jordan: The Gradual Decrease of Operative Surgery.
 2. Dr. Warden: On Contraction of the Meatus Auditorius Externus, and its treatment by a new form of Dilator.
- Members are invited to exhibit pathological specimens at the commencement of the meeting.

BALHAUGH, Esq., M.D., } *Honorary Secretaries.*
JAMES SANDER, M.D. }
Birmingham, November 1875.

PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

AT a Meeting of the Committee of Council, held at the office of the Association, 36, Great Queen Street, London, on Tuesday, the 12th day of October, 1875. Present: Dr. Falconer, President of the Council, in the Chair; Mr. W. D. Husband (Treasurer), Dr. Clifford Allbutt, Mr. J. W. Baker (Derby), Mr. Callender, F.R.S., Dr. C. Chadwick, Dr. R. Farquharson, Mr. R. S. Fowler, Dr. E. L. Fox, Mr. R. Harrison,

Mr. G. F. Hodgson, Mr. F. E. Manby, Dr. Morris, Mr. R. H. B. Nicholson, Dr. C. Parsons, Dr. W. Procter, Dr. Sibson, F.R.S., Dr. W. F. Wade, Dr. R. Waters (Chester), Mr. C. G. Wheelhouse, Dr. E. Wilkinson, Mr. Samuel Wood.

The minutes of the last meeting were read and found correct.

Read letters of apology for non-attendance from Mr. Alfred Baker, Dr. E. Copeman, Dr. Alfred Carpenter, Dr. Matthews Duncan, and Dr. B. Foster.

Read list of candidates for election.

Resolved—That the twenty-one gentlemen whose names appear on the circular convening the meeting, be and they are hereby elected members of the Association.

Resolved—That the minutes of the JOURNAL and Finance Committee of this day's date be approved, and the recommendations carried into effect.

Mr. Hodgson then withdrew his motion of which he had given notice, relative to the annual meeting being held at Brighton in 1876.

Resolved—That the President-elect, the President of the Council, the Treasurer, Dr. Carpenter, Mr. Callender, F.R.S., Dr. Chadwick, Mr. Bramwell, Mr. Hodgson, Dr. Hall, Mr. Humphry, Dr. Holman, Dr. W. Moore, Dr. S. Monckton, Dr. Jardine Murray, Dr. Parsons, Dr. Sibson, F.R.S., Mr. Heckstall Smith (St. Mary Cray), Dr. Stedman, Mr. Salzmann, Dr. Wade, and Mr. Wheelhouse, be the Arrangement Committee, with power to add members of the South-Eastern Branch—the number not to exceed twenty-four.

Resolved—That there be three addresses, viz., one in Medicine, one in Surgery, and one in Public Medicine.

Resolved—That Dr. Sieveking be requested to give the address in Medicine.

Resolved—That Mr. C. G. Wheelhouse be requested to give the address in Surgery.

Resolved—That Dr. Alfred Carpenter be requested to give the address in Public Medicine.

Resolved—That the subject of the Hastings Prize Essay for 1876 be Diphtheria, its Pathology, Diagnosis, and Treatment.

Resolved—That it be referred to the Scientific Grants Committee to consider whether any other way of awarding the Hastings Medal would be more conducive to the interests of medical science, than the present one of awarding it for an essay on a specific subject.

Resolved—That advertisements be inserted in the medical journals that applications for grants may be made to the Scientific Grants Committee of the British Medical Association up to the 29th day of next December.

Resolved—That Messrs. Price and Co., be appointed Auditors for the year 1875 in accordance with By-Law 33.

CORRESPONDENCE.

CONTEMPT OF A CORONER'S COURT.

SIR,—With reference to a paragraph which has recently appeared in the daily press headed "Contempt of a Coroner's Court", the real facts of the case are as follows.

1. I had no notice, either verbal or written, that the inquest was going to be held.

2. I knew no fee was allowed in such cases, as I have given evidence several times before.

3. I have heard no complaint about fees from any member of the resident staff.

I am, sir, your obedient servant,

THE HOUSE-SURGEON, University College Hospital.

* * The Coroner's remarks appear to have been hasty and unfounded.

HOSPITAL ABUSE.

SIR,—Will you allow me to make a few remarks on the subject of Hospital Abuse, *à propos* of the recent article on Provident Institutions and Hospitals in the JOURNAL. Having given the subject much attention for now very many years, and feeling that it is one that deserves much more notice than it has had at the hands of the public, I naturally have read your remarks with great interest.

I hoped that, at the last annual meeting of the Association, the subject might have been brought prominently before the members by some one capable of doing it justice, and who would have obtained for it the consideration it deserves. Though I am disappointed, I will not despair that we shall soon discuss the question fully, and be able to offer efficient aid and advice on the subject to the public.

I gladly admit, with you, that in the last five years, hospital re-

form has made great progress, and believe that the necessity for it is all but universally admitted.

Still, though the lay authorities of some of the metropolitan hospitals have taken effective measures to ascertain the true state of things, with sincere desire to act on the information obtained, it is painfully evident that others are either unwilling or unable to do so. I can make all allowance for the amiable weakness that indisposes us to inquire whether it is one's duty to assist the poor in all their trials and with providing the ways and means of relieving all who will accept our help. It certainly allows the pleasure of giving, to find that our alms are misapplied, or, perhaps, productive of injury, by destroying the *morale* of those who receive them. Can it be doubted that it is a characteristic of our times, that people in all grades of society scramble for the endowments that were intended for others?

The well-to-do are not ashamed to accept the provisions made for the poor scholar, the poor gentleman, the poor widow, the poor orphan.

Perversion surrounds us on all sides. It is almost, if not quite, impossible so to devise money that it will not be misapplied when intended for charitable purposes. What wonder, then, that hospitals are abundantly abused?

That they are abused by all classes is beyond controversy: by the subscriber who sends his dependants to them, by the prosperous tradesman, the well-paid clerk, the better paid artisan, by "the gentleman and lady of *limited* means" (a very large class when they are their own assessors).

Let the authorities of the London Hospital ask the medical men of the East End if the hospital is abused, instead of enacting the farce of "issuing a series of questions to each member of the honorary (and honourable) medical staff" (who know little or nothing of the social condition of their patients), if they really wish to know the truth and are not content with foregone conclusions. And I may state, with all deference, that, if the hospital is not much abused now, it certainly was during the many years I was officially connected with it; and I have yet to learn that any effectual steps have been taken to diminish the evil.

Of St. Mary's, University College, and Charing Cross, one can only conclude that the lay authorities are content to close their eyes and ears to unpleasant facts, and remain deluded.

It is certainly no part of the duty of the medical staff to consider the eligibility or ineligibility of their patients; but it is obviously the duty of the governors to see that only proper applicants are admitted as either in- or out-patients; and it is only just to the subscribers, the patients, and the medical officers, that every reasonable means should be employed to exclude improper objects.

Now, I maintain that usually no such care is taken at hospitals; it seems no one's business to ascertain the position of applicants, so, consequently, it happens that only now and then a flagrant case comes to light; the governors and medical staff alike are ignorant as to the rest.

To the honour, be it said, of the lay authorities of the Moorfields Hospital, effectual steps were taken some years ago to grapple with this social disorder, and six hundred applicants were refused in one year. Now, I am sure no one connected with that hospital would assert that all improper objects are detected and excluded; but, if six hundred cases were refused in a year, who can doubt the magnitude of the abuse? I may add that the number of ineligible patients constantly diminishes, probably in consequence of the publicity of the investigation, though many have learned to evade the Secretary's vigilance and scrutiny, and have even been detected in fraud.

But, in conclusion, sir, allow me to ask the opinion of the medical men engaged only in private practice, and I venture to predict such an overwhelming wave of testimony as would silence all cavillers and demand the public recognition of the immensity of hospital abuse.

I am, sir, faithfully yours,
J. C. WORDSWORTH, F.R.C.S.
London, October 1875.

COMPULSORY REGISTRATION OF DENTISTS.

SIR,—I shall esteem it a favour if you will permit me to state that I fully sympathise with Mr. S. Hamilton Cartwright's views, as expressed in his letter to you of the 30th ult. It is pretty generally known that I endeavoured, some years ago, to bring about the wholesome reform which he advocates; but I was forced to retire, because I found that I should have to fight the battle almost single-handed.

I regret that I am at present unable to take up in detail the various matters of which Mr. Cartwright's letter treats as, with your permission, I may possibly do at some future time; but it may be serviceable to the cause he advocates, to mention in the meantime that I have for some years past conducted my own practice upon the system which he would be glad to see extended, and have deputed to skilled me-

chianicians all work that may be defined as actually mechanical; and these execute my orders out of the house, and bring the results for my supervision and adjustment precisely in the same way that surgical instrument-makers carry out the instructions of an operating surgeon.

I remain, sir, faithfully yours,
WILLIAM DONALD NAPIER.
22, George Street, Hanover Square, Nov. 3rd, 1875.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

VACCINATION.—Mr. R. S. Hall of Ince, near Wigan, has received an extra grant amounting to £54:15, for the efficient state of vaccination in his district. He received a grant of £45 after the last inspection, two years ago.

THE ARTISANS' DWELLINGS ACT IN LIVERPOOL.—At a recent meeting of the Liverpool Health Committee, the engineer submitted a report for placing a district of the town, known as Nash Grove, under the operation of the Artisans' Dwellings Act. The area is situated off Scotland Road, one of the lowest parts of the town, and it contains about 22,487 superficial yards, 18,770 of which are covered by low-class dwellings, or yards, in use for trading purposes. Allowing for the removal of existing buildings, the engineer estimated the cost to the corporation of acquiring the site, sewerage, and paving at about £92,600. From this amount has to be deducted the value of the land for building purposes after the alteration, which is estimated at £30,746, leaving £62,254 as the actual cost of the improvement. After some discussion, the report was adopted.

POOR-LAW MEDICAL SERVICE OF SCOTLAND.

The Secretaries of the Aberdeen, Bonif, and Kincardine Branch would be glad to receive from any members of the Branch information concerning any defects in the administration of parochial medical relief, and any suggestions for reforming the present Poor-law for Scotland.

Aberdeen, October 20th, 1875.

J. URQUHART.
ALEX. OGSTON.

VACCINATION OFFICERS.

SIR,—I am glad that Mr. Glissan called attention, in your issue of the 23rd instant, to what he very properly designates a "growing nuisance". In this parish, the public vaccinator does not (that I am aware of) send out cards, as in Mr. Glissan's case, but calls upon my patients and threatens them with a prosecution unless they have their children vaccinated by him, although in some cases the children have already been vaccinated by me. Unfortunately, few of the lower classes know that any registered medical man may vaccinate, consequently our public vaccinator often succeeds in doing me out of my half-crown. It is high time, I think, that the excessive zeal that some of these officers display in doing their duty (?) should be put a stop to. If we had no vaccination-officer, there might be less room for complaint.—Yours truly,

St. Agnes, Cornwall, October 25th, 1875.

J. BAIN SINGOCK.

. The necessity for a vaccination-officer is patent: as we have explained, however, irregularities of the kind complained of should be reported to the Local Government Board; and no doubt it is also serviceable that they should be publicly ventilated in the medical press.

MILITARY AND NAVAL MEDICAL SERVICES.

THE VACANCY IN THE GUARDS.

By the retirement of Dr. Logie from the regiment of Horse Guards, and owing to the brigade system of promotion of medical officers holding good in the cavalry as in the infantry brigade, other changes must take place. It is rumoured that the medical officer next for promotion will not accept the vacancy, as it would entail his withdrawal from his own regiment; and therefore, if it be filled up by the officer next senior in the brigade, the vacancy for a junior will occur in the 2nd Life Guards.

KNIGHTSBRIDGE BARRACKS.

THESE barracks have begun to give practical force to the argument of those who would desire their demolition, by showing very evident signs of decay, the walls of one portion having so given way that it has been found necessary to remove the men and horses of two troops from it. This calls to mind the state of dilapidation into which the Portman Street Barracks had passed before their demolition, when one wall of the officers' quarters leant inwards to such an extent that the handle of the bell-ropes hung more than a foot away from it, to the great surprise of a casual observer. The time cannot be, therefore, far distant, when the Knightsbridge Barracks must also be razed to the

ground, notwithstanding the apparent difficulty in finding a more suitable locality. Though many good reasons have been adduced for their removal to a new site, we do not look upon this as such an absolute necessity; for if, in their reconstruction on the same ground, they were made a storey higher, the accommodation would then be sufficient, and we should retain near the centre of London one of our most valuable aids in the preservation of law and order in times of emergency.

THE MEDICAL DEPARTMENT AND THE RECENT EXPEDITION AGAINST THE CONGO PIRATES.

COMMODORE SIR WILLIAM HEWETT, K.C.B., in his despatch, published on the 2nd instant, describing the results of the recent expedition against the pirates of the Congo River, thus refers to the professional services of Fleet-Surgeon Fegan, C.B., the principal medical officer of the Forces under his command.

"The uninterrupted health of the squadron during the time it has been employed in this unhealthy river may be attributed to the care with which Fleet-Surgeon Henry Fegan, C.B., considered the precautions that should be adopted to secure its preservation, and I have to acknowledge the many valuable suggestions he has submitted to me."

Considering the large proportion in which rewards and promotions were conferred on the combatant officers after the Ashantee War, and the comparatively small number of similar distinctions which were bestowed on the medical officers who did so much to preserve the health of the troops engaged in the unhealthy climate of the Gold Coast on that occasion (not to mention their equally sharing the fatigues and risks of the bush with the combatants), we were pleased to observe that the leading journal thought right to comment on this part of Commodore Hewett's despatch. The following remarks appeared in the *Times* on the same day as the publication of the despatches.

"We are happy to see, moreover, that he calls the attention of the Admiralty to the valuable assistance afforded him by the preparations of the medical officer. The doctors seldom have their services duly recognised on these occasions; but it is not too much to say that it is medical science which alone renders these African expeditions practicable. Not many years ago, our ignorance of the real nature and cause of the fevers which render the African coast so pestilential would have exposed a force to insuperable dangers either in such a slight expedition as the present or in such an undertaking as the Ashantee War; and there is no occasion on which the arts of preventive medicine become of greater value. It is possible now to avoid dangers which would formerly have been unconsciously encountered, but would have been absolutely fatal; and, though the climate of the Coast must always be pregnant with peril, it can be endured for a sufficient space of time."

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

EXAMINATIONS IN STATE MEDICINE.—The following is the first annual report to the Senate of the Syndicate appointed to superintend the examinations in State Medicine.—The first examination in State Medicine under the regulations confirmed by grace of the Senate, February 4th, 1875, was held on October 5th and three following days. Twenty-eight candidates entered, of whom twenty-six presented themselves for examination. Four offered themselves in Part I only, of whom one was approved. The remaining twenty-two were examined in both parts, and nineteen of them were approved. Two days were devoted to each part of the examination. Part I comprised Physics and Chemistry, and their applications to sanitary matters. Part 2 comprised the remaining subjects specified in the regulations; viz., the causes and prevention of epidemic and infectious diseases, the circumstances and conditions of life which are injurious to health, and the laws of the realm which relate to Public Health. In each part, two papers of questions, each of which had been submitted to all four examiners, were set, to which written answers were required. In each part, the candidates were also questioned orally by two of the examiners sitting together; and in each part the candidates were tested by practical work. The examiners report that the answering was generally good, some of it excellent, more especially in questions relating immediately to the actual duties of officers of health. This remark applies emphatically to the reports on the sanitary condition of some of the small courts and other places in Cambridge, which the candidates were directed to visit for the purpose of inspection, each candidate having a different locality assigned to him. The examiners are of opinion that the number and character of the candidates are evidence

that the examination supplies a public want, and may be of real service in the advancement of sanitary improvements. Such a knowledge of sanitary science as has been shown by the successful candidates proves them to be entitled to some trustworthy voucher for their acquirements. The University certificate, granted after a careful and thorough examination, will be such, and may serve to assist the judgment of those public bodies in which the choice of officers of health has been invested by the law. Every candidate was required to pay a fee of four guineas before admission to each part of the examination, and it has been found that this has been sufficient to defray all the expenses incident to the examination. The certificate is granted to those who have passed both parts of the examination without further fee. The Syndicate considers it convenient that the holders of the certificate should be designated in an uniform manner, and recommends that their designation be "Holders of the Certificate in Sanitary Science", or abbreviated, "S. Sc. Cert. Camb." The Syndicate has arranged that the next examination shall begin on June 13th, 1876, and considers it desirable to hold a second examination next year at the beginning of October. These times seem as convenient as any for the University, and are likely to suit medical men engaged in the practice of their profession. Whether it will be advisable to hold two examinations in any future year must be decided by the experience gained as to the probable number of candidates, and by other considerations. (Signed) H. W. Cookson, G. E. Paget, G. M. Humphry, P. W. Latham, G. D. Livinge.

EXAMINERS FOR DEGREES IN MEDICINE AND SURGERY.—At a congregation on October 14th, the following gentlemen were appointed Examiners in Medicine and Surgery:—First M.B. Examination: R. Apjohn, Caius; J. W. Hicks, Sidney. Second M.B. Examination: Henry Power; J. N. C. Davies-Colley, Trinity. Third M.B. Examination: Dr. Barclay; Dr. Bradbury. Master in Surgery Degree: Timothy Holmes and Christopher Heath. Dr. J. W. Ogle was appointed Assessor to the Regius Professor of Physic.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Fellows on October 28th, 1875.

Adey, Charles Augustus, M.D. Edinburgh, St. Leonard's
Burder, George Foster, M.D. Aberdeen, Clifton
Corfield, William Henry, M.D. Oxford, Bolton Row
Falls, William Stewart, M.D. St. Andrew's, Bournemouth
Fearnside, Henry, M.B. London, Preston
Matterson, William, M.D. St. Andrew's, York
Monkton, Stephen, M.D. London, Maidstone
Montgomery, James Barclay, M.D. Glasgow, Penzance
Ord, William Miller, M.B. London, Brook Street
Semple, Robert Hunter, M.D. St. Andrew's, Torrington Square
Shepherd, Augustus Burke, M.B. Oxford, Seymour Street
Thorne, Richard Thorne, M.B. London, Inverness Terrace
Tuke, Daniel Hack, M.D. Heidelberg, Falmouth

The following gentlemen were admitted Members.

Herman, George Ernest, Bethnal Green Infirmary
Leech, Daniel John, M.B. London, Manchester

The following gentlemen were admitted Licentiate.

Chapman, Paul Morgan, Camden Park Road
Dyce, David Hyman, Bury Street
Gibb, Robert Charles, Guy's Hospital
Harvey, Thomas Prickard, Pyrland Road
Herman, George Ernest, Bethnal Green Infirmary
Hobson, John Morrison, Guy's Hospital
Lancaster, Henry Francis, Amersham Park Villas
Randle, James Mayne, Guilford Street
Rawlings, Alfred, Newlands, Sherborne
Taylor, Henry Cumberland, Guy's Hospital
Weakley, Samuel Joseph John, Upton, Essex

The following candidate, having passed in Medicine and Midwifery, will receive the College License on obtaining a qualification in Surgery recognised by this College.

Pickford, John Kemble, Maiden Newton

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, October 28th, 1875.

Bark, John, Royal Infirmary, Liverpool
Harvey, Henry Frederick, Gower Street
Morcom, Augustus, Coniston, Lancashire
Taylor, James, St. Giles Croft, Bristol
Williams, William Venables, Easingwold, Yorkshire

The following gentleman also on the same day passed his primary professional examination.

Capon, Herbert, James, St. Bartholomew's Hosp

MEDICAL VACANCIES.

The following vacancies are announced:—

CRICKHOWELL UNION—Medical Officer and Public Vaccinator. Salary, £35 per annum, exclusive of extra medical fees and vaccination fees. Applications on or before the 13th instant.
DENBIGHSHIRE INFIRMARY—House-Surgeon. Salary, £85 per annum, with board, washing, and residence.
HASTINGS UNION, Sussex—Medical Officer for Third District. Salary, £90 per annum. Applications on or before the 10th instant.
HUDDERSFIELD INFIRMARY—Physician.
LIVERPOOL INFIRMARY FOR CHILDREN—House-Surgeon.
METROPOLITAN FREE HOSPITAL—Honorary Assistant-Physician. Applications on or before the 13th instant.
MIDLAND COUNTIES SUPPLEMENTARY HOSPITAL, Leamington—Physician and Surgeon. Salary of the former, 100 guineas; and of the latter, 50 guineas; with board and lodging. Applications before the 5th instant.
NORTH STAFFORDSHIRE INFIRMARY, Hartshill, Stoke-upon-Trent—House-Physician. Applications on or before the 16th instant.
PROVINCIAL HOSPITAL, Port Elizabeth, Cape of Good Hope—House-Surgeon and Dispenser. Applications to T. E. Fuller, Cape Emigration Agent, 15, Coleman Street, London, E.C.
RADCLIFFE INFIRMARY, Oxford—House-Physician. Salary, £105 per annum, with board and lodging. Applications on or before the 24th instant.
ROCHDALE INFIRMARY—House-Surgeon. Salary, £100 per annum, with board, lodging, and attendance. Applications on or before the 6th instant.
ROSS UNION—District Medical Officer and Public Vaccinator. Salary, £100 per annum. Applications on or before the 20th instant.
TONGUE and FARR, District of, County of Sutherland—Medical Officer. Salary, £150 per annum, and house.
WEST RIDING PRISON, Wakefield—Resident Surgeon. Salary, £400 per annum, with house, coals, gas, and water. Applications before November 15th.
WORCESTER GENERAL INFIRMARY—Physician. Applications not later than the 17th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BARTON, John K., M.D., appointed Visiting-Surgeon to the Convalescent Home at Stillorgan, vice Arthur E. J. Baker, L.R.C.S.I.
FUSSELL, Edward F., M.D., appointed Physician to the Sussex County Hospital, Brighton, vice H. Moon, M.D., resigned.
HOLLIS, William A., M.D., appointed Assistant-Physician to the Sussex County Hospital, vice E. F. Fussell, M.D., promoted.
KINSEY, Robert H., M.R.C.S., appointed Medical Officer to the County Prison, Bedford, vice R. Couchman, M.R.C.S. Eng., resigned.
LAWRIE, John D., M.R.C.S. Eng., appointed Honorary Surgeon to the Bradford Infirmary, vice John R. McGee, L.K.Q.C.P., resigned.
MORRIS, Samuel, L.R.C.S., appointed House-surgeon to the Stanley Hospital, Liverpool, vice J. Bark, L.K.Q.C.P., resigned.
***MORRIS, D. Williams, L.K.Q.C.P.**, appointed Medical Officer and Public Vaccinator to the Skenfrith District of the Monmouth Union; also, Medical Officer and Public Vaccinator to the Kintchurch District of the Dore Union, and Medical Officer to the Dore Union Workhouse, Herefordshire.
SARGENT, Arthur F., M.R.C.S. Eng., appointed Junior House-Surgeon to the Tunbridge Wells Infirmary.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

DEATH.

SMART.—On October 25th, aged 36 years, at the residence of her father, Celia Elizabeth, wife of Bath Charles Smart, M.D., 90, Great Ducie Street, Strangeways, Manchester, and daughter of Daniel Gurteen, Esq., J.P., Haverhill, Suffolk.

GUY'S HOSPITAL.—The Entrance Scholarships in Classics, Mathematics, Modern Languages, and Science, have been awarded as follows:—L. C. Wooldridge, £60; W. H. White, £30; J. T. J. Morrison, honorary certificate.

PRESENTATION.—On October 14th, the *employés* of the General Infirmary, Chester, presented Dr. W. J. Fleetwood, on his resignation of the house-surgery to the institution, with a valuable box of surgical, amputating, and other instruments, as a mark of their esteem and regard.

REQUESTS.—Mr. William Creek, formerly of Worcester, has bequeathed to the Hertford Infirmary and the Worcester Infirmary £200 each; to the Royal United Hospital, Bath, and the Harrogate Hospital, £50 each.—Miss Sarah Godin, late of Maida Vale, has left (*inter alia*) to the Surrey Dispensary, the London Hospital, and St. Mary's Hospital (Paddington), £200 each, free of legacy duty.

KING'S COLLEGE.—Mr. Norman Dalton, Mr. Denis M'Donnell, and Mr. Frederic Harvey Norvill have obtained the Warneford Entrance Scholarships of £25 a-year each, tenable for three years; Mr. J. Frederic Silk, a new student, the Science Exhibition, given by the Clothworkers' Company, of £25 a-year, for two years; and Mr. T. Furze Clarke has obtained the First Warneford Prize of £20, and Mr. W. H. Bloomfield and Mr. E. A. Snell, Warneford Prizes of £10 each.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY**Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
- TUESDAY**Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
- WEDNESDAY** ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
- THURSDAY**St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.
- FRIDAY**Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
- SATURDAY** ...St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY**.—Medical Society of London, 8.30 P.M. Mr. Jabez Hogg, "On Spinal Concussion"; Messrs. Carr Jackson and Spencer Watson, "A Patient on whom Excision of the Astragalus was performed for Complicated Injury to the Foot and Ankle".
- TUESDAY**.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Semple, "On Diphtheria and its relations to (so-called) Croup".
- WEDNESDAY**.—Epidemiological Society, 8 P.M. The President will deliver an Inaugural Address.—Hunterian Society. A Council Meeting at 7.30 P.M. At 8 P.M., Mr. J. E. Adams will exhibit a Case of Plastic Operation on the Face for Rodent Ulcer; and will read a paper on Iodide of Potassium Poisoning. Dr. Peacock will read a paper on a Case of Aortic Disease originating in Malformation; will exhibit specimens of Malformation as a cause of Valvular Disease.
- FRIDAY**.—Clinical Society of London, 8.30 P.M. Mr. T. Holmes, "Case of Ligature of Femoral Artery with Carbolised Catgut"; Mr. W. Haward, "Case of Lymphadenoma"; Dr. Murchison, 1, "Case of Acute Cancer of the Liver, with Pyrexia, in a man aged 74"; 2, "Two Fatal Cases of Acute Pyelitis and Nephritis, apparently consequent on Gonorrhoea".

NOTICES TO CORRESPONDENTS.

- CORRESPONDENTS** not answered, are requested to look to the Notices to Correspondents of the following week.
- PUBLIC HEALTH DEPARTMENT**.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with *Duplicate Copies*.
- AUTHORS** desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.
- CORRESPONDENTS**, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.
- WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.**
- COMMUNICATIONS** respecting editorial matters, should be addressed to the Editor; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

TOTAL DESTRUCTION OF THE LUNG.

SIR.—In reply to Dr. Walter's remarks respecting my case of total destruction of the lung, I write to combat his doubts of its accuracy, to inform him that such binding down of the lung, or compression or flattening against the vertebral column, existed, as he ventures to suggest.—I am, sir, yours, etc.,
Holloway Road, Oct. 30th, 1875. E. COTTEW.

BIBLIOPHILE will find an interesting account of the works of Albinus in Atkinson's *Medical Bibliography*, and also of his celebrated engraver Wandelaar.

THE CONDUCT OF MEDICAL STUDENTS.

THE students of Guy's Hospital, convicted in the police court of riotous conduct at a music hall, have been dismissed with a reprimand, on tendering a full apology in court. The whole proceeding, however, cannot fail to attract the attention of the Treasurer of Guy's Hospital, and we shall make no further comment on the subject till we hear his decision, after inquiry, as to the proper course to be pursued.

CONSULTATION WITH UNQUALIFIED PERSONS.

SIR.—Is a Consulting Physician—or, indeed, any practitioner—acting correctly, medico-ethically speaking, in meeting in frequent consultation an unqualified assistant whose employer has been dismissed from attendance on a case?
October 27th, 1875. I am, etc., PARSONS.
* * * Certainly not.

ST. MARY'S.—The first or primary examination for the diploma of membership of the College this session will take place this day (Saturday).

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

MAN-HELDER PROVIDENT DISPENSARIES' ASSOCIATION.

SIR.—Your issue of the 14th instant contains a communication with reference to the Manchester and Salford Provident Dispensaries' Association, which is calculated, though quite unintentionally, I am sure, to produce an erroneous impression upon the minds of your readers. Your correspondent charges the Association with violating the rules upon which it has been founded, by admitting friendly societies into connection with the dispensaries. The facts are as follows. A number of these friendly societies applied for permission to become connected with the Association, but they were informed that, as the income of some of their members would, no doubt, exceed the limit fixed by the rules, their request could not be granted. The General Council felt, however, that the subject was one which should not be hastily dismissed, and ultimately resolved to summon an extraordinary general meeting to decide whether it would be wise to make the necessary alterations in the scheme. At such a meeting, the committees of all the provident dispensaries and free charities, and the subscribers to the guarantee fund, are entitled to attend and vote. Each dispensary committee is composed of four doctors, elected by the medical staff as their representatives, four ordinary and four honorary members. The rules provide that when such a meeting is to be held, notice shall be given some weeks previously, in the three daily papers, stating its object, and that the committees of such free charity and dispensary shall receive a letter containing the same information, with an invitation to attend. All these steps were taken; and the meeting in the present opposition to the Association was present at the meeting of his dispensary, and agreed without the slightest demur to the proposed alterations in the rules. The extraordinary general meeting took place; only three or four or twenty doctors were present, and resolutions were passed, and afterwards published in the papers, declaring the conditions upon which the friendly societies could be admitted to membership of the dispensaries. About a week afterwards, a protest was received from a number of the medical men against the arrangement, stating that it would not be accepted by them; but not a single reason was advanced to show that the Council were acting unfairly to the members of the medical staff. The subject was again fully discussed by the Council, and the recommendation of two of our leading medical men, managers of the two largest hospitals in the city, it was decided that as the question had been fully considered at a meeting duly convened for the purpose, and as not a single reason had been advanced in the protest to show that the decision arrived at was an improper one, it could not be rescinded. I fail to see that there has been in this any "violation" of the original scheme. A violation can only mean that its rules have not been observed. I challenge your correspondent to show which of them has been broken. A great amount of pressure was then brought to bear by a few of the medical staff, instigated chiefly by a number of club-doctors, upon their fellow-members. The movement became a sort of trades-union one, and ultimately a large number of those connected with the dispensaries yielded to the pressure, and gave notice of their intention to resign. The Council then asked all the members of the medical staff to meet them to talk the matter over; but those who were dissatisfied met together and decided to decline the invitation. A feeling of extreme regret was expressed by the Council at the decision at which the doctors had arrived, especially as it became apparent that it would now be more difficult to carry on the dispensaries unless radical alterations were made in the conditions upon which the medical men may become connected with them. The Council has always shown the greatest consideration for the interests of the profession; its conduct has always been guided mainly by its medical members, and it would have yielded at once in the present dispute, had there appeared any reasons for supposing that it was acting in opposition to the just interests of the profession.

But it may be said that the arrangement made with the friendly societies is an unfair one to the medical men now connected with them or with the dispensaries. It will be seen, however, that it is not so. The annual payment to a club doctor ranges from 2s. 6d. to 3s. 1s. 6d. per member; and for this he contracts to visit the members whenever required, to provide drugs, and make up the prescriptions. He is elected by a committee of working men, and is responsible to them for his conduct. The members may be said to live in the area of Manchester and Salford; and as an inevitable consequence, delay and annoyance are of frequent occurrence. [In many cases, the doctors do not personally attend the members, but send agents to do so.] It may be expected that this system is not at all popular, either amongst the societies or the medical men; and few of any standing in the profession will become connected with it. The arrangement made by the Council is this: that each lodge of a society shall join collectively, the members attaching themselves to the dispensary of the district in which they may reside, and each paying at the rate of 3s. 6d. *per annum*. Of this sum, 2s. 2d. will be received by the doctor chosen by the member, and the balance will be employed in the payment of the expenses of management; but the surplus, after defraying these expenses, is to be received by the medical men. In a very short time, at the present rate of progress, this surplus will amount to a considerable sum; and the actual payment to the doctors for each friendly society member will be as much as, if not more than, that received under the existing club-system. At one of the dispensaries, it is now 2s. 9d. It is pretty certain that, were all the friendly societies to join the dispensaries, the total amount received from them by medical men would be increased; but, at the same time, the doctors would possess these advantages: that they would not have to find medicines or make up prescriptions; that they would not be elected by a committee of working men, or be obliged to retain unreasonable patients without having a fair court of appeal; and that their labours would be minimised by having to attend only upon those patients who may live in their own district, instead of being obliged to visit those who may reside in parts of the city widely separated from each other. In this arrangement, I fail to see how "the interests of the profession have been injured".

Your correspondent further states that the system affords a "miserable remuneration for an extensively increasing expenditure of time and labour". I do not know who your correspondent is; and leave you to decide from what I have already stated whether or not he is an unprejudiced witness. This, however, I do know; that many members of the medical staff have expressed their entire satisfaction with the financial results of the system. One doctor says that "his private practice has doubled since he joined the dispensary"; another, that "his dispensary work is as well paid as any work in connection with a practice amongst the poor"; another is in receipt of £250 a year from his dispensary alone, although he joined but three or four months ago, and, I believe, had not been in practice before.

This fact is becoming more and more prominent, that the Manchester Provident Dispensary system, when fairly established, will well recompense the medical men who give it a fair trial. There are some in the profession who have disliked it from the first, and who would wish to make it a failure; to these, the results may not have been very satisfactory.

If any of your readers desire to receive further information about the provident dispensary system as established here, and the probability of medical men connected with it obtaining a fair recompense for their time and labour, I shall be glad to supply it. In some of the rapidly increasing districts of Manchester and Salford there is a great scarcity of medical men, those now established there being greatly overworked.—I am, sir, etc.
WILLIAM O'HANLON.
October 1875.

J. F. R.—Attendance at the Sussex County Hospital, Brighton, will be recognised.

THE TWO SYSTEMS OF EDUCATION.

SIR,—Your leading article in the JOURNAL of October 2nd on the above subject suggests to me a promise which I made myself during the late meeting of the British Medical Association in Edinburgh—viz., to give you my personal experience of the respective merits of systematic lectures and practical instruction; since I believe that, after having listened to about fifteen hundred lectures on various subjects, I am quite as capable as any of the professors who teach to form an opinion on the matter. Before, however, making any assertions, I may observe that I am one of those men who never regard any stimulus to work. I have always been a diligent student, and, though I have not become a great man, I can hold my own among my contemporaries. Many of the most able of my fellow-students are now scattered all over the world, and settled in obscurity; a very few have distinguished themselves in a sort of a way; some have "gone to the wall", and some of the most promising are dead. As I have no particular policy to pursue, no ambitious aims to gain from this communication, beyond a bare statement of facts, I hope my remarks will be taken as a simple unvarnished tale. It will be understood, of course, that I studied medicine at Edinburgh, as it is of that school that I desire to speak. Well, after an absence of sixteen years, I returned to attend the meeting of the British Medical Association last August, at the University, and the first thing that struck me was, the dingy appearance of the old lecture-rooms, and the melancholy aspect of the narrow winding stairs which led to those sepulchral-looking dens, which vividly recalled to my memory the days when I was a beardless boy, trudging along up and down, with a huge book under my arm, and engaged from 9 a.m. to 5 p.m. attending dry lectures, etc. This naturally led me to reflect how much I actually learned from attending these systematic lectures, from books, and from practical instruction; and I am bound to say that I have only a very hazy recollection of the lectures: in fact, I gained nothing at all by them; all my knowledge I have acquired from books, from dissection, and from clinical instruction; and, if I were beginning life over again, I would upon no account pay the slightest attention to these lectures.

I can vividly recall to memory the appearance of patients, and of morbid specimens, the attitude, language, and bearing of clinical teachers, but all the rest is chaos; all, in truth, was so much waste of time. A couple of hours a day receiving practical instruction at the infirmary, as many more attending a "grinder" (as "coaches" were termed in those days), would have been much better: the remainder might have been well spent in examining the pathology, symptoms, and treatment of diseases to memory, in my own writings, or in investigating my constitution by taking long walks into the country.

If the object of the Medical Act be to relieve human suffering, all teaching should be clinical, all instruction should be practical. It is a pity, nevertheless, it is a fact, that a knowledge of hydrostatics, physics, and all theologies, do not help us much in curing diseases. After exhibiting ourselves as scientific "ogres", fit to tackle anything, we come at last to acknowledge our utter helplessness; and it is then that we begin to think that what is called knowledge is not knowledge at all, but a heterogeneous conglomeration of opinions that live but for a few years. What is considered knowledge to-day will be scouted fifty years hence. How, then, can we dogmatise that the method of teaching in one particular school is better than that in all others? One session of pure practical instruction is worth a dozen of the present mixed sort. Old men appear to be incapable of comprehending this. What can be said of any theoretical teaching, university education, or otherwise, more than that it subjects the mind to more or less discipline? and what discipline can be better than bedside instruction? Men of mediocre talents, as well as the most brilliant, may, by dint of hard work, commit a great deal to memory from listening to dry lectures, but that will never make either philosophers or learned men of them: indeed, the most theoretical are often the most useless at the bedside when there is something really to be done. If the medical art were perfect, matters would be different; but as it is, and as it will be taught for some time, there is great room for improvement. Those who consider themselves authorities upon the subject of medical education, appear almost all to run into the same groove—viz., that four years should be sufficient to insure a complete and thorough medical education. This is the rock upon which they split. The time is too short. No man can acquire the thorough and profound knowledge required of him in such a short space of time. Hence the cause of there being so many sciolists amongst us. Specialists appear to forget that they either lecture or examine upon one, or at most two, subjects, and that whatever standard of proficiency they may meet with among some students, the result is always the same—viz., "got up for the occasion".

It appears to me, therefore, that for all those intended for the medical profession, instruction should be compulsory only in anatomy and physiology, the principles and practice of medicine (including the action and uses of drugs), surgery, and midwifery, as common sense and experience both teach us that whatever else is learned, is either forgotten or neglected the moment the tyro enters upon the "struggle for existence". This does not, of course, mean to exclude instruction in any of the other departments of human knowledge, which should be open to all comers, male or female, who may have an inclination or aptitude for such studies.

Any one who looks at the subject impartially, will find that the success of Edinburgh, as a seat of learning, is as much to be attributed to political considerations as to the wisdom and greatness of its professors. Once having got the lead, it was not very difficult in those days to keep it. If it had not been the capital of Scotland, it would never have been so famous as it is, and its system of teaching would have remained in obscurity. If any single circumstance could have contributed to its success, it must be put down to national character alone; and this ought not to be lost sight of by those wisacres whose minds appear to be enveloped in a haze of "vested interests", and whose intellects are incapable of further expansion.—I have the honour to be, sir, your obedient servant,

Edinburgh, October 1875.

K. N. M.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than Thursday, twelve o'clock.

INJECTION OF PERCHLORIDE OF IRON IN POST PARTUM HÆMORRHAGE.
SIR,—I read with great interest the account of Mr. Boddy's case of post partum hæmorrhage treated by the injection of a solution of perchloride of iron, as recommended by Dr. Barnes, which appeared in your JOURNAL of the 16th instant, and was somewhat surprised at the author's conclusion as to the immediate cause of death; and I wish, therefore, to submit to your readers what appears to me to have been the direct cause of death in this case, with the hope that, should my theory be fallacious, it may be corrected. First, let us consider the salt from a therapeutic point of view. What are its direct actions? Three; viz., styptic, astringent, and irritant; and, keeping these in view, I think we have the key to the pathology of the case. When the solution is first injected, the hæmorrhage ceases. How? By plugging of the mouths of the uterine vessels. But does this thrombotic process end here? I fear not; but, extending to the vessels forming the uterine plexuses, perchance a portion of a thrombus is broken off and washed into the general circulation, and not arrested until it reaches the bifurcation of the pulmonary artery, and here, cutting off the supply of blood to both lungs, death is the result, accompanied by convulsion and blueness of the cutaneous surface. With regard to its second and third actions—viz., those of astringent and irritant—I need say nothing, as we know that the uterine mucous membrane is corrugated, and the muscular tissue caused to contract by reflex action, as shown by Mr. Boddy, accounting for the abdominal and sural pains. Now, to me this points out a practical lesson, that the solution should be of such strength and in such quantity as just to plug the mouths of the torn vessels and cause uterine contraction; and I presume less than twelve ounces, especially of such a strength as that used in this case, would accomplish this end.

I may add, that, had a necropsy been performed, a valuable addition might have been made to obstetric science, as I believe Dr. Barnes does not notice such a case as this in his valuable work on obstetric operations.—I am, etc., J. G. B.

A METROPOLITAN TEACHER.—The delay in making the return to Dr. Ogle has been caused by the Newcastle School not having sent in the number of students entered there this session.

TREATMENT OF ENURESIS.

SIR,—Could any reader of your valuable and widely circulated JOURNAL assist me under the following circumstances? I have a case of enuresis, in which I have tried a variety of remedies; amongst others, tonics, cantharides, vermifuge medicines, and specifics of various kinds, all apparently without any success. The boy is now about thirteen years of age, and has been afflicted with the disgusting habit of wetting his bed almost every night, except when taken up, and even then occasionally, yet in the day-time he does not appear to require to micturate unusually often. He is a heavy sleeper, and his health in all other respects seems excellent. I may mention, also, that he feels acutely his lamentable condition.

If any of your correspondents or readers will aid me in this matter, they would be doing a good and valuable service to many a family, and confer a favour on Dublin, Nov. 3rd, 1875. A COUNTRY PRACTITIONER.

DOSAGE OF ESERINE.

SIR,—I read in your estimable paper of September 25th, which I have just seen only now, a note by Dr. Munro on Eserine Discs in Tic; this article troubles me a great deal. May I ask one of the three gentlemen—Dr. Munro, Mr. Squire, or M. Duquesnel—to explain me the weights they give? Dr. Munro says he has given the eserine, "1-25th of a kilogramme" for a dose, which means 40 grammes. May I ask him if his patient is still alive? A gramme in your English Pharmacopœia equals 15.432 grains; but the doctor makes it so that forty of these grammes equal .0006 of a grain. Perhaps your system of weights is different from ours. Besides, the discs contain .0006 of a grain; and the doctor says that 1-3200 is a proper dose. May I ask him again how he manages this? I tried to divide 32 by 6, but I could not possibly get whole numbers. Shall I cut a disk? Give me kindly a good explanation, or else I shall be obliged to come back to my own system of weights, which seems to me to be more easy and natural than your English.

Agree, Monsieur le Rédacteur, my distinguished salutation. KILOGRAMME. Paris, October 25th, 1875.

** It is not surprising that our correspondent should ask if the patient is alive, after taking one-twenty-fifth of a kilogramme of eserine. The word kilogramme was put by error for milligramme; and our correspondent will readily see that one-twenty-fifth of a milligramme is about .0001 grain. As regards the dose being 1-3200 of a grain, it will be observed that Dr. Munro says that half a disc is sufficient as a rule; therefore, .0006 x .5 = .0003 grain = 3-10000 of a grain = 1-3200th of a grain nearly, or more accurately 1-3333.

"DENS SAP."—Mr. Hancock has resigned his seat at the Dental Board of Examiners of the Royal College of Surgeons. His successor will be appointed on the 11th instant.

THE INDIAN MEDICAL SERVICE.

SIR,—Does the Indian Army (medical) offer a good position to a young surgeon at the end of twenty-five years? Would it be preferred in point of position, rank, and pay, to a partnership in an English county, never exceeding £700 for same time, to one who will remain unmarried?—Yours obediently, F.R.C.S.

** The best reply we can give to F.R.C.S. is to ask him to apply at the India Office for a copy, to be had for the asking, of the terms offered to candidates for the Medical Service of India. There, he will see at a glance the pay, rank, and pension given in detail. We have only to add, that Her Majesty's India Medical Service is still the best in the world, and that it commands the best men in the market. Like every other public service, its members have "grievances"; but if the young surgeon, in whose welfare he takes an interest, elects to go into private practice, he will find "grievances" in the course of his career to be "as plentiful as blackberries".

SEVENTY SNAILS IN THE RECTUM.—Dr. Jules Boeckel of Strasburg has communicated (*Gazette Médicale de Strasbourg*) to the Medical Society of that city a note of a case in which a man, admitted for severe pain in the lower part of the abdomen, stated that one of his friends, five or six days previously, taking advantage of his drunkenness, had introduced a number of snails into his rectum. By exploration, there were removed fifty-two snails, and others followed the use of an enema. In all, seventy were removed. The snails, nearly dead, appeared not to have undergone any degree of maceration or digestion.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

LUNACY IN SCOTLAND.

SIR.—I perused with great interest and approval the able leading article on Lunacy in Scotland, which appeared in the JOURNAL of the 10th instant. The article is so moderate and full of common sense, that it must, I think, commend itself to those engaged in the treatment of the insane, and practically acquainted with the subject. I am glad to see that your powerful pen has been taken up in such a cause, for I believe it is high time to place some check upon the vagaries of the Scotch Lunacy Board, their extreme views, and mischievous attempts to mislead, and are calculated to shake the confidence of the public in our present asylum system, and in the medical officers having charge of asylums in Scotland, who require to be protected from the tyranny of the Board, but who, with two or three exceptions, do not appear to have the courage to speak out, or to defend themselves. The extreme views and absurd crochets of the Scotch Lunacy Commissioners may be gathered from their annual reports, and are set forth in a review of Dr. Wynter's book On the Borderlands of Insanity (probably emanating from a member of the Lunacy Board, which appeared in the Scotsman on September 6th last. This review contains views both to Scotch asylums and their medical officers, who, as a body, are treated with scant courtesy and with marked contempt by the Lunacy Board. No wonder, then, that the Board is not held in much respect. It is not composed of practical men; it indulges in theories; it does not look at insanity as it exists in our midst, but imagines that Gheel-like colonies and Kennaway boarding-out villages could meet the requirements of the pauper insane, and eventually that education is to prevent madness, and clear it off the face of the earth. Although insane colonies like Gheel could be established in this country, there would still be a necessity for asylums, which have done, and are still doing, great good, not only as curative hospitals, but as homes for those who are dangerous to society and to themselves.

The matter and spirit contained in the Commissioners' official reports of the various asylums inspected by them do not tend to inspire one with respect for their wisdom or impartiality. As you truly remark in your leading article referred to, they have too much leisure on their hands, which they devote to free indulgence in statistics, theories, and crochets, with occasional abuse of the institutions they are supposed to improve and control.—I am, yours, etc.,

October 24th, 1875.

CONSERVATIVE DEGREES.

SIR, I have read the several letters in the BRITISH MEDICAL JOURNAL relating to the registration of foreign degrees, and certainly think the Medical Council should carefully ascertain by unmistakable evidence that such degrees have been obtained after a due course of study, by attendance on lectures and hospital practice, as well as after due examination, otherwise it would be most unfair towards those British graduates who have spent both time and money in obtaining their degrees. There is a pushing holler of a common language in my immediate neighbourhood whose education is such that he cannot spell ordinary English words correctly, while his Latin is something more than "excellent"; "I new a person," etc.; and his prescriptions are written in the same style; thus, "Acid plumbi, zinci valeriani, pot becarb, vin quinine inf, glycyrriza, ft. gargil", and others too numerous to mention; yet, strange to say, he has somehow managed to obtain a license in medicine and surgery from a British College, and his name appears on the Medical Register.—I remain, SIR, YOURS TRULY,

October 14th, 1875.

A BRITISH GRADUATE.

RIGHT TO SEE PATENT MEDICINES, &c.

THE National Association of Wholesale and Retail Chemists for 1875 contains the following note:—"Medical Act, 1858, and the Medical Act, 1868, and the Apothecaries Act, 1858. By the Apothecaries Act, no apothecary (with an exception in favour of old practitioners not material to this report) can recover any charges unless he can prove at the trial that he has obtained a certificate from the Court of Examiners. By the Medical Act, 1868, no person is entitled to recover for medical or surgical charges unless he can prove upon the trial that he is registered under the Act. Held, that a practitioner cannot recover for medical services rendered before he obtained his certificate under the Apothecaries Act, although at the trial he may prove that he has since obtained it, and been registered under the Medical Act.—Leman v. Huggins (1874)."

This will reply to several queries which we have lately received.

OPINIONS OF OFFICERS OF DEPARTMENTS.

THE Children's Hospital, Great Ormond Street, with great wisdom, has employed, as our readers are aware, the services of the Charity Organisation Society in investigating the new applications for medical relief at its out-patient department. At the last meeting of the Council of the Society, the secretary read a statement which he had received from the Children's Hospital, with reference to the number of out-patients during the quarter ending September 30th. There had been 4,115 new applicants. Of these, 47 had been summarily rejected at the hospital, on account of over-age, or the infectious nature of their complaints; 439 had received "casual papers", and had been seen once, their ailments being so slight as to make it unnecessary for them to attend again; 131, whose fathers or mothers were receiving more than 30s. a week, also received "casual papers", and were seen once, on the ground of their requiring good advice, and being unable to pay a consultation-fee; 3,498 were furnished with letters and referred to the committees of the Charity Organisation Society, after being seen once, that these letters might be stamped by them, if the statements made by the applicants at the hospital proved to be substantially true; 122 letters had been returned to the hospital unstamped, for various reasons; but the committees had not in all cases sent information about rejected cases, and the hospital authorities were unable to say how many of the 4,115 had attended, as they did not receive any attention. He was informed that there had been 400 fewer applicants than during the corresponding quarter of last year, whilst the opening of the new buildings might have been expected to increase the number. The district committees would be able to say how many letters had been brought to them during the quarter, and how many they had stamped.

MEDICAL APPRENTICESHIPS.

SIR,—Permit a practitioner of nearly forty years' experience to protest most energetically against the opinion expressed by the Rev. Mr. Poulton, in his introductory address at Queen's College, Birmingham, on the subject of apprenticeships. There never was a greater mistake made in medical education than that which takes youths direct from their ordinary schools to medical lecture

rooms and hospital wards. The consequence is, that numbers of young men pass their scientific examination with credit, and yet are entirely ignorant of all those minor details of practical medicine which go to form the successful practitioner; nay, even as they become advanced in the profession, unpractical prescriptions too often betray to the chemist the total unacquaintance of the prescriber with ordinary pharmacy. No doubt the old apprenticeship of five years, chiefly occupied in compounding superfluous medicines, was an abuse; but now, certainly, has gone much too far the other way. There can be no better portal for a youth into our profession than a year or two of residence in the house of an intelligent gentleman in general practice in the country, more especially of one with union and club practice. In such a position he lives, as it were, in a medical atmosphere. He must acquire practical knowledge of pharmacy, such as he cannot get elsewhere; and the morning waiting-room cannot fail to bring before him those details of medical and surgical practice which make up by far the larger proportion of our daily work. The varicose ulcer, the fractured arm or dislocation, the abscess of the wound, all come in, in succession, varied with minor medical cases, which every one has to be visited with his master at their own homes.

In years gone by, when in active country practice, I have had various youths pass through my hands, and have been pleased to hear from them testimony as to the advantage they found, the knowledge acquired, during their pupillage, not only in practice, but in their student-life. Of course, I am pre-supposing that the master not only knows his profession, but is willing to take pains, as a conscientious duty, to teach it to his pupils, and to train them in every way to become gentlemen as well as medical men.

By all means educate youths intended for our profession thoroughly in general literature, but do not ignore that practical training for the every-day work of the profession, which, if not acquired during pupillage, must be afterwards more irksomely acquired, when such work should be over. I remain, SIR, YOURS TRULY,

S. T.

F.R.C.S.—The subject was discussed at the last meeting of the Council of the College of Surgeons. Particulars relating to the appointment will be found in another column, and the official notice in our advertising pages.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Bristol Daily Post; The Evening News; The Sheffield Post; The Metropolitan; The Blyth Weekly News; The Edinburg Daily Review; The Glasgow Herald; The Western Daily Press; The Merthyr Telegraph; The Leighton Buzzard Observer; The Bristol Daily Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Sunderland Daily Echo; The Co-operative and Financial Review; The South Wales Daily News; The Manchester Courier; The Melbourne Argus; The Southampton Times and Hampshire Express; The Jarrow Express; The Birmingham Daily Post; The London Leader; The Standard; and Rotherham Independent; The Derbyshire High Peak News; The Liverpool Daily Courier; The National Food and Fuel Reformer; The Worcester Herald; The Norfolk News; The Worcester Chronicle; The North British Daily Mail; The Social Science Review; The Carlisle Express; The Sussex Daily News; The Royal Leamington Spa Courier; The Bethnal Green Times; The South London Press; The Hampshire Advertiser; The Worcestershire Advertiser; The Newcastle Weekly Chronicle; The Worcester Journal; The Hobart Town Mercury; The Weekly Times; etc.

* * * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, &c., have been received from:—

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REMARKS

ON

SOME PHYSIOLOGICO-PATHOLOGICAL PHENOMENA OF THE CIRCULATION IN PREGNANT WOMEN.*

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THE modifications wrought in the circulation under the influence of pregnancy are of great physiological and pathological interest. The phenomena by which these modifications are revealed throw a valuable light upon certain anxious clinical problems, and afford distinct indications in practice. These modifications may be classed under two heads: 1. Changes in the constitution of the blood; 2. Modifications in the dynamic conditions of the circulation. In every pregnant woman, changes easily discovered in both these conditions are present; but in some exceptional cases evidence of a special and more striking character shows itself. The right interpretation of these exceptional cases depends upon our knowledge of the general laws that govern the circulation in the pregnant woman. Unless they be rightly interpreted, we might be led into serious practical errors.

I need not do more than refer to the general facts established by Andral, Becquerel, and others, as to the alterations induced in the blood itself during pregnancy. They found increase of water, diminution of red corpuscles, increase of fibrine. These changes do not, perhaps, occur universally; but they are certainly frequent. Of late years, it has been recognised that leucocythæmia—that singular disease in which the white corpuscles acquire a remarkable preponderance—is especially liable to arise under the influence of pregnancy; and it is enough for the present purpose to call to mind the various empoisonments of the blood which arise from obstructed excretion, as when urea and uric acid or biliary matter accumulate in it, the kidneys or liver being overtaxed. It would lead me away from the path I propose to follow, were I to pursue this subject.

With regard to the dynamic changes, it is desirable to say a few words. Since the researches of Natalis Guillot, Larcher, Duroziez, and others, it is, I believe, admitted that there is a normal hypertrophy of the heart induced by pregnancy. I have myself made observations which satisfy me of the truth of this proposition in some cases; and visible evidence is occasionally obtained in the production of enlargement of the thyroid gland, and that prominence and brilliancy of the eyeballs known as Graves's disease. This exophthalmic goitre is sometimes induced by pregnancy. Here it must be regarded as an exaggerated expression of the physiological increase of the heart's force. Other evidence exists of this increased action. The pulse is usually somewhat quicker than in the non-pregnant state. There is strong ground for the conclusion that a greater volume of blood is flowing in the vessels. Two organisms have to be supplied; and, when the fetus is thrown off, a considerable quantity of blood, which may be regarded as surplus, is commonly discharged, without any obvious detriment to the mother. The sphygmograph supplies direct testimony to the increase of tension of the arterial system. Dr. Mahomed has ably illustrated this point in reference to the albuminuria of scarlatina, and incidentally with reference to the albuminuria of gestation (*Med.-Chir. Trans.*, vol. lxxv); and in a paper in the last volume of the *Obstetrical Transactions* by my son, Dr. Fancourt Barnes, are some interesting tracings showing this increase of tension. In my Lumleian Lectures (1874), I dwelt upon the increase of nervous irritability induced by pregnancy, showing that conditions which would not excite convulsion in the non-pregnant woman were sufficient to do so in the pregnant. Now, increased nervous tension can hardly exist without influencing the circulation dynamically; and that influence will be shown in increased vascular tension. Again, the new developmental nîsus set up in the uterus of necessity attracts a large supply of blood to this organ, and induces increased vascular activity analogous to that which Hunter described as taking place during the growth of the stag's horns.

Passing from these general facts, let me invite attention to the hæmorrhages, not alone the uterine, which occur during pregnancy. In the first place, we must take note of the remarkable hyperæmia

which is commonly seen in the skin and mucous membranes of pregnant women. In some women, this hyperæmia is general; but in most it is prominently marked in the veins of the breasts; and in the vagina, vulva, rectum, and inferior extremities, to such a degree as often to afford the best proof of pregnancy in the early months.

I will now offer a few clinical illustrations of the peculiar erethism of the circulation in pregnancy. The great development of the vascular system of the pelvis, seen in the deep purple colour and the turgid state of the cervix uteri, vagina, and vulva, frequently passes into marked phlebectasis; the varicose condition forming prominent masses in the vagina and vulva, and often being attended by varicosity in the superficial veins of the thighs and legs. This often begins early in pregnancy: an important fact to remember, because it affords strong presumption against the theory that the cause is pressure exerted by the enlarged uterus upon the pelvic veins. Cases have been known of these distended veins bursting and giving vent to fatal hæmorrhage. Mr. Towne of Kingsland told me of a case which occurred under his observation. This phlebectasis usually starts with the first pregnancy, subsides after labour (the veins, however, rarely if ever quite recovering their natural condition), and returns with every succeeding pregnancy. The following cases are ordinary illustrations.

CASE I. *Phlebectasis and Tendency to Exophthalmic Goitre.*—In November 1861, I saw at the London Hospital a woman aged 34, who had had two children. She was then three months pregnant. The veins of both legs became enlarged during the first pregnancy, and again in the second; and there had been some œdema of the legs before the actual pregnancy. In January following, when she was about five months gone, the venectasis was more marked; there was a very large bunch of veins on the inside of the right thigh, very painful and "throbbing". She suffered intense headache. The carotids throbbled visibly. There were increased impulse of the heart, and slight prominence of the thyroid body. She was subject to palpitation, and the face was often injected.

CASE II. *Phlebectasis.*—In February 1862, I saw at the London Hospital a woman aged 28, who had had three children. She was then six months pregnant. She complained of frequent faintings. She had a large coiled mass of varicose veins in the right labium; one vein, of the size of a goose-quill, inside the thigh, communicated with this mass. The right foot swelled; the veins were quite elastic; there were no thrombi in them. She had noticed some varicose swelling with the third pregnancy; this quite disappeared. There was general deep hyperæmia of the vagina, and the superficial veins of both legs were varicose.

CASE III. *Phlebectasis.*—On July 14th, 1873, Mrs. George W. consulted me in her third pregnancy. During her first pregnancy, she began to have dilatation of the veins of the right leg especially, and slightly in the left leg. This subsided after labour. It returned in the second pregnancy, and again subsided after labour. It was now very marked, although she was only about three months gone. The right foot swelled a little at night. The saphena up to the femoral ring was all dilated. There was a large bunch of distended venous plexus at the inner side of the knee. Her general health was good. She had worn an elastic stocking up to the knee.

This is a very common case. The following one is a curious example of the puzzles to which this vascular development may give rise when it is much exaggerated.

CASE IV. *Phlebectasis: remarkable Case, simulating Cancer.*—In February 1863, a woman came under my care at the London Hospital, who had been delivered in 1860, and had since had two abortions. She was seven months pregnant. She "felt something come down" a fortnight ago, which "she believed was the child's arm". There was some flooding at the time. I found a mass of rounded soft botryoidal swellings inside the labia, extending all along the urethra, and filling the vagina. These were varicose veins; in parts, the appearance was like that of small projecting cysts. It suggested, and for a time was mistaken for, malignant disease. She could not sit down. After some weeks, the condition was less prominent. She was delivered without trouble. All varicosity vanished.

The following case is an illustration of the influence of menstruation upon the superficial circulation.

CASE V.—In July 1863, I saw Mrs. G., who had been married three months. Her menstruation had been scanty before marriage; since then, painful and more copious. Between the periods, there was anæmia, and the feet swelled. She had several spots on the legs, which enlarged, reddened, and became confluent, at the menstrual periods.

The following case affords a different illustration of the same thing.

CASE VI. *Nævus increasing under Pregnancy.*—A few days ago, I

* Read before the Metropolitan Counties Branch.

saw at St. George's Hospital a woman aged 44, who had her last child eight years ago. She bears a large nævus on her left cheek. She says it grew bigger every pregnancy, and has ceased growing since she left off having children.

The three following cases are examples of the difficulty under which the heart labours in some cases of pregnancy. In two of them, there was ascertained hypertrophy of the heart.

CASE VII. *Heart-hypertrophy from Pregnancy.*—February 29th, 1868. Mrs. B. had had two children, the last ten months ago, weaned after two months. Menstruation was regular. She was anæmic. She had great palpitation; tumultuous action of the heart; wine set it palpitating. There was hypertrophy of the heart. All her trouble dated from pregnancy.

CASE VIII. *Hypertrophy of Heart and Thyroid Body.*—In November 1861, I saw at the London Hospital a pregnant woman who had had four children and four abortions. At the last pregnancy, two years ago, the placenta "grew to the left side"; puerperal fever followed. She observed enlargement of the thyroid, and suffered from palpitation, soon after the first labour. She was now five months gone. The os uteri was soft and patulous. There was purple congestion of the vagina. She had had two "shows" early in pregnancy. Her feet swelled this pregnancy, as they did in the preceding one. She had a suffocating feel in the throat, with increased impulse of the heart, and a slight blowing sound communicated to the arteries of the neck. The pulse was too small. She was relieved by treatment, and was delivered at term.

CASE IX. *Palpitation during Labour.*—In May 1863, I met Mr. Kesteven on the case of a lady in labour, who had had many children. During and soon after her last labour, she was seized with alarming palpitations and syncope. In actual labour, the progress was slow; and, similar impairment of the heart's action being apprehended, Mr. Kesteven sent for me, in case it should be desirable to accelerate labour. But labour was terminated naturally.

The apprehension felt in one of these cases is sometimes realised. Syncope, ending in sudden death, may occur. This, I have little doubt, is the explanation of two cases of sudden death during labour to which I have been summoned; and, if death do not occur by sudden failure of the heart's action, it may ensue from extravasation of blood in the brain. Apoplexy is one of the accidents to which pregnant women are exposed. This is most to be dreaded during the increased tension of the vascular system attending the expulsive act of labour.

CASE X. *Death from Blood Effusion in Brain.*—In a case observed in the maternity of St. Thomas's Hospital, the woman was in her seventh labour. Convulsion, stertor, and syncope set in before the expulsion of the child. The child was expelled alive. The mother died twenty minutes afterwards. A small clot, quite recent, was found in the left thalamus opticus; and another, of larger size and of a dissecting character, in the left crus cerebri. The abdominal and pectoral organs were healthy.

CASE XI.—On September 28th, 1862, I saw the wife of a medical friend. Her age was 37. She had had ten children, and no abortions. Latterly, she had been getting stout, staying much at home. Being about two months pregnant, on September 19th a sudden gush of blood, estimated at a pint and a half, escaped with some pain. In the evening, she suddenly sprang up in bed, and fell back paralysed on the left side. Stertor followed; but there was some return of consciousness next day. Complete coma set in in the afternoon. Dr. Ramsbotham saw her in the morning. He found the ovum not detached. He thought the case hopeless. I saw her at 8 P.M. She was in deep coma with stertor. There was no swelling of the legs. The urine had been suppressed for twenty-four hours; it had not been tested. Thinking it possible that the cerebral symptoms might be connected with albuminuria, I examined the state of the uterus. The cervix admitted the tips of the fingers; the ovum was partly detached. I therefore passed one finger into the uterus, and brought it away. She died the same night.

In the above case, the complication with albuminuria could not be verified; but, in a considerable proportion of the fatal cases of puerperal eclampsia, lesion of the vessels of the brain, and effusions of blood and serum, have been found.

CASE XII. *Effusion into the Pericardium.*—Sometimes effusion of blood takes place into the serous cavities. Thus I remember a singular case of which I saw the necropsy in the service of Dubois, when I was a student in Paris. A young woman in her first pregnancy was expecting her labour. When in the act of straining at stool, she died almost instantly. The pericardium was found full of blood, fluid and coagulated. The aorta had given way through the bursting of a hydatid cyst in its wall. The growth of this cyst had thinned the wall, so that, under the increased tension, a rupture took place.

I have also known blood-effusion into the peritoneum take place in pregnancy, forming retro-uterine hæmatocele. Anyone who has seen the intensely turgid state of the vessels of the Fallopian tubes and broad ligaments during pregnancy, will appreciate the probability of this accident. When effusions take place into the brain, or when the heart fails in its action, death or grave injury is the inevitable result. When effusion takes place into the pericardium, if the quantity of blood be at all considerable, recovery can hardly be expected; but if the peritoneum be the seat of the effusion, the subject may escape after shock and peritonitis. Fortunately, hæmorrhages are more frequent from the mucous membranes; and, therefore, there is provided a natural outlet. Although these mucous hæmorrhages are sometimes so profuse as to induce danger by anæmia, they must in their design and first tendency be regarded as salutary, as instances of a conservative process. It would be easy to adduce examples of hæmorrhage from all the mucous tracts. But I would especially draw attention to some cases of hæmoptysis, of hæmatemesis, of hæmorrhage from the bowel, and from the urinary tract.

Hæmoptysis is of especial interest, because it naturally gives rise to the suspicion of tuberculosis. I have known this error to be committed most frequently in cases of hæmoptysis from disturbance in the menstrual function. But it is very important to remember that bleeding from the lungs may occur as a simple consequence of pregnancy.

The subject of the following case, as well as her family, is well known to me; so that I can affirm, with some confidence, that there is no tubercular element.

CASE XIII. *Hæmoptysis in Pregnancy.*—May 1873. Mrs. J. L. A., a young lady, was seen by me a month before her delivery of a child, now ten months old. She suckled until two months ago; when she left off, because the milk disagreed with the child. She menstruated all through lactation, until four months ago, when she fell pregnant. From that time, she had been liable to cough and morning sickness. On waking at 6 A.M., she felt blood in the mouth; this excited cough; and free hæmoptysis of bright red, in parts frothy, blood mixed with small clots followed; then came vomiting at times to a very distressing degree. She had not lost flesh. The chest was well-developed—*bomble*. There was some degree of harsh respiration in the right chest; the left was quite normal. I prescribed nitric acid, digitalis, oxalate of cerium, and Püllna water. The hæmoptysis ceased in a few weeks. She still vomited at times. She then suffered from palpitation and a disposition to syncope, which she had had to a less degree before pregnancy. The hands and feet swelled. At a later period of pregnancy, she had more œdema, and some albumen appeared in the urine. She was carefully watched, and was delivered of a healthy child at term without further trouble. She nursed the child, and has enjoyed good health, without return of hæmoptysis or cough to the present time. I find a note of an observation made of this lady in 1867, when she was fourteen years old, that there was rather strong respiratory sound in the centre of the right chest. The subsequent appearance of albuminuria is very interesting, as confirming the theory that hæmoptysis was due to increased vascular tension. At this moment she is in good health.

CASE XIV. *Hæmoptysis in Pregnancy.*—October 1874. A medical friend consulting me about his wife, told me that, in the seventh month of pregnancy, she had, every two or three days, severe hæmoptysis. Dr. Peacock, who examined the chest, found no disease.

Dr. Montgomery relates a case in which hæmoptysis recurred in five successive pregnancies; the last one running into hydatidiform degeneration of the placenta.

The two following cases are interesting illustrations of hæmorrhage from the bowel due to pregnancy.

CASE XV. *Hæmorrhage from Bowel during Pregnancy.*—On December 18th, 1872, I saw Mrs. A., with Mr. Lammiman. She was a young woman, five months gone in second pregnancy. During her first pregnancy, for the first time, she had frequent losses of blood by stool. These diminished after labour, but recurred now and then whilst suckling. They had been much more frequent and copious since she had been pregnant again. The blood came sometimes in clots; sometimes fluid and bright. It came after stools, without pain, and daily. She was somewhat anæmic; the pulse had the "hæmorrhagic jerk". She declined examination; but Mr. Lammiman had examined the rectum, and said there were no piles, and no disease as far as he could reach. After her last labour the abdomen remained large. The possibility of there having been some ulceration of the mucous membrane or glands of the colon occurred. But the more probable explanation was hyperæmia of the mucous membrane, or dilatation of the hæmorrhoidal vessels. I advised turpentine enemata, and half-drachm doses of turpentine by the mouth. This treatment was followed for a fortnight; when, being somewhat improved, the patient refused to go on with it. She then took twenty-drop doses of tincture of perchloride of

iron three times a day for about a month, at the end of which time the bleeding had almost ceased. She was delivered on April 7th, 1873. Very little bleeding attended the labour. She continued in good health until January 1875, when she aborted at about three months' gestation. The bleeding from the bowel had occurred very slightly. Possibly (observes Mr. Lammiman) it would have increased had the pregnancy advanced. She bled very moderately during the abortion, and has since (May 13th, 1875) remained in good health.

CASE XVI. *Hæmorrhages from Bowel and Threatening Mania during Pregnancy.*—In May 1872, I saw, with Dr. Williamson of Mildmay Park, a delicate lady who had had seven children in less than seven years. When we met, she was five months gone. From the beginning of pregnancy, she began to have repeated and copious losses of blood by the anus, coming in large clots, and leaving her very blanched and prostrate. Latterly, she becomes almost maniacal and imbecile from the losses. She had also had four hæmorrhages from the vagina. She complained of no marked pain in the stomach or intestinal canal. There was no vomiting. As far as could be ascertained, there were no piles or other morbid condition within reach of the finger. The urgent question to determine was whether the pregnancy could be allowed to go on. Looking at her extreme prostration, the likelihood of the losses being repeated, and the danger of her breaking down in body and mind, we decided upon the induction of labour. Dr. Williamson reported to me "that the hæmorrhage continued, and that he therefore provoked labour. The hæmorrhage ceased immediately after labour; and she made a good recovery. She has since become pregnant, and again the hæmorrhages returned. About the third month, she had a mental shock, and aborted. All unfavourable symptoms ceased; and she has been quite well ever since. She has had no maniacal symptoms since. There is no family tendency thereto." Within the last week (May 1875), Dr. Williamson has completed her history to the present time. She has been pregnant a third time, and again the hæmorrhages returned. As her strength was giving way, Dr. Williamson induced miscarriage about the third month, and again the hæmorrhage ceased immediately. "She has not now been pregnant for a year, and is strong and well. When you saw her, she was anæmic, and very much emaciated; she has now a good colour, and is much stouter; she is much more active, cheerful, and her intellect is clearer and better than it has been for years." The complication with maniacal tendency is extremely interesting. The combined vascular and nervous tension of pregnancy are important factors in the production of insanity.

CASE XVII. *Hæmorrhage from Bowel after Labour.*—Mrs. A. consulted me on April 29th, 1875. She had had five children, the last in October 1874; she did not suckle it. She passed half a pint of blood by bowel after labour.

The following is an example of hæmatemesis. When we reflect upon the extreme pressure thrown upon the stomach by the vomiting of pregnancy, it may seem surprising that hæmatemesis is not more common.

CASE XVIII. *Hæmatemesis in Pregnancy.*—C., aged 26, had had four children. She menstruated regularly, and during lactation. Her last child was born nine months ago; she had not suckled it. She was now (May 1875) five months pregnant. Since her pregnancy, she had vomited blood two or three times a day. There was no menstrual or leucorrhœal discharge. She was giddy, faint; "her head turned round"; she could not walk; was anæmic. The pulse was very feeble. There was pain in the right hypochondrium. In previous pregnancies, she vomited, but not blood. She took sulphuric and hydrocyanic acids, and got better.

CASE XIX. *Eclampsia: Hæmatemesis: Epistaxis: Albuminuria.*—In February 1875, I saw, with Dr. Lees of Camberwell, a woman seven months gone in her fifth pregnancy. Her previous labours had been hard, but there had been no convulsion. She was in fair health three weeks ago, when her husband went to sea in very bad weather; she feared he was drowned. Headache, giddiness, and some disturbance of sight came on; and her face was observed to be somewhat puffed. She had not noticed movements of the child for a fortnight. Convulsion broke out on the 23rd and 24th. The ring was a little tightened; there was no other mark of dropsy. Some days before the first fit, she had vomiting of blood. Labour was provoked the same day; some convulsive symptoms appeared. The fœtus was expelled dead; it had been dead sometime. A severe fit attended the extraction of the placenta. She bled at the nose, and considerable uterine hæmorrhage took place. After this, there was no return of convulsion. The symptoms were those of anæmia. The urine contained much albumen.

Dr. Lees has kindly continued the history. "A few days after my last report, Mrs. W. was seized with vomiting, which lasted thirty-six hours, followed by dark brown tongue, sleeplessness, and pulse 120,

which, during the following fortnight, fell to 72. Since then, she has become apparently well; has been for a few weeks into Warwickshire. I saw her yesterday; she looks very well; the menses appeared about a week ago, lasting five days. The urine is still albuminous; about one-third as much as when you saw her. She has always had slight hæmoptysis during her pregnancies, never hæmatemesis. She has occasionally troublesome attacks of bladder-irritation." Here, again, we observe concurrence of hæmorrhage from a mucous tract, and albuminuria, illustrating the general increase of vascular tension.

Hæmorrhage from the urinary tract is, in its clinical aspects, the most interesting of the hæmorrhages of pregnancy. It is not, however, easy to estimate it at its exact significance. It may be complicated with albuminuria, or it may be simply oozing of blood. Albuminuria may, indeed, be regarded as a form of hæmaturia. The observations of Dr. Mahomed upon this point are of extreme value. I will cite some of his observations. "Previously to the commencement of any kidney-change, or to the appearance of albumen in the urine, the first condition observable is high tension in the arterial system." "If this condition of high tension be sufficiently severe, transudation of the characteristic crystalloids of the blood, notably hæmoglobin, occurs before albumen appears in the urine; and they can be detected in that fluid by the guaiacum test for blood." The transudation of albumen, then, which is so often observed in pregnancy, and which is so often attended by disastrous disease, may be regarded as allied to hæmorrhage. This alliance is further exemplified in the following case.

CASE XX. *Pregnancy: Dropsy; Hæmaturia.*—I saw in the London Hospital a patient of Dr. Parker, a young woman married about six months. She menstruated one month afterwards; was four to five months pregnant. For some weeks, she had had general dropsy; the labia majora being much distended. There were no nervous symptoms at this time. There were hydræmia and palpitation. There had been blood in the urine. When this had passed away, some urine which I examined was acid, slightly albuminous. There was no evidence of other disease. The albumen detected here might have been due to a little blood lingering in the urine. There was no opportunity of following up the case.

Here it may be interesting to note the analogy between abortion in uterine gestation, and the cataclysmic hæmorrhage attending rupture of the sac in Fallopian and other forms of ectopic gestation. Rupture of the tubal gestation-sac, which usually occurs about the second or third month, may be regarded as abortion. The conditions are similar. Hæmorrhage, probably under ovarian excitement and increased tension, is an universal phenomenon. Just as uterine hæmorrhages and abortions are especially prone to occur at menstrual epochs, so it is with the hæmorrhages of tubal gestation. Indeed, I have elsewhere shown that uterine hæmorrhage frequently attends the rupture of the sac and the intraperitoneal hæmorrhage.

I have referred to the conservative tendency of some of the hæmorrhages in the preceding cases. In this connection, it is deeply interesting to examine the hæmorrhages which take place from the genital mucous tract. This is obviously the most natural, as it is the most frequent, source of hæmorrhage. Blood escaping by the vagina may be poured out from the body of the uterus, from the cervical canal, from the vaginal portion, and from the vagina. Occurring with more or less marked periodicity, it has been described as menstruation during pregnancy. And provoked, as it undoubtedly often is, by the increased nervous and vascular tension of recurrent ovulation, it may fairly be regarded in this light. During the first two or three months, blood may be discharged from the decidua cavity—that is, from the free surface of the decidua vera and decidua reflexa. But, I believe, a more frequent source is the mucous membrane of the cervical canal; and this is more certainly the case when there is abrasion or loss of epithelium at the os externum. In this latter case, the villi of the mucous membrane, being unprotected, bleed on the slightest touch, and presumably will do so on any increase of vascular congestion or hyperæmia.

All the phenomena we have noted as occurring in pregnancy may be observed under the influence of menstruation, supplying further proofs in addition to the many which physiology supplies of the close affinity between these two conditions.

Mucous hæmorrhages must in many cases be regarded as a means of taking off excess of arterial tension; and thus of averting disastrous hæmorrhages into the brain, or abortion. And in many cases where the hæmorrhage, instead of escaping from the free mucous membrane of the uterus proper and cervical canal, is extravasated into the placental tissue, or into that part of the decidua which is in immediate relation with the ovum, abortion is the almost necessary result. But in many of these cases, too, the same conservative action is manifest, abortion being the means of averting a more serious catastrophe.

To pursue the reflections which the facts and considerations I have so imperfectly stated suggest, into all their bearings and applications, would be a task beyond my present power, and beyond your patience. I must be content with indicating a few general conclusions.

1. There exists in pregnancy a peculiar state of the blood, an increased arterial tension, and a disposition to phlebotaxis, general or affecting particular vascular regions or systems, which may, under certain circumstances, lead to hæmorrhagic effusions.

2. These hæmorrhagic effusions may be salutary or conservative. Hæmorrhages from the mucous membranes, by relieving excess of tension, may avert internal hæmorrhages or abortions, or that oppression of the kidneys which results in albuminuria and eclampsia.

3. Hæmorrhages from the uterus inducing abortion may, in the same way, avert more serious mischief, especially albuminuria and eclampsia.

4. But these hæmorrhages, although we may recognise in them a conservative purpose, easily exceed physiological or useful limits, and may themselves induce danger by anæmia.

5. Hæmorrhages, from whatever part, occurring in women within the period of sexual life, should suggest the probability of pregnancy, or of menstrual disorder.

6. The hæmorrhages described should be taken as indications to reduce vascular tension. This may be done in some cases by bleeding, general or topical; by purgatives; by salines; by abstinence from stimulants; by regulation of diet: by digitalis, hydrocyanic acid, and other means.

7. Bleeding from the arm may avert abortion, not only by reducing arterial tension, but also by a derivative action determining the direction of the blood from the pelvis to the opening in the vein. This derivative action of bleeding was much relied upon in a variety of cases by *Jasbianc*.

8. In some cases, where the hæmorrhages are frequent and great, and induce serious symptoms, the induction of labour is indicated.

FURTHER OBSERVATIONS ON THE ELECTROLYTIC DISPERSION OF TUMOURS.*

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FINDING that there is still much difference of opinion concerning the therapeutical value of electrolysis as used for the dispersion of tumours, I am led to think that a short summary of my more recent experience on this subject may be welcome to the members of the Association. There are now so many and effective modes of treating the various forms of morbid growths which are met with in practice, that it would hardly be allowable to add another means to those already at the disposal of the surgeon, unless it could be shown that it possessed peculiar advantages of its own over other methods used for the destruction of these growths, or that it was applicable to such forms of tumours as are otherwise unmanageable or rebellious to treatment. This I hope to be able to do for electrolysis in the following communication. It seems to me now pretty well ascertained what this remedy can do and what it cannot do; and I think it unlikely that its limits of usefulness will either be much curtailed or much enlarged by further researches.

It is not my purpose, on the present occasion, to describe the chemical and physiological principles on which the electrolytic treatment is based, as I have done so fully on previous occasions, and more particularly in the last edition of my treatise on *Medical Electricity*. I will, therefore, only say that in electrolysis the constant voltaic current is conveyed to the tumours by means of gold needles, which act either in fixed rows, or singly in any direction that may be required by means of the serres-fines conductor; that either the influence of the negative or of the positive, or of both poles simultaneously, is utilised; and that the effects are not owing to the development of heat, and have consequently nothing to do with the galvanic cautery.

In cases where only the negative pole is used, as, for instance, in bronchocele, the operation is not painful if properly performed; but, where both poles have to be inserted into the tissues, as in nævus, sebaceous tumours, etc., a good deal of pain is generally experienced by the patient, and chloroform or some other anæsthetic may, therefore, be used under such circumstances, if thought advisable.

1. *Nævus*.—One of the commonest tumours met with in practice is nævus of the face or scalp. Although this is not, as a rule, dangerous to life, it is nevertheless desirable to have it removed, as it disfigures the person affected with it. Almost every surgeon has a favourite plan

of treating nævus, with the results of which he is well satisfied; but I doubt whether any other mode of removing some of these unsightly marks is as good as electrolysis, and those who have once used it will probably always use it again. Over excision, it has the advantage of being entirely bloodless; over the injection of perchloride of iron, that it is not dangerous to life; over cauterisation by nitric acid, that it can be better localised, and acts more thoroughly; over the subcutaneous ligature, that, once the operation has been performed, no further suffering is caused to the child, or trouble to the medical attendant; and over the galvanic cautery, that it does not leave a scar. It is rapidly successful in the flat round tumours of the size of a shilling, which are only slightly raised above the skin, but acts less quickly in extensive "port wine marks". Where nævus assumes the form of large fleshy masses or lumps, the treatment is rather tedious, and, unless the patient perseveres, not so satisfactory in its results. An ordinary round flat nævus yields to one electrolytic application, while in extensive "port wine marks" half a dozen or more applications may be required. The current should be directed to the tumour by means of fixed rows of gold needles, connected with both poles of ten to fifteen cells of Becker-Muirhead's battery. As soon as the connection has been made, a destruction of the texture of the nævus is seen to commence, the blood-vessels and the skin withering away rapidly under the eyes of the operator. The destruction is more thorough at the positive than at the negative pole, and the worst parts of the nævus should, therefore, always undergo the influence of the former. As a rule, not a drop of blood is lost during the operation; but if, by sudden movements of the child, one of the needles should come out prematurely and a drop of blood should appear, this can be immediately coagulated, and any hæmorrhage checked, by applying the positive pole to the puncture. The whole mass of the tumour is then gradually brought under the influence of the current, care being taken not to act too long or too energetically upon any one point, as otherwise a scar might be left. When everything morbid appears to have been destroyed, the action is discontinued, and the surface covered with a piece of goldbeater's skin. There is no pain or discomfort after the operation; no dressing is required, for there is no discharge; the scab remains dry, and falls off in ten or fourteen days, leaving a healthy surface which gradually assumes the appearance of the surrounding skin.

2. *Bronchocele*.—Cystic bronchocele yields to a number of operative procedures, such as the seton, injection of iodine, or perchloride of iron, etc. Amongst these means, electrolysis may claim a foremost place from the comparatively painless nature of the proceeding, the absence of risk to life, and the circumstance that there is, as a rule, no open wound or sore produced which requires dressing. The best mode of proceeding is to insert two or three needles singly into the cyst, and connect them by means of the serres-fines conductor with the negative pole of the battery, while the positive electrode connected with a moistened sponge is placed on the skin in the neighbourhood. The consequence of this is, that the liquid in the cyst is decomposed, the chloride of sodium solution being changed into one of caustic soda, whereby the secreting membrane of the cyst is cauterised and prevented from effusing further liquid. From two to six applications appear to be sufficient for a cure.

Solid Bronchocele is much more difficult to deal with, and the ablest surgeons of the present day habitually refuse to interfere in such cases, there being imminent risk to life attached to such operations as were previously practised. These tumours, however, often become dangerous to life by pressure on important neighbouring organs; and electrolysis then steps in as the right thing in the right place. I have of late years combined injections of the tincture or liniment of iodine into the substance of the tumour with the electrolytic applications, as it seemed to me that by such combined treatment time was gained. Iodine, subcutaneously injected, appears to break up the internal structure of the tumour, more especially where this is very old and tough, and aids electrolysis by allowing a freer passage of the current through the mass. In recent tumours, electrolysis alone is sufficient; but most cases which have been under my care have been of many years' standing.

I will now relate the particulars of a case of double solid bronchocele which I have treated in this manner, and which may be considered typical of this class of cases.

CASE.—J. L., aged 37, single, a native of Yorkshire, and engaged in a mercantile firm in the city, came under my care in April 1874. He had for the last ten years been subject to a tumour in front of the left side of the neck, involving the thyroid body, which had very gradually increased until it reached an inconvenient size. The patient had on various occasions consulted the heads of the surgical profession in London, with the view of having it removed. This, however, was

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not considered expedient by the eminent men whose opinions the patient had sought, and nothing had been done except painting the skin over the tumour with iodine, which had no beneficial effect. Things had gone on for a considerable time in this manner, when, on April 10th, suddenly a fresh tumour appeared on the right side of the neck, over the collar-bone. This was accompanied by an increase of temperature in the parts, and the swelling showed considerable pulsation. At the same time, alarming symptoms of pressure on the pneumogastric nerve became apparent; viz., loss of voice and of the power of swallowing, a sense of choking in the throat, and severe pain at the back of the head, on the right side. There was regurgitation of liquids through the nose, and the patient had not slept for four days and nights, but was obliged to sit up in bed propped up by pillows, or to lean forward in a chair.

Under these circumstances, he had again consulted Sir William Fergusson, and entreated him to operate. Sir William, however, declined to do so, and the patient was then sent to me by his usual medical attendant, Dr. Black of Islington. I first saw him on April 13th, 1874, and found him in the following state. The pulse was 120; respirations, 36; anxious expression of countenance; eyes staring and protruded; excessive action of the left ventricle. He had not been able to eat or sleep for four days, and could only talk in a whisper. In front of the left side of the neck, there was a tumour of the size of a small orange, which was very hard, and showed no signs of fluctuation. It was limited interiorly by the thyroid cartilage and the wind-pipe, which were considerably displaced to the right side; exteriorly, by the strongly pulsating carotid artery; superiorly, by the horizontal branch of the lower jaw; and inferiorly, by the apex of the trigonum supraclaviculare. On the right side, there was a small but strongly pulsating tumour occupying the space of the supraclavicular triangle. It was much softer and less prominent than the one on the left side. The circumference of the neck on the most prominent point of the left side was $16\frac{1}{4}$ inches, and on the right side $15\frac{1}{2}$ inches.

The patient was in such a state of prostration, and so racked with pain and distress, that I thought it best to commence the treatment with an external application of the constant current, for the purpose of soothing and strengthening the central nervous system and diminishing the effects of pressure upon the pneumogastric. He recovered his voice almost immediately; had some sleep the night after, and no more regurgitation of liquids. Next morning, the expression was less anxious; the pulse had gone down to 90 beats; respirations, 28; the voice went away and came again from time to time. On April 15th, he reported that he had had four hours' sleep; eating had become easier; he had drunk off a whole tumblerful of beef-tea without trouble, and the voice was stronger. The tumour on the right side was smaller, and its pulsation much diminished. The headache was still intense, and did not seem to be affected by the external application of the current. On April 19th, I introduced a needle connected with the cathode of fifteen cells of Becker-Muirhead's battery into the tumour on the right side, and allowed the current to pass through it for fifteen minutes. On the 21st, the patient reported that he had eaten some fowl and pudding, and that the headache was nearly gone. The old tumour on the left side was now likewise attacked by electrolysis and parenchymatous injections of iodine.

I will not weary your attention by further details about the treatment and progress of this case. Suffice it to say that by the middle of May the tumour on the right side had entirely disappeared, and that the left was then shrinking visibly under the influence of the treatment, which was continued, with some considerable intervals, until the middle of March last. At that time, there was only just a trace left to show that there had been once a tumour; the circumference of the neck was reduced from $16\frac{1}{4}$ inches to $13\frac{3}{8}$ inches. The patient has since resumed his work in the city, and was, when I last saw him (July 1875), in all respects in good health. Sir William Fergusson had an opportunity of examining him again about that time, and expressed to me his gratification at the successful result of my treatment in a case which he had thought beyond surgical interference.

It may be asked whether the result in this case was more owing to electrolysis or to the injections of iodine. Having carefully watched the effects of both, I have come to the conclusion that, of the two agents employed, electrolysis was by far the most effective. Indeed, one of the tumours yielded entirely to this alone in a comparatively short time. The iodine, however, unquestionably aided the action of the voltaic current in the manner described above; and I have since then, in view of this result, treated similar tumours again in a similar manner.

3. *Sebaceous Tumours.*—These occur not unfrequently on the face and scalp, and are excised without difficulty; but, as many patients have a great dread of any cutting operation, however trivial, and as

erysipelas, with fatal results, has been known to supervene upon the removal of sebaceous tumours by the knife, even where the operation was performed in the most skilful manner, it will often be found expedient to resort to electrolysis, which rapidly destroys these tumours without any risk to life, and without leaving a scar. Both poles in the growth act more quickly than the negative pole alone.

CASE.—In June 1874, Dr. Seton of Thurloe Place sent a lady to me who had an atheroma as large as half a chestnut on the scalp. This had become developed, as she thought, in consequence of her having knocked her head against a table about two years ago; and, as it caused disfigurement, she was anxious to have it removed. I electrolysed the tumour on two consecutive days; on the third day, it had almost entirely withered away, and only a small trace of it was left, which was likewise easily removed. The application was unpleasant, but not bad enough for chloroform to be used; and the electricity took away not only the atheroma, but also a headache from which the patient had previously suffered.

4. *Recurrent Fibroid.*—In this form of tumour there is, as its name conveys, great tendency to relapses after excision; and the growth is sometimes so intimately connected with organs important to life, that the ablest surgeons not unfrequently refuse to interfere. Recurrent fibroid is frequently the seat of intense pain; it is very disfiguring when situated about the face and neck; inconvenient, on account of the size to which it may attain in any other portion of the body; and, if allowed to grow, it ultimately exhausts the most buoyant vital powers. As excision fails to cure these tumours, another means of treating them seems, therefore, to be imperatively called for.

My experience with electrolysis in recurrent fibroid is as yet not particularly favourable, probably because the cases which have been under my care were of very long standing, and in them the tumours had attained an enormous size. If the treatment were used immediately upon the first signs of relapse after excision, the result would most likely be better.

CASE.—A gentleman, aged 28, single, who had been a long time in Australia as sheep-farmer, came under my care in December last. He had been living on a very poor diet, eating no vegetables and little else but salt beef for a considerable period. About four or five years ago, he was kicked by a horse on the left cheek, and some months after that a tumour made its appearance, which involved the cheek and left side of the head. This was excised at Sydney three years ago, and a large cicatrix which runs from the ear down to the external angle of the jaw marks now the place where the incision was made. The patient nearly died of hæmorrhage after the operation, but ultimately recovered. It was, however, not very long afterwards that signs of a relapse manifested themselves, and the new growth became at last so large and painful, that he wished to undergo another operation. He, therefore, consulted the heads of the surgical profession in London with this view; but Sir James Paget, Sir William Fergusson, and Mr. Cæsar Hawkins pronounced against an operation, and Sir William Fergusson then sent him to me. The patient was of spare habit, and had a feeble pulse. There was an immense tumour occupying part of the left cheek and the left side of the head, displacing the ear upwards and backwards, filling up the stylo-mastoid fossa and reaching a considerable way up to the left parietal bone. He also had large packets of swollen lymphatic glands on the neck, and could wear a collar but with great difficulty. The substance of the tumour was exceedingly hard, more osioid than fibroid, and its surface livid, showing tendency to ulceration. Electrolysis was commenced on December 16th. One of the first results was, that the pain, which had been severe, especially at night, was relieved, the tumour became softer and smaller, and the surface assumed a healthier colour. Sir William Fergusson, who saw the patient again on January 8th, expressed to me his satisfaction at the progress of the case. Unfortunately, the treatment could not be persevered with for a sufficient length of time, as the patient did not live in London, and circumstances rendered it difficult for him to stay. The tumour was still very large when the treatment was discontinued; but, on the whole, the result was so far encouraging as to warrant my recommending an early resort to electrolysis in such cases, more especially where the tumour has not yet attained such an immense size as was the case in the present instance.

5. *Cancer.*—In primary scirrhus, early and complete excision is the best treatment; but, in epithelioma and secondary cancer, electrolysis is often of essential service. We are not able by this means to eradicate the cancerous diathesis, or to prevent the tendency to death; but it is most effectual for the relief of the pain; besides which it promotes sleep and appetite, and appears to soothe and strengthen the system generally. It often renders the last few months of the existence of these wretched sufferers comparatively happy, and smoothes the road to dissolution, which is otherwise for them only too thickly beset with tortures.

CASE.—A housekeeper, aged 38, single, came under my care in November last. Sixteen months ago, she first noticed a swelling in the right breast, which gradually grew larger, and was excised in February 1874. Five weeks later, a fresh tumour had already formed, and was likewise removed by excision. Soon afterwards, numerous cancerous nodules sprang up about the cicatrices in the axillary glands, and also in the left breast; and, as further surgical operations appeared unadvisable, Mr. Irvine sent her to me. When I first saw her, on November 23rd, the cancerous cachexia was strongly marked. There was intense weakness and depression of spirits; the face bore an expression of agony; the complexion was sallow; there was complete loss of appetite, great wasting, restlessness at night, a pulse of 120, and sixty respirations in the minute. Towards evening, well marked febrile movements set in, and there was excruciating pain, more especially in the left shoulder.

Under these circumstances, no treatment could be expected to produce a decided change in the aspect of the case; but, as the patient and her friends were most anxious that something should be done, electrolysis was suggested. On November 30th, I introduced a needle connected with the cathode of Becker-Muirhead's battery into one of the cancerous nodes on the right side of the chest, and placed the anode to the left shoulder. The power of current was gradually raised from ten to thirty-five cells, and it was allowed to circulate for ten minutes. Immediately afterwards, the patient expressed herself as considerably relieved. I saw her again two days later, when she informed me that she had had less pain ever since, had slept better, and felt stronger and more cheerful. On December 14th, the cancerous node which had been electrolysed had disappeared, the tumour in the left breast was smaller, the pain was gone, the pulse had fallen to ninety beats, and the inspirations were only thirty-six in the minute. The patient said that she hardly felt any discomfort at all; looked wonderfully better, and entertained hopes of perfect recovery. During the intense frost which prevailed at that time, she caught a severe cold, which prevented her from coming to see me again, and she died on January 15th, 1875, from congestion of the lungs, but without a return of the pain. I should add that I also prescribed for this patient morphia, chloral, and quinine; but these remedies appeared to do little good, while, immediately after each electrolytic application, a decided change for the better took place.

I have now put before you as concisely as possible what I believe to be the advantages and limits of usefulness of the electrolytic treatment, and trust that you will henceforth use it more extensively in suitable cases than has hitherto been done.

USE OF PERCHLORIDE OF IRON IN POST PARTUM HÆMORRHAGE.

By LOMBE ATTHILL, M.D.,
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THE case recorded by Mr. Boddy, in which death followed almost instantaneously on the injection of a solution of the perchloride of iron, conveys a very important lesson. It is, as far as I am aware, the first recorded case in which there are just grounds for believing that death was due to the use of the styptic; but, even here, the cause of death remains doubtful, there not having been a *post mortem* examination, a matter greatly to be regretted. Mr. Boddy's conclusion that "without doubt death resulted from the action of the solution of iron upon the lining membrane of the uterus" is not, in my opinion, correct. First of all, the uterus has not, immediately after delivery, any "lining membrane" properly so-called; next, Dr. A. H. Ringland has, in several cases of *post partum* hæmorrhage recorded by him, carried the *solid perchloride* into the uterus and applied it direct to the interior of the uterus without producing any injurious results (*vide Proceedings of the Dublin Obstetrical Society*, session 1873-74).

I am not in a position to give an explanation of the cause of death in Mr. Boddy's case; but I believe it proved from Dr. A. H. Ringland's cases, in which he applied the solid perchloride to the inner surface of the uterus, and from my own (*Dublin Medical Journal*, April 1874), in which I injected a small quantity of a strong solution into the uterus, that the application of the styptic to the inner surface of the uterus is not *per se* a dangerous practice.

I would point out that in Mr. Boddy's case an unnecessarily large quantity of the styptic was injected; for, though "the hæmorrhage ceased immediately on the injection of the solution", the process was continued till the patient gave a shriek and died; and to this continuance of the injecting process after the purpose for which it had been employed was attained, the fatal result, in my opinion, is to be attributed,

which probably would not have occurred had but three or four ounces of a strong solution (one part of the strong liquor to two of water) been employed.

I think the profession are under a great obligation to Mr. Boddy for publishing this case.

THE TREATMENT OF SPINA BIFIDA.

By JAMES MORTON, M.D.,
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PREVIOUSLY to October 1871, it was the habit, with others as well as myself, to regard cases of spina bifida as hopeless, and to discountenance the idea of surgical interference. It was well known that they had been dealt with in a variety of ways, some of these reckless and rash, others more or less prudent, almost all proving in the end unfortunate. It was also known that in some few instances a spontaneous cure had taken place, but these were truly, like angels' visits, few and far between. It was universally admitted that very many died, in truth by far the greater number, the precise numerical proportion being difficult to arrive at; the conviction being general that only a very small percentage lived for any great length of time. As a proof of this, the prognosis usually given was a very hopeless one, and seldom falsified by the result.

So entirely had this view of the malformation taken possession of practitioners, that it was the custom to limit their efforts to what was called the palliative treatment, such as protection, or defence from injury, carried out in various ways, so as to avoid ulceration and bursting of the sac with its fatal ending. Up till the date mentioned, I was a follower of the do-nothing system; but, on October 2nd, 1871, a case was presented in the Glasgow Royal Infirmary, which prompted me to reconsider the question, more especially as the child was otherwise healthy, and I felt a strong desire to give it a chance. On turning my attention to the numerous methods previously employed, too numerous to mention here, it appeared to me that injection was the safest, as that could be effected without permitting the complete escape of the fluid contained in the protrusion. The kind of fluid to be injected next demanded consideration, when it occurred to me that a solution of iodine, less diffusible than either a spirituous or watery solution, would best suit my purpose, as being less likely to permeate the cerebrospinal fluid with rapidity, and, therefore, less likely to cause shock or bring on convulsions. With these views, I caused the following solution to be prepared, which is now known as the iodo-glycerine solution.

R Iodi x gr.; potassii iodidi xxx gr.; glycerinæ j ʒ.
From half a drachm to two drachms of this fluid have been used, according to the size of the spinal protrusion.

Previously to injecting, I considered it prudent to make a tentative puncture, to ascertain whether such interference would be tolerated; and followed this course in the first case and most of the others. To close the openings made both by grooved needle and by trocar, collodion and flexible collodion have both been used, and have served the purpose, so that either may be employed. This mode of treatment was first employed by me in October 1871, and the details of the case are given in the abstract of a clinical lecture which appeared in the number of the BRITISH MEDICAL JOURNAL, dated April 6th, 1872, after having been shown to the members of the Glasgow Medico-Chirurgical Society on February 1st of that year.

The second case was shown to the same Society on May 30th, 1872, and was published in the JOURNAL named on June 15th succeeding.

Dr. J. R. Watt of Ayr successfully followed the same plan in two cases; one of which appeared in the BRITISH MEDICAL JOURNAL of April 26th, 1873, the other in that of January 31st, 1874, with a well executed photograph of the patient after cure.

Another case treated under my own care is published on October 24th, 1874, in the same JOURNAL. More recently a case has been successfully treated by Mr. Angus of Newcastle, which appeared in the JOURNAL for April 17th, 1875; and, in a private note with which he kindly favoured me, he expressed his confidence in the method employed if conducted with due care.

Since the beginning of this month (July 1875), I have treated another case with the like good fortune, and without a disagreeable symptom. The fluid was twice analysed by Professor Ferguson of Glasgow, but gave no indication of the presence of sugar.

During the past winter, a large cervical spina bifida was presented to me, which was several times injected without any appearance of

* Read in the Surgical Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

shock or suffering, but it ultimately succumbed to convulsions caused by the continued escape of the subarachnoid fluid. The domestic circumstances of the mother demanded her presence at home, and unfortunately she was allowed to leave the hospital with her child, and the following night the mischief took place; and, though the flow was stopped, it had already prostrated the child. Every reasonable effort was made to obtain a *post mortem* examination, but without success. I may mention that several analyses of the subarachnoid fluid withdrawn from this child were made, resulting in doubtful indications of the presence of sugar, or of some glucose matter which reduced copper oxide. At present, I have under observation another instance of this defect in the lumbar region; the child is about ten days old, and it has not yet been interfered with.

But the question may be put, How is the cure produced? or, What is the *modus operandi* of this solution when injected? The reply which most readily suggests itself is, that it is analogous to the process occurring in the tunica vaginalis consequent upon the operation for the radical cure of hydrocele.

Though the quantity of albumen in the subarachnoid fluid is small, a coagulum seems to form; adhesive lymph may be produced or deposited, and, at all events, arrest of further collection of fluid results from successful injection. This may be accompanied or followed by closing of the opening or channel of communication between the spinal canal and the protrusion.

The anatomy of this defect at once presents itself as a matter for consideration; and, on this point, I have made some inquiry, and have been rather disappointed to find that anatomists of very prolonged experience had little or nothing to offer me in the way of personal observation of its dissection. Figures of the parts have been given in books, with appropriate descriptions. All authors seem to agree in the local deficiency of the spinal canal, and the protrusion of the covering of the cord, containing a quantity of the spinal fluid, and the cord (or portions of its immediate branches), though it has been affirmed that occasionally the latter is absent. I am not aware upon what evidence this statement rests, and, meantime, prefer to believe in its presence while awaiting further investigation. Such belief may induce caution in treatment, though it need not lead us to doubt the possibility of cure, as a recent writer in the BRITISH MEDICAL JOURNAL seems to do. To assume the absence of the cord, or parts of it, in seven consecutive cases, is so entirely beyond the range of probability as to be altogether inadmissible, while possibly it was present in all. At the same time, I shall feel personally indebted to any one who may procure authentic information on this point, such information as may amount to a demonstration or dissection of parts. I am able to show you here a dorsal case, or rather a preparation of it. The child died, exhausted by the escape of the cerebrospinal fluid; no attempt having been made towards cure. The cord is seen projecting into the tumour, and attached to its walls. I am glad to say that, as yet, I cannot show an injected case, that is, a dissection of a case after successful injection, however much that may be regretted in an anatomical point of view. On this point, authors write very much as follows, which can be seen in Dr. Churchill's work on *Diseases of Children*, and there given on the authority of Dugès. "The condition of the spinal marrow is of considerable interest. Ollivier states that, when the case is not complicated with hydrocephalus, he has generally found the spinal marrow traversing the sac unaltered, except that in some cases it seems lengthened. But, if coexistent with hydrocephalus, or if the canal of the spinal marrow be distended with fluid, the cord may be flattened out, as it were, so as apparently to line the sac. In some few cases," continues Dr. Churchill, "the spinal cord seems to have left the canal, and to be contained within the tumour, forming what some authors have properly called hernia of the spinal marrow. This happens only when the deficiency is at the lower end of the spine."

In a lecture on pathological anatomy published in London this year, Drs. Wilks and Moxon write: "A funnel-like depression or umbilicus in the middle of the tumour, will generally signify the point of insertion of the spinal cord on the walls of the sac." This is worthy of recollection by those about to operate. There is evidently some variety in the position of the cord and the distribution of its branches.

The statistics of the operation at the present time are the following. This mode of injection has been employed in ten cases. Of these, seven have been successful, and entirely so; the cases being uncomplicated by paralysis or any other deformity, and, so far as known to me, remain well. Of the other three, one has been already referred to as dying from a preventable cause, a well known danger; another occurred in the hands of Dr. Watt, who states that the child was otherwise diseased at the time; and the third is the case published by Mr Burton of Liverpool, manifestly a case in which the spinal protrusion

was but a small part of the whole deformity; though, seeing the child *in extremis*, he considered it his duty to give it even a forlorn chance. We are thus in the position of recording 70 per cent. of cures, and at the worst 30 per cent. of mortality; and, when we revert to the past history of spina bifida, such a result is sufficiently gratifying. I ought to add, however, for the encouragement of others, that all my own lumbar and dorsal cases have proved fortunate hitherto; that they will always do so, I am not sanguine enough to expect, though I can now approach their management with less misgiving. I have been exceedingly pleased to find that this method of treatment has succeeded in the hands of others, and have to thank Dr. Watt and Mr. Angus for the publication of their cases.

In managing a case of spina bifida, the following points are important.

1. The child should be in a thriving condition.
2. Make a tentative puncture with a grooved needle.
3. Draw off not more than half of the fluid contents.
4. Carefully close the puncture by collodion or otherwise, so as to prevent further escape of fluid.
5. When proceeding to inject, use a trocar with cannula of a medium size, not too small, otherwise the glycerine solution will not run readily through the cannula.
6. The parts must be carefully handled and protected by the nurse, and the injection repeated, if required.

P.S. At the Edinburgh meeting, in August last, Professor Pirrie, of Aberdeen, drew my attention to a wet preparation of a similar case, in which the cord passed through the sac, and was attached to the outer wall of it.

ON THE USE OF NITRIC ACID AS A CAUSTIC IN UTERINE PRACTICE, AND ITS SUPERIORITY AS SUCH TO NITRATE OF SILVER.*

By JAMES BRAITHWAITE, M.D. Lond.,

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I BELIEVE that, in cases in which the use of a caustic is necessary for the cure of ulceration or erosion of the os and cervix uteri, that which is generally, but not invariably, the most suitable for our purpose is nitric acid.

I do not propose to enter upon the disputed question of the pathological importance of these affections, nor upon any other point in their treatment, such as the primary relief of congestion or inflammation. I cannot, however, with Dr. Routh (*Transactions of Obstetrical Society of London*, vol. xi, page 94), look upon the use of caustics as solely for the purpose of relieving congestion by means of the discharge produced, in which case nitric acid would be useless, for it produces no discharge. I find that by curing the ulceration we cure the congestion, generally, but not always, without other treatment.

I think it will be admitted that nitrate of silver is the caustic in most general use, and that it is unnecessary I should take up your time by references to writers on the subject to prove this.

The great fault of nitrate of silver for the purpose in question is the fugitive nature of its action. Its influence seldom extends beyond five or six days, even when rubbed upon and held in contact with the parts. Again, nitrate of silver is more a stimulant than a caustic, causing extreme turgescence of the capillaries immediately below the surface actually influenced. This is evidenced by the frequency of hæmorrhage, often sufficient to obscure the parts before it has been removed from contact with them. The escharotic action of nitrate of silver, such as it is, is too superficial to destroy the diseased surface, and by the production of a slough to stimulate the parts beneath to the healthy activity necessary for its separation. At the second examination, we often find the ulceration or erosion very little, if at all, altered in appearance.

The action of nitrate of silver is thus defective for our purpose—1, in duration; 2, in quality; and 3, in degree; and these faults must be atoned for by its frequent reapplication. This necessitates each time the use of the speculum, distasteful alike to patient and to attendant. I believe in this really lies the source of the opinion held by some eminent men that these diseases require little or no local treatment. Our opinions are often unconsciously influenced by our wishes. Dissatisfaction with nitrate of silver has caused the trial of other applications such as sulphate of zinc points, nitrate of mercury, potassa cum calce,

* Read before the Section of Obstetric Medicine at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

ignited charcoal-points, and electric heat, all of which either have some disadvantage or are ineffectual. I believe nitric acid to possess these advantages as a caustic in uterine practice. It requires no special preparation, and is always at hand; it cannot affect the system as may a salt of mercury; it does not spread like potassa cum calce, nor is its action so deep; it produces little or no pain, and no hæmorrhage. These advantages are trivial compared with the fact that, when it has once been properly applied, in the majority of cases no further interference is necessary, and thus that opprobrium of our branch of the profession—the frequent use of the speculum—may be done away with. When the second examination is made, it should be after the lapse of a month; and it will then sometimes be found that there is a small spot requiring a fresh application of the acid, but often the sore is seen to be quite healed, or healing satisfactorily. The eschar separates slowly, and the resulting sore has a very strong tendency to heal. The fresh mucous membrane which forms is not cicatricial in appearance, and, when healing is going on satisfactorily, has a sharply defined edge, and, being of a pale rose colour, contrasts strongly with the bright red colour of the sore. The contraction is greater than follows the use of any other caustic; but this is a great advantage, for, on account of the relaxed state of the tissues, it is just what is required to insure the permanence of the cure. The acid is best applied by means of a small and tightly rolled piece of cotton-wool, which is to be placed by means of an ordinary speculum-forceps in contact with successive portions of the surface, until the whole is covered with a white eschar. In a case of chronic endocervicitis, the acid should be applied to the interior of the open cervical canal; and, if it be not open, the case is not one suitable for this treatment. The contraction which accompanies healing is only to a healthy and natural state, provided the caustic has been used with ordinary prudence. I have never seen anything but good follow its use, and the ease with which a chronic case of cervical catarrh with ulceration or erosion may be cured by it is something marvellous. The bulk of my cases have been hospital out-patients, and the comfort the use of nitric acid has been in their treatment is very great, both in certainty of result and in saving of time. Without local treatment, very little can be done for these patients, for hygienic treatment is generally impossible, and medicinal treatment alone is useless. I shall not take up your time by details of cases, although I have copious notes of about forty, as by trial of the remedy you will soon prove your own opinion of its value.

The use of nitric acid as a caustic is so familiar to us all, especially in diseases of the rectum, that I have had some hesitation in bringing the subject before you, and should not have done so, but that I believe it is only used by two or three medical men engaged in the treatment of diseases of women. It is mentioned incidentally at the conclusion of a paper by Dr. Lombe Atthill, upon its application to the interior of the uterine cavity, that he uses it habitually in the diseases in question; and Dr. Roe of Dublin, in an analysis of the cases of uterine disease (*Dublin Journal of Medical Science*, August 1872), relates a case of extensive ulceration in which he employed it. Mr. Robert Ellis has recommended the use of a saturated solution of nitrate of silver in nitric acid; and I believe Dr. Bennet has mentioned its use. But these writers are exceptions to the general rule. It is not mentioned by Tilt in his admirable work on *Uterine Therapeutics*, nor by any other of our standard authors upon diseases of women, all of whom recommend nitrate of silver, or mention its use as the usual practice.

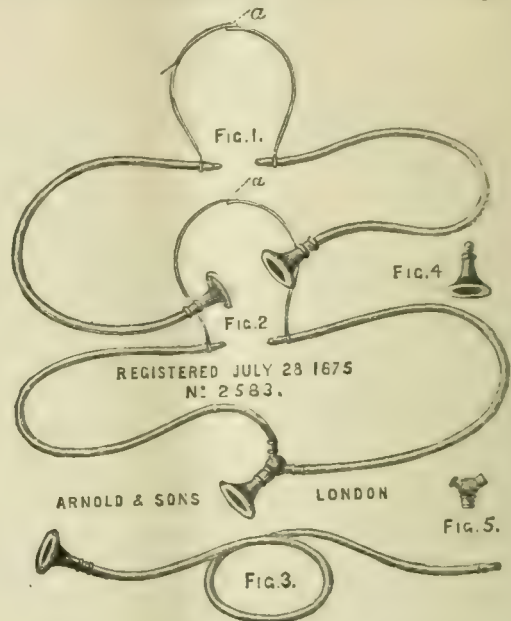
ON A NEW DOUBLE STETHOSCOPE: "THE HEAD-SPRING STETHOSCOPE".

By R. HARVEY HILLIARD, M.D.

THE object of this design is to produce a flexible double stethoscope which is free from the objections that apply to other instruments of this class. The advantages of a double flexible stethoscope are apparent in a moment's consideration. The ease to the auscultator, who may be seated at his patient's bedside, and with comfort to himself and his patient, to apply the instrument to all parts of the body without painful pressure or other inconvenience to the patients on the one hand, or unnecessary straining to himself on the other, is very plain; and if this can be done without loss of conduction of sound, and with an instrument as conveniently carried in the pocket as the ordinary wooden stethoscope, the superiority of the double instrument would be granted by medical practitioners, and eagerly welcomed as a boon long sought for. The objections, however, have been that instruments of this class are too bulky for ordinary practice, and that the acoustic results have been less perfect than the simple wooden stethoscope in almost universal use.

These objections I believe I have overcome by the instrument I now present to the profession.

The "head-spring stethoscope" consists of two simple tubes of finest India-rubber, very smooth, and equal in calibre, from their attachment to the chest-piece (or pieces) to the well adapted "ear-nipples", which are held in the ears by means of a low spring hinged in the middle for greater convenience of carriage in the pocket, which, by its elasticity, retains its position when carried over the head or under the chin. When it is desired to use the instrument as a differential stethoscope (Fig. 1),



the ends of the tubes, which bear suitable mounts, are screwed into separate collectors or cups; but when a binaural stethoscope (Fig. 2), with single chest-piece, is required (which, for most purposes, is the preferable combination), one of the cups alone is used, to which are attached the tubes by means of a branched body-piece which bears corresponding screw-adjustments. These changes can be made at pleasure and almost immediately. Fig. 3 shows one of the tubes fitted with cup and "ear-nipples" for use as a single flexible stethoscope. I have used the instrument for two years with increasing satisfaction; and I believe that experience will prove that I have not overrated its merits.

Messrs. Arnold and Sons of West Smithfield are the manufacturers; and they have bestowed great pains in executing my instructions.

CHRONIC POISONING BY ARSENIC.

By ARTHUR T. HARRY KERR, L.R.C.S.I., Preston.

THE following case of poisoning by arsenic in the manufacture of cotton is, I consider, of importance from a toxicological point.

John L., aged 28, a weaver, commenced to weave, about the end of September last, a green material. About the 25th of October, he first complained of being ill. At the end of October, his symptoms were loss of appetite, nausea, colicky pains, constipation, headache, emaciation, sleeplessness, strangury, inflammation of the conjunctivæ, with intolerance of light. There was no cutaneous eruption, nor local paralysis, which are usually found in chronic poisoning by arsenic. Taking these symptoms into consideration, and the fact that the others employed at the same material were affected similarly, I was led to suspect arsenic as the cause. Accordingly, I obtained some of the green yarn, and made an analysis of it; and I found it to contain a large amount of arsenite of copper (Scheele's green).

This patient was treated by emetics in the first instance; subsequently, by the moist peroxide of iron, albuminous and mucilaginous drinks. The symptoms of poisoning have now disappeared. As he is still weak, he is at present taking tonics.

The habit which weavers have of biting the ends of cotton before knotting has, I have no doubt, been the principal way in which the poison in this case was taken into the system. The absence of skin-eruption and diarrhoea in this case is unusual.

THERAPEUTIC MEMORANDA.

ON INFUSION OF MATICO AS AN INTRAUTERINE INJECTION.

In 1867, I learnt from my friend Dr. Swayne of Clifton the value of infusion of matico as an injection in cases of menorrhagia, and I have repeatedly found it of great service when the flow of blood has not been due to fibroid tumour, polypus, or malignant disease. It is not uncommon to meet with instances of menorrhagia, the cause of which is obscure, but which may be ascribed with some probability to malnutrition of the lining membrane of the uterus, ovarian irritation, or poverty of blood. Local treatment is often as important as the constitutional, and sometimes is the only means at all efficacious. The infusion can be injected with a Higginson's syringe, the nozzle of which need only be introduced into the vagina as far as possible. If the injection be propelled with any fair degree of force, some must enter the uterus; and the immediate benefit which results is a proof that it does so.

There can be no doubt, I think, that alarming and even fatal consequences have happened from the use of perchloride of iron. In the sudden emergency of *post partum* hæmorrhage, I wish to ask whether the infusion of matico has ever been tried. Is it not likely to have a beneficial effect, and probably to be free from the dangers which, under the most careful administration, may follow the injection of the metallic astringent? The point is worth considering, but I can bring no personal experience in discussing it.

I take this opportunity of mentioning that borax is a capital astringent for vaginal leucorrhœa, and may be injected in the proportion of two drachms to an imperial pint of distilled water. It seems to be decidedly superior to the traditional remedies, alum and sulphate of zinc.

JOHN KENT SPENDER, M.D. Lond., Bath.

SURGICAL MEMORANDA.

VERTICAL DISLOCATION OF THE PATELLA.

THE enclosed case may, perhaps, be worth admission into the JOURNAL, being, as I think, rather a rare one.

I was sent for yesterday morning (November 1st) to attend a young girl, aged 16. On arriving, I found the patella turned on its long axis to such an extent that the outer edge lay immediately under the skin, whilst the inner edge rested on the femur at a right angle with the shaft of the bone. It appeared that she was in bed with her mistress, who touched her with the heel on the outside of the patella; whereupon she turned sharply over in bed, and suddenly discovered that she was unable to bend the leg. Sudden muscular contraction was probably the cause of the dislocation. I effected reduction without any difficulty, by raising and straightening the leg and manipulating the patella into its place.

CHARLES TERRY, Newport Pagnell.

CLINICAL MEMORANDA.

NOTES ON A CASE OF OPIUM-POISONING:
RECOVERY.

I WAS called at 3 o'clock A.M. on October 13th, 1873, to see a gentleman (a druggist), recently married, who to all appearance was suffering from an attack of apoplexy. His wife was awakened by his loud snoring, and, finding him unconscious, she became alarmed and sent for me. The apparent hopelessness of the case induced me to have a consultant, who, having agreed as to symptoms, etc., left to return in a few hours. On making minute inquiry into the history of the case, I learned he had been suffering some months previously from facial neuralgia, and had taken freely of opiates, which, owing to his business, he was supposed to know how to use judiciously. On this night, he took his usual draught about half-past ten o'clock, which subsequently turned out to be pure tincture of opium, the contents of an ounce bottle. He immediately fell into a deep sleep (he usually slept very badly), and gradually passed into a state of coma.

The pulse was slow and full; breathing very laborious and loudly stertorous. The pupils were reduced to a pin's point, and the eyes turned upwards. His teeth were tightly clenched, and there was a cold perspiration all over his body. I immediately administered enema of turpentine, and put flying blisters over the region of the heart and along the spine. Stertor became less marked, and the muscles of the

face were slightly relaxed. I was now able to force down his throat half a drachm of aromated spirit of ammonia in water, and in a few moments his breathing became natural. I now placed him in a sitting posture, and employed assistants to irritate the soles of his feet with feathers. In fifteen minutes, he became slightly conscious, and, after half an hour, he spoke and begged to be allowed to sleep. A drop of croton oil was given with sugar, and hot coffee was administered by consultant, now returned. We agreed to inject one-thirtieth of a grain of atropine under the skin of the forearm. Ten minutes afterwards, the pupils were perceptibly enlarged, and consciousness became more marked. At 7 A.M., I got him to the garden, and kept him walking about between two assistants. At 9 o'clock, the effects of atropine seemed to be passing off. I again injected one-thirtieth of a grain, which restored the pupils to their natural size; but he saw very confusedly. At 10 o'clock, he passed urine, but had no motion. I left for two hours, having given directions that he be kept walking about. On my return at 12 o'clock, the desire to be permitted to sleep continued; but his general condition was much improved. He had some more coffee, a little brandy and water, and some beef-tea. There had been no alvine evacuation. A second enema was administered. He was now (at 2 o'clock) perfectly conscious; but his mind began to wander. He fancied his wife was about to separate from him, and he threatened self-destruction if she persisted in it. At 11 o'clock P.M. on the 14th, the bowels acted slightly. He was suffering much from congestive headache. I gave calomel and a draught of bromide of potassium on the 15th. Hyperæmia of the spinal cord set in, accompanied with much fever. I kept him under medical treatment, with bromide and tincture of belladonna, and had a small blister kept open on the vertex for a week. In the course of a month, he had perfectly recovered, and has never had a return of neuralgia since.

OBSERVATIONS.—In this case, it was too late to think of using the stomach-pump, as all the physiological effects of the drug were exhibited before he was seen, and some time elapsed afterwards before the stomach could be reached. The antagonistic action of the atropine was well marked. Finally, his friends attached no importance to his taking the opium, and consequently there was some difficulty about arriving at the cause.

J. J. MURPHY, L.R.C.P. & S. Edin., Dublin.

RARE CASE OF SPINA BIFIDA.

IN THE BRITISH MEDICAL JOURNAL for October 23rd, I see a case of spina bifida recorded as rare. A case which I met in my practice about two years ago somewhat similar might interest the readers of this JOURNAL.

On December 18th, 1873, I was called to see the child of Mrs. F. It was a male two days old. There was nothing noticed at birth in connection with the labour, which was natural. There was across the loins, about the length of the three last lumbar vertebrae, a bag of loose thick skin about the size of a large orange. There was a hole in the centre of this bag that would admit three fingers. I dressed the hole with a pad of lint well oiled with carbolised oil, 1 part in 30, and then applied a broad roller four or five times round the body. The next day, the hole seemed a good deal contracted. There was a little sanious oozing, yet the tumour never filled with fluid during life. On the fourth day, the child was seized with convulsions. I then omitted the pressure, and gave half-grain doses of bromide of potassium three times a day. The convulsions did not return; but there was loss of both sensory and motor powers, with great wasting of the muscles of both lower extremities, during the last few days. Death occurred on the twelfth day from paralysis. I was unfortunately not allowed a *post mortem* examination.

GEORGE ST. GEORGE, L.K. & Q.C.P.I., Lisburn, Co. Antrim.

OBSTETRIC MEMORANDA.

TREATMENT OF *POST PARTUM* HÆMORRHAGE.

I, and doubtless many readers of the JOURNAL, feel much indebted to Mr. Boddy for the publication in the JOURNAL of October 16th of a case of Injection of Perchloride of Iron in *Post Partum* Hæmorrhage, resulting in Death. Two years since, I had a severe case of flooding after a tedious labour terminated by forceps, in which, had I had the solution of perchloride of iron, I should have felt inclined to use it. While sending for it, I injected water as cold as it could be obtained for about three quarters of an hour. This effectually stopped the hæmorrhage, and the patient made a tedious but perfect recovery.

J. T. BECK, Cambridge.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 9TH, 1875.

SIR WILLIAM JENNER, K.C.B., M.D., F.R.S., Vice-President,
in the Chair.

ON DIPHTHERIA AND ITS RELATIONS TO (SO-CALLED) CROUP. BY
R. H. SEMPLE, M.D., F.R.C.P.

THE author began by setting forth the reasons which induced him many years ago to regard as erroneous the doctrines formerly held in Great Britain on what was called "croup", and to propose a new nomenclature for the maladies which that term seemed to include. These reasons were drawn from his study of the French writings on what was called diphtheria, together with his own clinical researches into the pathology of the disease so named by Bretonneau. That physician and other French authors regarded diphtheria when it attacked the trachea as synonymous with membranous croup. When the disease now called diphtheria broke out at Tours, Bretonneau had previously seen only two cases of croup (to use his own language); but, when it showed itself as an epidemic, he studied it carefully in combination with his then pupils Velpeau and Trousseau, and they all found a remarkable uniformity in the symptoms and *post mortem* appearances; and, from the constant presence of the false membrane, Bretonneau applied to the malady the name of *diphthérite*. The physician of Tours, however, not only studied the actual features of the disease as it presented itself to his notice, but he endeavoured moreover to solve the important question whether any such epidemic as he then witnessed had ever presented itself before in the history of the world; and the result of his inquiries was to convince him that his *diphthérite*, although under different names, had existed from all antiquity, and had been described in the earliest medical writings. Dr. Semple, following out Bretonneau's views in this direction, and examining the historical evidence in existence, did not agree with him that diphtheria had been clearly described by the Greek and Roman medical writers; for he (Dr. Semple) had failed to find in the original Greek of Hippocrates or Aretæus, or in the Latin of Celsus, such a distinct description of the false membrane lining the trachea as would constitute such a disease as the *diphthérite* of Bretonneau. But, from researches into the writings of a more recent period, Dr. Semple was convinced that the disease had been accurately described as an epidemic by Spanish, Italian, Sicilian, Swedish, and French physicians. The names of the medical historians and the titles of their works, and references to important passages, were given by Dr. Semple in his paper; the chief authors consulted by him being Herrera, Fontecha, Villa Real, Sgambati, Carnevale, Nola, Ghisi, Cortesius, Wilcke, Marteau de Grandvilliers, Bard, Starr, and Francis Home. At the commencement of the present century, owing to the death of a relative of the Empress Josephine from so-called croup, a number of essays on that disease were written by various European physicians; but, after examining them all, Dr. Semple had found that they included under the name of "croup" at least three different diseases. Very soon after the publication of these essays, Bretonneau began his well known researches, in which he confined the term "croup" to those cases in which there was a distinct false membrane in the windpipe; and this view was adopted by his successors of the French school, such as Trousseau, Guersant, Bouchat, Empis, Daviot, Valleix, and Rilliet and Barthez, all of whom adopted Bretonneau's name of diphtheria. Dr. Semple proceeded to adduce cases from his own experience, one of which occurred only a short time before his paper was written, and the preparation from which was shown to the Society. He compared this case with others, also from his own experience, and he showed that they all presented characters exactly similar, both in their symptoms and *post mortem* appearances, to the cases described by Bretonneau. He had also compared his own specimen with others contained in the pathological department of the museum of the College of Surgeons, which were in the catalogue of that museum described as "croup"; and he found that they were exactly identical. He also described the nature of the false membrane, which differed essentially from that which was effused from inflamed serous surfaces, and he showed that the greatest German authorities, like the French, regarded the membrane of croup and tracheal diphtheria as identical. The general conclusions at which Dr. Semple arrived from his own clinical experiences, from the perusal of the literature of the subject, and from his historical researches, were mainly the following. He by no means alleged that croup and diphtheria were synonymous words, but he maintained that the term "croup", as generally employed, comprised at least three very different affections; namely—1. Laryngismus

stridulus; 2. Infantile laryngitis; and 3. Tracheal (or rather laryngo-tracheal) diphtheria. He thought that diphtheria (although under many different names) had probably existed, like other diseases, from all antiquity; and, although its features had not been described with sufficient distinctness by the ancient Greek and Roman medical writers, its epidemics had been clearly indicated by Spanish, Italian, Sicilian, French, German, Swedish, American, and British authors from about the end of the sixteenth century down to the present time. He considered that diphtheria as an epidemic did not visit London until about the year 1858 or 1859; and he regarded as the last European epidemic of diphtheria the visitation of the disease in Florence and the neighbourhood of that city from 1860 to 1870. But, although diphtheria as an epidemic had prevailed only at fitful and irregular intervals in the history of the world, sporadic cases had always existed; the case which accompanied the present paper was of that description, and would probably have been called "croup" by a former generation.

Dr. WEST said that thanks were due to anyone who threw the light of erudition and experience on a subject regarding which there was much room for doubt. But the last word had not been said as to the relations of croup and diphtheria. And, however interesting researches into antiquity might be, he doubted whether they could settle the matter. The old writers, indeed, described accurately what they saw; but they did not give the minute details now regarded as necessary for settling diagnosis. They were like the old anatomists, who described the aorta and vena cava as they saw them accurately enough, but were unacquainted with points known at the present day. In the present day, paralysis was regarded as one of the distinguishing characters of diphtheria; but, in spite of his care in observation, Bretonneau did not seem to have noticed it. Some years ago, at the Children's Infirmary in Lambeth, Dr. West met with cases which must have been diphtheria; but he had no note of subsequent paralysis. Dr. Cheyne, an accurate observer, had described croup, and had employed bleeding successfully in it; and in several cases Dr. West had opened the jugular vein in children with success. These cases, setting in with more or less of catarrhal symptoms, cough, difficult breathing, etc., were distinct from what was called diphtheria, where there was, perhaps, no febrile movement, but extreme depression, and in most cases distress about the larynx. In such cases, bleeding would destroy the patient's life. He asked whether these were one or two diseases—whether it was to be considered that croup and diphtheria were allied to each other, being different manifestations of the same disease, and not more different from each other than the mild and the severe forms of scarlet fever. He had hitherto believed that the two diseases were distinct; that one was a local inflammation, and the other a blood-disease. He still held the same opinion; but his belief was becoming less positive in consequence of the increasing evidence on the other side. The question could scarcely be settled satisfactorily by individual observation; and he would suggest the appointment of a committee of the Society to investigate the subject. The questions to which answers were required were: Do croup and diphtheria prevail epidemically at the same time and in the same locality? Does croup (without albuminuria or paralysis) observe a different rule from diphtheria as to epidemic prevalence? Are cases of the two diseases met with in the same family at the same time? Is the croup of Cheyne accompanied by albuminuria? Are both diseases followed by disorder of the nervous system?—Sir WILLIAM JENNER had till recently held that true membranous croup and diphtheria were distinct diseases, and had strongly expressed the opinion. Larger experience, among the poor as well as among the rich, had made him alter his views; and he now regarded the evidence as all but conclusive on the other side. But still he was not quite sure on the subject. The grounds of his change of opinion were the following. He had seen in cases of croup, albuminuria, which was said to be peculiar to diphtheria. He had also met with a case in which a surgeon had a laryngeal membranous deposit in consequence of the discharge from a diphtheritic patient. Again, he could not allow the idea of a sthenic and an asthenic condition to stand in the way of the identity of the diseases. He thought that Dr. Cheyne had confounded catarrhal laryngitis with croup. In 1817 and 1818, relapsing fever was described by Cheyne and others as typhus; they bled successfully, and the patients recovered, and the conclusion was arrived at that bleeding was the remedy for typhus. He had seen one case of true croup followed by nervous symptoms; and one of apparently true diphtheria coming on after exposure to cold.—Dr. DICKINSON had seen a large number of cases of croup and diphtheria at the Children's Hospital; and he agreed that the last word had not been spoken on the subject. He thought that the view of the identity of the two diseases amounted to nothing less than recognising one cause for all membranous exudations on the larynx. If two causes were acknowledged, one a poison and the other cold, it was easily seen

how one class of cases tended to prostration and the other to the formation of a limited false membrane. He held to the old view, that croup and diphtheria were essentially distinct.—Dr. SEMPLE said that he had spent much time in investigating the subject, and he was pleased to find that authorities of high influence held views similar to his. He had long entertained the opinion that membranous croup and diphtheria were synonymous. Croup was an old Scotch word, merely indicating difficulty of breathing from some cause. No particular significance could be attributed to it. But diphtheria was an entity. Commencing on the fauces and tonsils, it might, and often did, spread into the larynx and trachea; and, when it did so, it was the same disease as that called membranous croup. He had expected more opposition to his views than had been expressed in the discussion. Dr. West, instead of opposing, had confirmed them. He had studied Cheyne's writings, and found that that physician had evidently confounded infantile laryngitis with pseudo-membranous croup. The French writers did exactly the same thing, until Bretonneau clearly distinguished the disease diphtheria. Again, in the early appearance of diphtheria in this country, many disorders were described as diphtheritic which were really not so. In concluding, he said that, while diphtheria was the same thing as so-called membranous croup, it by no means followed that croup always meant the same thing as diphtheria.

Dr. WEST proposed, Dr. DICKINSON seconded, and it was resolved: "That the Council be requested to consider the expediency of appointing a Committee to examine into the relations existing between the diseases commonly known respectively as membranous croup and diphtheria."

Incessant Muscular Movements of Right Arm.—Dr. HUGHINGS JACKSON showed a man who was affected with constant muscular movements of the right arm. The leg also of the same side was somewhat affected in a similar manner.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, NOVEMBER 2ND, 1875.

G. D. POLLOCK, F.R.C.S., President, in the Chair.

Syphilitic Disease of Viscera in an Infant.—Dr. COUPLAND read the notes of the microscopical examination of the syphilitic patches in the intestines shown by him to the Society on its last meeting. In the heart, round cells were found in numbers betwixt the muscular fibres, especially around and near the blood-vessels, very much as in the case shown by Dr. Burney Yeo last year. In the lung, the gumma consisted of a reticulated network filled with small round cells; the growth was very vascular; at its margins, the alveoli were filled with round cells. The mass in the liver was a typical gumma in the young state ere degeneration or shrivelling had set in; at its edges, atrophied liver-cells were to be seen. In the kidney, there was nothing to be seen by the naked eye to indicate disease; but, when examined microscopically, an infiltration of cells betwixt the tissues was found, as in the heart.

Syphilitic Disease of the Heart.—Mr. PEARCE GOULD showed a syphilitic heart. It came from a man aged 40, who died suddenly when to all appearance he was well. Death was caused by apoplexy of the left lung. The anterior wall of the right ventricle consisted of grey-white material extending into the auricle. It was thought to be cancer by the medical gentleman who made the *post mortem* examination. On microscopical examination, however, it was found to be exactly like Dr. Coupland's case. In the interior of the growth, the normal tissue had disappeared. The left side of the heart was quite healthy. The history threw but little light on the case. The man had for some time complained of pain in the region of the heart, and of dyspnoea.

Syphilitic (?) Lung-Disease.—Dr. GREENFIELD exhibited a case of what he thought might be termed syphilitic pneumonia. The first question that presented itself was this: Was it pneumonia? The next was: Was it syphilis? It occurred in a child twelve months old, who was brought into St. Thomas's Hospital, and died in the out-patient room. There was a doubtful syphilitic history on the mother's side. There was complete consolidation of the right lung, like grey hepatisation, with slight pleurisy. On section, the lung-tissue was smooth, of a grey-white colour, with yellow bands running through it. The neoplasm was most marked around the vessels. There were fibrous septa running through the lung-tissue, with the usual round and spindle-shaped cells. With a high power, the alveolar epithelium could be seen here and there quite normal. In parts, there was the exudation of catarrhal pneumonia engrafted upon the earlier changes. The case seemed one of congenital syphilis of the lung. This change was usually found in the newly born. It was on one side only. Was it merely cirrhosis?

Dr. COGHART had some time ago brought two such cases before the Society. In one case, the mischief seemed set up by an accidental injury. The change occurred in the lower lobe of the lung, where it looked like red hepatisation, only not so solid, but tougher. The disease formed rings round the vessels.—Dr. GREEN felt some doubts as to whether these cases were really syphilitic or not. The changes were identical with those found in chronic pneumonia. Chronic pneumonia was common in syphilitic subjects, especially in infants; but it also occurred in adults. From histological examination, it was hard to say if they were syphilitic. The question must rest upon the collateral evidence. The lung might be affected in its entirety, or in parts only.

Cancer of the Breast in the Male.—Mr. WAGSTAFFE brought forward a case of cancer of both breasts in a male. (The man was shown.) He was first seen by him in 1874, when there was a mass in the left breast as large as a walnut. It was true scirrhus, without ulceration. In the right breast was a small nodule under the nipple. In the left axilla, there were some glands of doubtful hardness. In March, he operated upon him, and removed both breasts. The man did well. In March this year, there were felt some lumps in the left axilla, one very distinctly, as large as a walnut. He removed it in April. The scars were free from any morbid change, and there had been no return. Some indurated glands could be felt in the right axilla. The microscopical examination had been made by Dr. Creighton of St. Thomas's, who found in the nodule of the right breast normal acini of large size, with healthy epithelium. In some, there was germination of the epithelium. The acini were surrounded by connective tissue of several different forms. The fibrous tissue was a perivascular growth. The epithelium of the acini was the starting-point of the disease. It was true scirrhus. In the glands, the epithelium was also affected. In looking up the literature of the subject, Mr. Wagstaffe found that Mr. Milton had recorded forty-two cases, and he had himself discovered nine more, so as to form a total of fifty-one cases of cancer of the male breast. The cases of disease in the right and left breasts were equal; the age of the affected persons extended from 25 to 80; the duration of the disease was from one to eight years. In many, the cancer was evidently constitutional. In one case, after six years, there was no return, the man then dying of apoplexy. In another, eleven years had elapsed without a return of the disease. Infiltration of the neighbouring tissues was common. He could not find any other case where both breasts were affected.

Cancer of the Male Breast.—Mr. CROFT brought forward another case of cancer of the male breast. The specimen, he said, showed badly, and was blanched by keeping. The case occurred in a labourer aged 52, who came to St. Thomas's Hospital in June. He had noticed a lump for three months. It was above the nipple. The man was spare, simple, and not well nourished. The mass measured $4\frac{3}{8}$ in. from above downwards, and $3\frac{1}{2}$ in. from side to side. It appeared as three divisions. The middle third was boss-like, and the skin over it was purple and smooth. The upper third was purple, but not so deep-coloured, and felt elastic, as if containing fluid. The lower third was but slightly raised above the surrounding parts, and there were adhesions betwixt it and the skin. There was no retraction of the nipple; nor was there mischief in the axillary glands. There was a small nodule in the skin. He thought it a case of spindle-celled sarcoma; but afterwards doubted whether it were not scirrhus. On July 14th, he removed it. On section, there was no creaking; the middle lobe was firm, the others juicy. Sections were exhibited, and showed it to be spindle-celled sarcoma. The man lived eight days, and then sank from no definite disease. There was no microscopical examination made of the glands.—Mr. MAUNDER said there was in the London Hospital Museum a specimen of cancer of the male breast removed by himself.—Dr. COUPLAND asked if, in Mr. Wagstaffe's case, Dr. Creighton had found any vacuolation of the cells. The answer was in the negative.—Mr. HOWARD MARSH said there had been a case of cancer of the male breast in St. Bartholomew's Hospital some time ago. It was thought to be scirrhus, but turned out to be really fibrous.—The PRESIDENT said that he had seen three cases of true scirrhus in the male breast. One was the case mentioned by Mr. Wagstaffe, that survived six years, and died of apoplexy. One case, where the cancer was removed in 1869, is still alive; and a third, operated on in 1873, is quite well.

Cystic Oxide Calculi.—Mr. CHRISTOPHER HEATH showed some calculi of cystic oxide. They were really cystine. There were two series of them, in all nineteen, and they were removed by median lithotomy. They came from a man aged 28, who had passed some *per urethram*. There was retention of urine, and when a catheter was passed, it grated in its passage; so he operated forthwith. In the prostate were found sixteen small stones, and in the bladder three. All showed a greasy section. They were not green, because they had not

been long enough exposed to the air. Cystic oxide calculi became green after time only. All calculi were of renal origin, and why some of these had lodged in the prostate it was not easy to say. In the larger stones in the bladder, the lamination was distinct. The man made a good recovery; there was no cystine in his urine but once, and that was on the third day. This form of calculus was very rare. Sir Henry Thompson had only met with one case. It broke up oddly under the lithotrite.—Mr. HICKS gave an account of the chemical examination of the calculi. They were pure cystine. The method of examination was given. The external layers were concentric. There was no actual nucleus; but, in the larger calculi, large central portions were found. There were two forms of crystals of cystine: 1. Hexagonal prisms; and 2. Four-sided tables.

Epithelioma of Tongue and Jaw.—Mr. HEATH exhibited an epithelioma of the tongue and jaw. It occurred in a man aged 52. The skin was quite healthy. The method of operation by which the mass was removed was described. The tongue was largely healthy. A previous operation had been performed in order to loosen the tongue from the jaw; but it failed to afford relief. The tissues below the tongue were most affected. The pain was felt entirely in the occipital region. A return of the disease was probable; but so far the man was well.

Cancer of the Rectum.—Mr. HEATH showed a case of cancer of the rectum after colotomy. The operation was performed two years and nine months ago, as a mass of cancer protruded at the anus. The case made a good recovery. He removed portions of the epitheliomatous mass from time to time. Then the vagina became involved. She went into the Middlesex Hospital cancer-wards. The anal and vaginal openings formed ultimately one cloacal opening. The bladder was healthy. There was a secondary mass of cancer in the liver.

Carcinoma Lipomatousum.—Dr. HILTON FAGGE exhibited a case of carcinoma lipomatousum. It occurred in a woman aged 57, who had no urinary symptoms during life. The left kidney was granular, and weighed four ounces and a half. The other was smooth, with whitish nodules, which were extensions from a mass in the hilus which looked like fat, and grew into the kidney and renal vein. On microscopic examination, it looked like fat-globules in cells, rectangular or of various shapes. When hardened, it was found to be a true carcinoma, but of the very rare form called carcinoma lipomatousum. There was no secondary cancer.

Gangrenous Ovarian Cyst.—Mr. KNOWSLEY THORNTON showed a fresh specimen of an ovarian cyst which had become gangrenous. A week ago, the patient came to the Samaritan Hospital. She was pregnant; the cyst was therefore tapped, and ovariectomy deferred till the pregnancy was over. Pain, however, in the abdomen set in, with collapse. Several doses of opium were given ere relief was obtained. After a consultation, it was determined to remove the cyst. The woman was very ill, and almost dead. She revived during the operation. The cyst was found behind the uterus, with the pedicle twisted. The cyst was black and white mottled. The patient rallied for an hour or two, but sank in the night. The specimen had curiously lost its offensive odour, and the dark parts had become red from the exposure since its removal.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, NOVEMBER 4TH, 1875.

W. H. BROADBENT, M.D., President, in the Chair.

Dr. DE G. GRIFFITH exhibited a case of Alveolar Sarcomatous Tumour, and narrated a case of Acute Chorea.

The Diagnosis and Treatment of the Curable Forms of Fibroid Tumours of the Uterus.—Dr. ALFRED MEADOWS read a paper on this subject. These forms of morbid growth being more amenable to successful treatment than was generally supposed, their diagnosis in relation to the uterine walls was of the first importance, and Dr. Meadows relied very confidently on the differential indications of hæmorrhage and pain. Hæmorrhage, according to his experience, pointed to an intrauterine, submucous, and curable form of tumour; whilst pain was usually associated with the subperitoneal or almost incurable class. Coming to more exact means of diagnosis, it was found that cervical displacement arose from a growth in the opposite direction; that a closed os, with small and rigid cervix, were almost fatal signs of incurability; the larger and softer the cervix, the better being the operator's chances; and that, by the use of the sound, very valuable information might also be obtained. As the subperitoneal variety of tumour did not encroach on the cavity of the uterus, there was none of that elongation which was met with in the submucous form in direct proportion to its size: and by working with the sound, in conjunction with the finger

in the vagina, one could tell, by the thickness of tissue intervening between these points, whether the morbid growth occupied the anterior or the posterior uterine wall. As regarded the drug-treatment of these cases, he had only derived real benefit from ergot, which frequently acted well in small soft tumours, by cutting off their supplies of blood, and causing steady compression by contraction of the unstriated muscular fibres in which they were embedded. Operative measures were next discussed; and gastrotomy, which was occasionally performed for removal of subperitoneal growths, was only justifiable if the tumour were fairly out of the pelvis, and the cervix, as well as a good part of the body of the uterus, free from disease. In the submucous varieties, the tumour was reached by dilatation of the os and cervix; and, its investing capsule being broken down, enucleation was done more or less completely with the finger; valuable aid being derived in very large growths from Greenhalgh's olive-shaped cautery, removal being then completed by the expulsive action of the uterus, aided, if necessary, by ergot. As regarded after-treatment, rest was, of course, all-important. Hæmorrhage must be checked by styptic plugging; septicæmia, by antiseptic injections; and inflammation, by opium; it being pointed out that cystitis and cellulitis more frequently followed operations on the anterior than on the posterior uterine wall, in consequence of the larger quantity of cellular tissue which lay between the uterus and bladder, than between that organ and the rectum.—A discussion followed, in which Dr. Wynn Williams, Dr. Bantock, Dr. Gustavus Murray, Dr. Aveling, Mr. John Scott, Dr. De G. Griffith, and Mr. Knowsley Thornton, took part.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, OCTOBER 12TH, 1875.

W. T. GAIRDNER, M.D., President, in the Chair.

THE PRESIDENT opened the session by a retrospective glance at the kind of work done by the Society since its formation two years ago, and made some suggestions as to keeping the Society strictly to the basis of its constitution as composed of working members.

Cure of Iliac Aneurism.—Dr. WILLIAM MACEWEN showed a patient with multiple aneurism, formerly shown to the Society (*see BRITISH MEDICAL JOURNAL*, May 22nd, 1875). Since then, a successful treatment of the larger aneurism, involving the upper part of the femoral and the lower part of the external iliac artery on the right side, had been carried out. At the meeting of the Society in March, pressure was recommended, and, failing that, galvano-puncture was suggested. The rigid state of the vessels generally seemed to preclude the idea of ligature of the common iliac artery. The patient was treated steadily with large doses of tincture of steel, as a preparative measure. Pressure with Lister's abdominal tourniquet on the common iliac for twenty-four hours having failed to produce more than a mere temporary impression, and other trials of pressure above and below the aneurism for four or five hours each day having likewise failed, another plan was tried on April 13th. The common iliac was compressed till pulsation had completely subsided in the aneurism, and a very fine steel needle was then introduced deeply into the sac, and moved at intervals in various directions during an hour, when it was removed without hæmorrhage; the pressure on the iliac was gradually relaxed, and removed in about fifteen minutes, when the walls of the sac seemed firmer; this was more marked next morning, and on April 18th the tumour was solid and the pulsation had stopped. The patient went to the Highlands in May, and had no accident, with the exception of a small superficial abscess and boil over the tumour. On July 26th, a teaspoonful of pus was evacuated, and a small slough of the cellular tissue came away, and the wound soon healed. As now shown to the Society, he had been free from this pulsating tumour for six months, and he had been regularly at work. Dr. Macewen said he used the needle with the view of trying the effect of a foreign body in producing coagulation; he discussed the question as to whether this part of the treatment had been the cause of the success, or if it were the pressure which had really succeeded; and he raised the question of the success of galvano-puncture depending, in whole or in part, on the presence of the needle in the sac apart from the galvanism.

Patient with Addison's Disease.—Dr. DONALD FRASER showed a typical case in a young man aged 18, employed as a scourer for the last two years. His work consisted in moving bundles of yarn (14 lbs.) backwards and forwards in water; this he managed easily at first; but, about a year ago, he became less able, and of late he had done but little work, although going regularly for eight hours to his business. His father, in whose place the lad worked, thought he was merely lazy, as he did not seem to be in any way ill, and advice was sought on account of an increasing discoloration of the skin, which had been no-

ticed first about eighteen months ago; it began on the lips, and appeared a little later about the navel; the boy used to scrub his skin diligently, thinking it was dirty there. At present, the whole skin is affected; the face, neck, and hands are as dark as those of a Hindoo; at the axillæ, the inside of the thighs, the penis and scrotum, and the umbilicus, the tinge is deeper. There are well marked bluish-black stains on the lips, gums, and mucous membrane of the cheeks. There is no affection of the thoracic organs to be made out, although the boy now feels some palpitation on running; there is a nervous *bruit* in the neck; there is no albumen in the urine; the blood seems normal as to white corpuscles; he has not lost much flesh: in 1871, he was 8 st. 4 lb.; in 1874, 7½ st.; and now he is 8 st. There has been no vomiting, and no pains have been felt anywhere. No explanation of the cause of illness can be found; there has been no injury; the family history is good; and the lad used to be strong and active.

Penknife Swallowed and Passed by an Infant.—Dr. HECTOR CAMERON showed a double-bladed penknife, two inches and a half long, which had been swallowed on May 24th by an infant of 8½ months, and passed from the bowels on August 27th. The blades were in great part gone, and the tortoiseshell back of the knife had entirely disappeared. With the exception of dark stools, doubtless due to the steel, nothing unusual was observed in the state of the child from first to last.

Aneurism involving Recurrent Laryngeal Nerve; Unsuccessful Tracheotomy.—Dr. JOSEPH COATS showed a preparation of an aneurism of the aorta. The patient had been admitted to the Western Infirmary with symptoms of acute laryngitis, with profuse expectoration and considerable dyspnoea. There was a history of syphilis. After recovering so far that he could go about the ward and grounds, he began to have recurring attacks of dyspnoea, which were relieved by chloral. A severe attack occurred suddenly one morning, and death seemed imminent, apparently from some obstruction in the larynx. It was noticed at this time (the first occasion on which such a spasm had been observed carefully) that the obstruction seemed to be almost entirely in expiration. As a last chance, tracheotomy was performed, but without advantage, and death occurred in a few hours. A small aneurism was found to arise from the transverse portion of the arch of the aorta, projecting upwards and backwards; it was adherent to the roots of the great vessels by its anterior wall, and to the trachea by a portion of its posterior wall; it bulged into the trachea at its lower extremity, but not sufficiently to cause serious obstruction. The mucous membrane over this swelling was very red, and the redness extended into the finer bronchi, which contained a frothy and bloody mucus. The left recurrent nerve was adherent to, and partly imbedded in, the posterior wall of the aneurism, its fibres being somewhat stretched and expanded.

VERTIGO.—M. Piorry has lately read before the Academy of Medicine at Paris a memoir on vertigo. In his opinion, vertigo, headache, and sea-sickness are merely products of visual disturbances, especially of irisaigia. Therefore, those persons who are subject to it should not look continuously or with much attention at objects which actively stimulate the sight. This advice is especially applicable to those patients who are affected by any degree whatsoever of strabismus. They should remain in the dark, lie down on a bed in a horizontal position, and use all their mental energy to overcome the optical sensation experienced; and call up all the power of their will to drive away any uneasiness they may feel, and to call to mind that the brain has nothing to do with this train of symptoms, which last but a short time, and are scarcely ever followed by accidents or serious lesions of the encephalon. Pressure, frictions of the diseased eye, the application of warm and sometimes cold substances, slight douches, and still more the projection of water on the eyelids, may be of some use. Recourse may be even had to the extract of belladonna, which, being spread on a plaster which is brought into contact with the affected eye, promptly dilates the pupil. It is advisable to make frictions on the diseased side with some opiated liniment containing morphine, etc. A very simple and common treatment, which seems more efficacious because it succeeds very well in preventing headache, consists in provoking the physiological action of the stomach at the outset of the evil by taking a biscuit soaked in a few spoonfuls of good wine—a plan useful in irisaigia, if adopted in the first moment when the irisaigic circle makes its appearance. It is equally important to combat the complications or circumstances which predispose to vertigo: for instance, dyspepsia. Large doses of bicarbonate of soda and bismuth are then given. When the liver is increased in size, extract of berberies or alcoholate of quinine is administered. Plethoric subjects are treated by depletion. For anæmic patients, a treatment consisting of good food, exercise, iron, etc., is indicated.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, NOVEMBER 13TH, 1875.

DANCERS' CRAMP.

IN a recent number of the *Wiener Medicinische Wochenschrift*, Dr. B. Schulz describes and comments on a peculiar disorder of which he has seen several cases. He begins by briefly relating a case.

Fraulein Sch., a solo-dancer in the Court Opera in Vienna, complained of suffering very severe pains while dancing. She said that they began in the soles of both feet, and spread, with increasing severity, to the calves of the legs; they at last became so violent, that her feeling of security was lost, the feet seeming as if made of wood. These pains were accompanied with violent palpitation; and, if she continued to dance, she felt faint, and sometimes lost consciousness, the body becoming quite rigid. When the pain and palpitation were less intense, the pain continued after dancing, and ceased very gradually, leaving some tenderness of the soles; and the suffering was reproduced on her again appearing on the scene, to such an extent as to cause her to require assistance. She informed Dr. Schulz that nearly all female solo-dancers were affected in the same way, though not all to the same degree; and that the ballet-master employed the following means of relief when the pain lasted some time. He either tied a handkerchief tightly above the ankle, or had the individual placed on a wooden cylinder, which she rolled backwards and forwards while the whole weight of her body was supported on it. In this way the pain was relieved so that the dancing could be resumed; but its return was not prevented.

The successful treatment of this case by galvanism led Dr. Schulz to be consulted by two other ladies affected in a similar manner, but without syncope. He therefore endeavoured to ascertain the cause and seat of the disorder. He was informed that female solo-dancers alone were affected, not males, nor the male and female members of the *corps de ballet*. The three ladies all told him that during the vacation, when dancing was quite interrupted, not only did the pains never set in, but the tenderness of the feet, which usually continued in the intervals even when they walked, entirely disappeared. He therefore concluded that the cause of the pain lay in the *pas* performed on the points of the feet.

In this step, the dancer places herself on the point of the second phalanx of the great toe, in such a way that she either moves herself forward in musical time in the most different directions on the points of both feet, or, balancing herself on one foot, turns very rapidly on her vertical axis, and from this position attempts by a spring to fall on the same foot or on the point of the other foot, and at the same time to preserve a graceful balance. The centre of gravity of the body passes beyond the extended great toe, and falls only over the little one. To bring this about, the heel being raised, not only must the knee- and ankle-joints be rendered immovable, but the whole foot, and especially the great toe, must be fixed. All the muscles connected with the foot must contract in a co-ordinate manner; and, as this is not provided for by nature, they must be trained to it by innumerable repetitions of most troublesome movements. There is no doubt that the principal share of the work must fall on the muscles which fix the metatarsus and the phalanges of the great toe. Such movements, carried to excess, must

produce mechanical results at variance with the objects of the muscles of the foot.

If a dancer be desired to point her foot while sitting, she extends it in such a way that the dorsum of the foot forms a nearly direct line with the leg; the instep being arched and narrowed, the sole more concave, but less broad; the leg, foot, and great toe seem as if fixed in one piece; the first phalanx of the great toe is a little bent on the head of the metatarsal bone, but rigid; its unguis phalanx only can be moved a little with the hand. The highly developed *abductor hallucis* muscle is readily felt; even in the relaxed condition, it is developed to such an extent as to be indicative of the foot of a solo-dancer.

If the dancer be asked to perform the step with bare feet, she cannot do so; because, as she says, the unguis phalanx requires a certain amount of support. The dancing-shoe is made rather wide; the sole is of soft leather, and shorter than the foot, reaching only as far as the posterior third of the unguis phalanx of the great toe. The upper part, generally of satin, projects forward, and supplies the place of the deficient leather of the sole. This part of the satin is worked with strong silken threads, so that it may not be torn. In the interior of the shoe, over the leather sole, is a layer of thin firmly pressed pasteboard, either extending over the whole breadth of the anterior part, or limited to the length of the great toe. In the former case, it is carried back, gradually narrowed, as far as the heel. The leather sole and its covering are lined with fine kid leather. The heel part of the shoe is quite soft, consisting only of satin; and the shoe is fastened above the ankle by narrow ribbons. Without this preparation, the pointed step is not possible.

Dr. Schulz then describes the effects of electricity on the muscles of the foot. If one pole of an induction-apparatus be applied over the posterior tibial nerve, where it lies superficially at the lower third of the leg, and the other over the flexor longus pollicis pedis, the foot assumes exactly the position of the pointed step, but the unguis phalanx is immovable. The dancer also said, when the experiment was tried on her, that she had the same feeling as when she was bringing her foot in position for the step. Electrification of the posterior tibial nerve alone allows a little movement of the unguis phalanx of the great toe, the rest of the foot being immovable.

Here may be distinctly recognised the action of the long flexor of the great toe, which is capable of fixing the unguis phalanx, with, however, the mechanical assistance of the addition to the sole of the shoe. On the other hand, as the posterior tibial nerve, on entering the calcaneo-astragalar canal, gives off, in its continuation as internal and external plantar nerves, only motor branches to the plantar muscles, and as it is especially those of the latter which are attached to the great toe that are mostly supplied by it, the abductor, adductor, and flexor brevis of the toe may be considered to be those muscles which have to contract most powerfully.

The cause and seat of the disorder being ascertained, it is not difficult to recognise its essential character. The work done by a muscle depends partly on the strength and partly on the amount of contraction; the former being in proportion to the transverse section of the muscle, the latter to its length. Hence, in the above named muscles, in consequence of the increase of their transverse diameter by frequent exercise, the voluntary contraction easily passes into a painful tetanus-like one. The following characters of the malady agree with this explanation.

1. The localisation of the pains, which, on more accurate examination, were found indeed to proceed from the sole of the foot and its inner edge, but were also felt on the dorsum, and spread backwards next along the calf, but at its side. They thus corresponded very closely to the position of the above named muscles; the position of the interossei explained the pain in the soles of the feet.

2. The insecurity of the movements, since, as the dancers expressed it, the feet felt as if "wooden", when they were obliged to continue the dance for some time while suffering severely. It is known that, during pain in the muscles, the ordinary muscular sense is deadened.

3. The result of the remedy employed by the ballet-master for cutting short the pain further indicates a cramped state of the muscles.

In the treatment, before he was accurately acquainted with the details of the malady, Dr. Schulz applied the galvanic current from the cervical vertebrae to the tibial nerve in the popliteal space. The result of this was, that the palpitation and fainting did not return, and the local pain was relieved. He afterwards applied the induction-current in the way mentioned above; and, when the more severe pains had ceased, the disposition to tetanic contraction was treated. A sensation of forced contraction remained, by which, indeed, all female solo-dancers are more or less troubled, but not to such an extent as to diminish their feeling of security in executing the above described steps of the dance.

THE QUARTERLY RETURN OF THE REGISTRAR-GENERAL.

DURING the spring quarter, 1875, the registered number of *persons married* in the United Kingdom was 120,330, and the marriage-rate was 14.7 per 1,000 persons living. In England, the rate was 16.2, and was slightly below the average. The marriage-rate was very high in the June quarter, 1873, and has since declined. The lowest county marriage-rates were 9.1 in Cambridgeshire, 10.1 in Suffolk, and 10.8 in Essex; the highest rates in counties were 19.5 in Lancashire, 20.5 in Northumberland, and 21.6 in Lincolnshire. There was a decline in the number of marriages throughout England generally, except in the North Riding of Yorkshire, and the extra metropolitan portions of Middlesex and Kent; the decline was most remarkable in Westmorland, Cornwall, and Cumberland.

During the quarter that ended on September 30th last, the *births* of 273,499 children were registered in the United Kingdom; the rate being 33.1 per 1,000. In England, the birth-rate for the quarter was 36.0 per 1,000, which was 0.5 above the average rate in the ten preceding corresponding quarters, but was somewhat below the rate in the third quarter of 1874. The slight decline in the birth-rate during the first nine months of this year appears to be partly due to the decrease in the marriage-rate, which commenced in the early part of 1874, and has since prevailed. The birth-rate during the quarter did not exceed 28.4 and 30.2 in the principally agricultural population of the south-western and south-eastern registration divisions, whereas it was equal to 38.7 and 41.6 in the manufacturing and mining population of the north-western and northern divisions. In the eighteen large English towns, the rate was 1.8 above the average in England and Wales; it ranged from 31.5 and 32.3 in Norwich and Nottingham, to 41.6 and 50.0 in Sunderland and Salford respectively. In fifty other large towns, the birth-rate averaged 35.9 per 1,000; and ranged from 24.6 and 25.5 in Cheltenham and Hastings, to 45.5 and 47.1 in Wigan and Gateshead.

During the three months ending September 30th last, 158,811 *deaths* were registered in the United Kingdom, and the death-rate was 19.2. In England and Wales, 121,459 deaths were recorded, equal to an annual rate of 20.1 per 1,000, and 1 per 1,000 below the average rate in the corresponding quarters of the ten preceding years. The rate last quarter was lower than in the same period of any year since 1862, excepting only in 1867 and 1873, when it was 19.9 and 19.5 respectively. The excess of male over female mortality has steadily increased in recent years; and of equal numbers living, the deaths of males last quarter were equal to 114 to each 100 deaths of females. The death-rate in Sussex and the extra-metropolitan portion of Surrey, where the population is principally agricultural, was so low as 14.8 and 14.9 per 1,000; whereas, in Lancashire and in the East Riding of Yorkshire, with a population mainly engaged in mining or manufacture, it was 24.3 and 25.1 respectively. The death-rate amongst the 13,500,000 persons residing in towns, was 22.3 per 1,000; amongst the rural population of 10,000,000 it was 17.2 per 1,000. The urban rate was 1.6 and the rural rate 0.1 below the average of the quarter. Urban rates have undoubtedly in recent years showed a commence-

ment of the results to be expected from the awakening of national interest in sanitary matters. Urban sanitary authorities, with the assistance of their medical officers of health, have in most large towns been for some time earnestly endeavouring to improve the public health, and the death-rate has been reduced. The sanitary welfare of rural districts is for the most part in the keeping of local boards of guardians, who, in a large proportion of cases, have not yet formed a proper estimate of their responsibilities under the Public Health Act of 1872; and, except in certain localities where combined sanitary districts have been formed, the medical officer of health is usually a local practitioner, often without any special qualifications for the appointment, who receives an almost nominal salary. Under these circumstances, it can hardly be a matter for surprise that comparatively little sanitary work has yet been done in rural districts, and that the decline in their death-rate has not kept pace with that of our larger urban population.

In the eighteen largest English towns, including London, with an estimated population of rather more than 6,500,000 persons, the death-rate was 23.8 per 1,000, and exceeded the general urban rate by 1.5. The rates in these eighteen towns ranged from 19.2 and 21.5 in Portsmouth and London to 30.1, 31.3, and 32.4 respectively, in Hull, Leicester, and Salford. In fifty other large towns, having a population of about 2,750,000, the death-rate was equal to 21.4; the lowest rates were 14.8 in Dover, 15.1 in Reading, and 15.2 in Cheltenham. The following were the highest rates: Wigan, 26.3; Northampton, 26.8; Bury, 26.8; Gateshead, 27.3; Stockport, 28.7; Preston, 31.1; and Ashton-under-Lyne, 37.2. The high rates in these last-mentioned towns were almost entirely due to the fatality of the principal zymotic diseases. Their sanitary condition is deplorable.

The 121,459 deaths from all ages, included 37,118 of infants under one year of age, equal to 176 per 1,000 of the births registered. In the agricultural counties of the south-western registration division, infant mortality averaged but 119 per 1,000, and was but 95 in Dorsetshire and 114 in Wiltshire; whereas, in the principally mining population of Durham and Northumberland, it was equal to 222 and 223, in Nottinghamshire to 215, and in the East Riding of Yorkshire to 252 per 1,000; whilst, in the districts of Hull and Driffield, it was so high as 317 and 290 per 1,000 respectively. Excessive rates of infant mortality are almost invariably found in urban populations; but it is also important to bear in mind the wide range in the rate of mortality among infants in different towns. In the eighteen large English towns for which weekly returns are published, infant mortality averaged 222 per 1,000, exceeding by 46 per 1,000 the proportion in the whole of England and Wales, and corresponding with that in the mining county of Durham. In these eighteen towns, however, infant mortality ranged from 149 and 178 in Oldham and Portsmouth, to 277 in Liverpool, 288 in Hull, 300 in Norwich, and 407 in Leicester. The remarkable difference between the rate of 149 in Oldham and 407 in Leicester, appears to afford ground for special inquiry, which could not fail to result in an useful contribution to our at present limited knowledge of the true cause of these wide variations in urban infant death-rates.

The annual rate of mortality among children and adults aged between one and sixty years, was equal to 11.0 per 1,000 living at those ages in the whole of England and Wales; it ranged from 9.7 and 10.3 in Norwich and Portsmouth, to 16.8 and 19.9 in Oldham and Salford. Among persons aged sixty years and upwards, the rate of mortality averaged 54.8; and ranged from 45.1 and 46.3 in Bradford and Bristol, to 74.8 and 101.0 in Newcastle-upon-Tyne and Liverpool. The death-rate among elderly persons in Liverpool still conspicuously reflects the unhealthiness of the town.

The deaths from all causes included 14,006 which were referred to diarrhoea, 4,609 to scarlet fever, 2,883 to whooping-cough, 2,849 to different forms of fever, 1,152 to measles, 628 to diphtheria, and 164 to small-pox; in all, 26,283 deaths, equal to an annual zymotic rate of 4.4 per 1,000, and ranging from 2.2 per 1000 in the south-western agri-

cultural counties, to 5.6 and 5.7 in the principally manufacturing population of the York and north-western divisions. In the eighteen largest towns, the average zymotic rate was 6.5, and ranged from 4.6 and 4.9 in Portsmouth and Oldham, to 11.4 and 12.5 in Salford and Leicester. In the fifty towns ranking next in size, the zymotic rate averaged 5.0 per 1,000; it was but 1.5 in Southampton, 1.8 in Shrewsbury, and 1.9 in Dover, while it ranged upwards to 8.5 in Yarmouth, 9.3 in Northampton, 9.6 in Preston, and 14.1 per 1,000 in Ashton-under-Lyne. In Salford, the zymotic fatality arose from the combined effects of measles, scarlet fever, whooping-cough, and diarrhoea; scarlet fever as well as diarrhoea were exceptionally fatal in Leicester; diarrhoea was the principal cause of the high zymotic rate in Yarmouth, Northampton, and Preston; and in Ashton-under-Lyne, measles and scarlet fever contributed, with diarrhoea, to produce the exceptional annual death-rate of 14.1 per 1,000 from the seven principal zymotic diseases.

The 14,006 deaths from diarrhoea were equal to an annual rate of 2.3 per 1000. In the eighteen largest English towns the death-rate from diarrhoea has steadily decreased of late years, whereas it has increased in fifty other large towns, and increased at a greater rate in the rural portions of England and Wales, which would point to real sanitary progress in the eighteen towns; whilst similar progress has not been shown in the smaller towns and rural districts, where it is much wanted, and where the growing evils of overcrowding, the increasing difficulties of sewage disposal, and continued pollution of streams in many cases used as sources of water-supply, have not even been kept in check. Diarrhoea was very fatal in Birmingham and Leicester.

Next to diarrhoea, scarlet fever was the most fatal epidemic during last summer. The present epidemic commenced in the last quarter of 1873, and increased in intensity throughout 1874. During the first nine months of this year the epidemic has continued to prevail, but as the fatal cases in each quarter have been below those in the corresponding quarter of last year, the climax of the present epidemic probably occurred in the last quarter of 1874. Among the large towns, the disease was more fatal during the last quarter in Bristol, Stockport, Birkenhead, Maidstone, Bradford, and Ashton-under-Lyne. But in many small towns the fatality was more intense, especially in Buckfastleigh, with a population of less than 3,000 persons, where 21 persons (equal to an annual rate of 28 per 1,000) died of the disease. The death-rate from fever, including typhus, enteric, and simple continued fever, has of late years shown a remarkable and steady decline, which was maintained during the quarter now under notice. It was only 0.30 and 0.34 in the mainly agricultural population of the eastern and south-western divisions, whereas it was 0.63 in the manufacturing and mining population of the north-western, York, and northern divisions. In the eighteen large towns, the annual fever-rate last quarter averaged 0.51 per 1,000, and ranged from 0.33 and 0.35 in London and Newcastle-upon-Tyne, to 1.35 in Nottingham and Sheffield. The remarkable decline in the prevalence and fatality of fever in London in recent years affords conclusive evidence of the improving sanitary condition of the metropolis, the result of more complete sanitary organisation, of increased facilities for isolation of fever cases, and of a more liberal devotion of intelligence and money to sanitary purposes. The fever-rate was as high as 1.37 in Carlisle; 1.28 in Dudley; and 1.01 in Ashton-under-Lyne. The deaths from small-pox in England were probably fewer last quarter than at any period since the discovery of the efficacy of vaccination.

The natural increase of population in the United Kingdom produced by the excess of births over deaths during the quarter was 114,688; and in England that increase was 89,322. The emigrants of British origin who sailed from the United Kingdom were 37,560; a less number than in the corresponding period of any year since 1862.

The cold weather, which set in on June 11th, continued throughout July and until August 5th; the mean temperature during this period of fifty-six days showed an average deficiency of 3.1 degrees. On August 6th, warm summer weather set in, and, with few exceptions, prevailed up to the end of the quarter; this period also embraced fifty-six days,

the average excess being 3.2 degrees. The fall of rain during the quarter at Greenwich amounted to 10.3 inches, and exceeded the average by 2.9 inches. The price of meat remained high; but the prices of wheat, potatoes, and coal were lower. The number of outdoor paupers was 30 cent., and of indoor paupers 9 per cent. less than in the corresponding quarter of 1870.

FOOT-AND-MOUTH DISEASE.

WEEK after week, the foot-and-mouth disease is reported from all parts of the country as on the increase. Year after year, the disease is permitted to spread far and wide without any general and systematic effort being made to check it. There exists a well manned veterinary department of the Privy Council; but its action is spoiled by a Permissive Act, which allows local authorities to adopt restrictions, or not, as they please. The result is, that, whilst the stockowners of one district are hampered by regulations, those of neighbouring districts separated by no natural barriers are left free to do as they choose, and disease spreads. Further, it seems to us that the Contagious Diseases (Animals) Act and the Privy Council orders are made subservient to political exigencies, and that they can never be made strong enough to fairly meet the requirements of the country until the public take a greater interest in the matter; until, in fact, popular opinion is so strongly expressed as to warrant Government in acting fully up to the suggestions of their professional advisers.

When the cattle-plague decimated our herds and threatened a meat-famine, public interest was aroused, and active measures were soon successful in stamping out the disease. Cattle-plague was quickly fatal; foot-and-mouth disease is rarely so, and thus the radical measures applied to the one are thought unnecessary for the other. This is true so far as slaughtering is concerned, but absolutely false as to the other essential points of detecting disease and stopping the movements of animals.

It may seem startling to say that foot-and-mouth disease has caused greater loss to the country than cattle-plague; but it is the simple truth. Loss is entailed by a diminished supply of milk, by the depreciation of fat stock, by the abortion of cows in calf, and by many other causes, just as certainly as by death. One of the witnesses before the Select Committee of the House of Commons, in 1873, produced a calculation, showing that, in 1872, the country lost £12,000,000 from foot-and-mouth disease alone. This estimate is applicable only to an exceptional year; but it must be remembered that the disease is always rife, and that it has been so more or less for thirty years.

It is a moderate and safe calculation to say that the contagious diseases of animals cost us over one million a year, and this loss, although first felt by the stockowner, affects the whole community by its action on the price of meat.

The question, then, of the prevention of these diseases, of which foot-and-mouth disease is the most prominent, is one of great interest to the sanitarian and the political economist; but of greater still to the consumer of meat.

Much ignorance prevails concerning the disease. The prescriptions offered almost daily through the press show that an idea is extensively held that the affection is merely one of foot and mouth. It is really a specific eruptive fever, which must run a definite course. The eruptions on the mouth, teats, and feet are simply the local accompaniments, and require palliative treatment. It is quite right to treat the mouth and feet with a view to assisting mastication and locomotion; but it is sheer ignorance to think that any local treatment is capable of "killing" or checking the disease. We offer no treatment. There is not a single modern work on veterinary medicine which does not give thoroughly scientific and reliable information on the subject, and we have no reason to believe that any veterinary practitioner is not quite capable of guiding a herd or flock through the disease, if only his directions be followed.

The treatment of individual cases is, however, a small matter com-

pared with the total extinction of the disease, and this is quite within reach, if only our regulations were framed with judgment and enforced with energy. Foot-and-mouth disease never originates in this country, but is always due to contagion. It was first imported from the Continent, and is now probably occasionally re-introduced by foreign stock. The mere stoppage of foreign importation would, however, never free us from the disease. The movement of diseased home stock is the chief cause of its prevalence, and we look upon Ireland as a great offender in sending a large number of infected animals.

One attack of foot-and-mouth disease gives no immunity to an animal against a second attack; so that, as long as we can send the disease to Ireland and the Irish send it back again, there is no possibility of its dying out. There is no wish to treat Ireland as a foreign country; but it must submit to the same regulations as one of our own counties. So long as it sends us disease, it must be treated as an infected place. The sooner it can show a clean bill of health, the sooner will it find an open market for its produce. It is absurd, from merely sentimental notions, to permit such a natural barrier to the spread of disease as the Channel to be of no effect.

When, during the cattle-plague days, restrictive measures on the movements of animals were in force, foot-and-mouth disease disappeared. Here, then, is a remedy which has been proved effective. Let us again adopt it. Let the cattle-plague regulations (*minus* slaughtering) be applied to foot-and-mouth disease. In a week or two, the necessary movements of cattle and sheep will almost have ceased, purchasers will have obtained their stocks, and stringent regulations will produce the minimum of hardship on individuals. If such a plan be adopted and carried out thoroughly and generally for the space of two months, we have no doubt that the disease will disappear. But what then? Guard against the re-importation of disease, make existing regulations general and compulsory, and we shall remain free.

THE Brussels correspondent of the *Pall Mall Gazette* writes:—A school of medicine for ladies, due to private initiative, will be opened here on the 1st of next month.

DR. CRICHTON BROWNE has issued cards for his annual medical *conversazione* in the hall of the West Riding Asylum, for Friday, Nov. 19th. Dr. Broadbent will deliver an address on the Theory of Construction of the Nervous System.

IN the London School of Medicine for Women there are at present, we hear, upwards of twenty ladies studying. The courses of Anatomy and Practical Anatomy for this (the second) winter session are given by Mr. Reeves and Mr. Mears, of the London Hospital; Medicine, by Dr. T. K. Chambers, Consulting Physician to St. Mary's Hospital, and Mrs. Garrett Anderson, M.D., Physician to the New Hospital for Women; Histology, by Mr. Needham; Physiology, by Mr. Rivington; and Surgery, by Mr. Cowell, Senior Surgeon of the Westminster Hospital.

MISPLACED ENTHUSIASM.

OWING to the many expedients that have been adopted to obtain signatures, the time has passed for numerous signed memorials to carry the weight with them that their bulky appearance or imposing-looking figures would suggest; but, whilst memorials continue to be presented on every conceivable subject, it is as well now and again to draw attention to the manner in which signatures are obtained. Subjects that appeal to the feelings have ready and enthusiastic supporters in ladies, who, guided by impulse rather than by reasoning, are without doubt most useful allies. So, evidently, think the Committee of the Association for the "Promotion of Humane Treatment of Animals", in placing in the hands of young ladies papers for the signatures of their friends. This Committee ought really to be congratulated upon their system of working, if it be carried out so completely in England as we have been informed has recently obtained in Lincolnshire,

where it was suggested that the visitors attracted to the neighbourhood by the festivities incidental to the race-week should be applied to for their signatures. How could there be a more perfect way of obtaining opinions on an important scientific question than by sending to young ladies in country houses papers for such a purpose? Happening to see one of these valuable documents, we observed that three-fourths of the names were those of ladies, one of whom, however, wise in her generation, only gave her initials, as she thought that "by so doing her name would carry greater weight". How charming in a ball-room for one of these enthusiastic young ladies to be able to make it a stipulation with her partner that, if she danced with him, he must sign her anti-vivisection paper! It is quite natural that the non-scientific world should feel opposed to vivisection, especially when their minds are stirred up against it by a few well-described revolting stories; but it is really lamentable to think that questions of this vital importance to the human world should be subjected to such treatment.

HOSPITAL SUNDAY IN LIVERPOOL.

THE Hospital Sunday Committee of Liverpool, in making their annual report, regret to be obliged to announce that the collections of 1875 have fallen short of those of 1874 and 1873. The total amount in 1874 was £11,185:8:9; in 1873, £9,821:9:10; and in 1875, £9,716:13:4. This is to be accounted for partly by a depressed state of trade; partly by the fact that Hospital Sunday was wet and stormy; partly also by a belief generally prevalent at the date of the collections that the medical charities would receive a large accession of income from other sources. Fluctuations in the amount of the collections, arising from these and similar causes, are to be looked for from year to year; but the Committee have every reason to believe that the institution of Hospital Sunday retains in an undiminished degree the confidence of their fellow-townsmen.

COWPOX AND FOOT-AND-MOUTH DISEASE.

MR. J. GREENE, of Birmingham, writes to us:

"I notice, in to-day's issue of the BRITISH MEDICAL JOURNAL, that M. Félizet of Elbeuf has inoculated twenty-five beasts with cowpox, and that subsequently these animals had not suffered from foot-and-mouth disease, notwithstanding that it abounded in the neighbourhood. The cowpox to which he refers is probably the 'white pock' of Ceely. During the last few years, I have repeatedly examined herds of cows affected with the 'white pock', and have noticed its apparent protection against foot-and-mouth disease. None of these numerous cows subsequently suffered from this complaint, though it existed severely all round. From recent inquiry, this exemption still continues. The importance of the observations of M. Félizet can scarcely be exaggerated. The subject calls for further experiment and observation, which should be official and on the part of Government. True variolous cowpox is excessively rare at present; but I have had proof that it is not protective against foot-and-mouth disease."

PROGRESSIVE MORPHOLOGY.

THE first part of the new *Journal of Morphology*, issued by Gegenbaur, contains, according to *Nature*, a very notable paper by Dr. Emil Rosenberg, on the Development of the Vertebral Column and of the Os Centrale Carpi of Man. He sets before himself the problem, little touched hitherto, of the discovery of the steps by which man may have developed from the nearest mammalian stock. Taking first the vertebral column, he sets forth the differences existing therein in the various Anthropomorpha, and seeks to reconcile them with that of man. For instance, in two genera, Troglodytes and Hylobates, there are thirteen dorsal vertebrae; while in the Orang and in man there are only twelve. But Dr. Rosenberg has observed in more than one human embryo an actual rib-rudiment on the thirteenth dorsal vertebra; so that the homology of the thirteenth dorsal in man and Troglodytes is established. Another result that Dr. Rosenberg alleges that he has demonstrated from examination of human embryos is, that a process of transformation goes on in the growth of the sacrum, by which vertebrae at the proximal end, with their costal elements, are assumed into the sacrum, while a corresponding number at the distal end undergo reduc-

tion, and are dismissed into the caudal region. And this process, generalised, may be applied to each of the hinder regions of the vertebral columns. Thus, in the history of development, each lumbar vertebra in man is the result of a single transformation from the condition of a dorsal vertebra; each sacral vertebra has previously passed through the lumbar stage; while the caudal vertebrae have been successively dorsal, lumbar, and sacral, before becoming caudal. This is necessarily but a very imperfect sketch of the major subject of this paper, which is of very high interest.

THE CHELSEA GARDENS OF THE APOTHECARIES' COMPANY.

AT the last meeting of the Chelsea Guardians, the following motion stood on the paper in the name of Mr. Cox, viz.: "That the necessary steps be taken for applying to Parliament in the next Session for obtaining power to acquire the fee of the gardens belonging to the Apothecaries' Company at Chelsea, and that the solicitor be instructed to give the necessary notices." The subject was referred to the Works and General Purposes Committee.

DIED OF WORRY.

ON Saturday evening, at the Prince Albert, Mape Street, Bethnal Green, Mr. Humphreys inquired into the cause of death of Mr. Thomas Sarvis, aged 53 years, for many years medical officer of health for the parish of Bethnal Green, who fell dead in his surgery, 350, Bethnal Green Road, on the preceding Thursday afternoon. Mr. J. D. M'Donald deposed that he was the deceased's assistant. About five o'clock, witness, who was in an adjoining room, suddenly heard a slight scream, and upon opening the door saw the deceased falling. He never again moved. The deceased had previously told him that he had a sanitary meeting to attend at 6 o'clock, about which he seemed much worried. Mr. Mainwaring said he found death to have been instant from effusion of serum into the ventricles of the brain. The heart weighed 21¾ ounces. There were no traces of poison to be found. Mr. Jacobs, Chairman of the Sanitary Committee, said that the late doctor had neglected to have his report laid before the Board in June last; and, on that very night, there was a notice for him to attend a meeting of that Committee to answer the charge. The jury returned a verdict of "Death from natural causes".

INQUEST OR NO INQUEST.

WE learn from the *Bethnal Green Times* that some discontent has arisen in that district in consequence of an inquest not having been held upon the body of a pauper who died in the workhouse in July last. The circumstances of the case were briefly these. The man, James Harper, left the workhouse on Wednesday morning for an ordinary day's leave. In the afternoon, he was seized with sudden illness. He was faint, and complained much of pain in the chest and right side. His friends gave him brandy, but he was unable to retain it. When somewhat better, he attempted to make his way back to the workhouse. While going, he fell; and was picked up by his daughter, who accompanied him to the workhouse, and told the official that her father was very ill. The porter, however, believing that he was drunk, sent him into the receiving ward, where he was retained the whole night without any medical assistance. The next morning, it was evident that he was ill; and he was removed at once to the Infirmary, where everything was done to relieve him. He died, however, on the following Saturday; and the medical officer gave a certificate to the effect that he died from inflammation of the lungs. His body was given over to his relatives for interment; but the coroner, Mr. Humphreys, gave directions that an inquest should be held. The jury were duly sworn; but, while they were on their way to view the body, they were recalled, and informed by the coroner that, since they had left, he had received a communication from the guardians, through the medical officer, by which it appeared that the inquest was unnecessary. They were, therefore, dismissed. But the matter was not to rest here. A memorial was forwarded to the coroner, requiring him to order a *post mortem* examination, and to hold an inquest as he

originally proposed. To this, Mr. Humphreys consented. But a difficulty arose with regard to a mortuary where the body, if exhumed, could be deposited. Then, at the end of August, it was said that the time had gone past when a *post mortem* examination could be of any value. Thus the inquest was "shunted", but the question is not settled; and we allude to it because it is intimated that it will be brought under the notice of the Home Secretary. The case of James Harper is another example of the dissatisfaction which so often arises from the want of careful discrimination between illness and intoxication; and the main object of the agitation seems to be to secure greater attention to this point at the Bethnal Green Workhouse.

THE CONJOINT SCHEME.

DR. PAGET and Dr. Humphry have been delegated by the University of Cambridge to represent that body on the committee now in course of formation for the furtherance of the conjoint scheme of examination for England and Wales.

MEDICAL MAYORS.

THE list of new provincial mayors contains the names of the following members of the medical profession: Mr. Puddicombe, Dartmouth; Mr. Joseph May, Devonport; Dr. Kelburne King, Hull; Mr. Barrow, Ryde; and Dr. Eyton Jones, Wrexham.

SHIP-SURGEONS.

PUBLIC attention having been recently directed to the fact that passenger-ships frequently sail from the United Kingdom with an unqualified surgeon on board, or with one not registered under the Medical Act, or with no medical officer at all, the Board of Trade issued at the end of last month an official circular to their emigration officers and mercantile marine superintendents explaining the state of the law on the subject, which is discussed in the *Pall Mall Gazette*. The broad interpretation of its provisions appears to be that every foreign-going ship having on board one hundred or more persons, and every ship carrying more than fifty passengers (sailing under the Passenger Acts) shall carry an officer, who shall be a duly qualified and duly registered medical practitioner. But our contemporary points out that the circular affords no practical clue whatever as to how the law is to be put in force. "It gives no power to an officer to summon either master or owner, nor does it even hint that a vessel can be stopped if she sail without an authorised surgeon, although her complement may number several hundred persons. A parliamentary return moved for in June last showed that, during the two previous years, 224 'experienced' surgeons sailed from the United Kingdom whose names did not appear on the *Medical Register*; and that, of this number, fifteen were under twenty-one years of age, and could not have been qualified at all. It does not appear, therefore, that passengers are in a much safer position than they were before as regards medical attendance afloat; and, indeed, it is notorious that several ships have sailed during the last autumn with no surgeon on board, to ports east of the Cape and by the old Cape route, each carrying more than a hundred persons."

THE COST OF HOSPITAL EXTRAS.

AT the last meeting of the Metropolitan Asylums Board, an important report was presented by Mr. Proudfoot on behalf of the Finance Committee, who had been investigating the causes of great differences between the cost of fever-patients at Homerton and Stockwell Asylums. The Committee found that the difference arose from the "medical extras"; these costing, on the average, 6d. a day each patient, and at Stockwell 1½d. Mr. Proudfoot proposed that the report should be sent to the committees of the two asylums. After some discussion, Dr. Cortis suggested an addendum to the motion requesting the committees of the hospitals to give information respecting the death-rate, the average duration of residence in the two hospitals, both of those who recovered and those who died; and the resolution, thus amended, was carried. A wise liberality in the matter of hospital extras is a very desirable element in hospital administration; and, within a certain

range, it is very advisable to allow the utmost latitude to medical officers in "feeding fevers", and in the adoption of costly drugs and costly dietaries for the sick. On the other hand, we have known some very remarkable results to have followed from the analytical investigation of the causes and nature of excess of expenditure under this head; and sometimes the medical officers themselves are not a little surprised at the differences existing between the cost of their patients and those of their colleagues.

STATISTICAL SOCIETY.

THE first ordinary meeting of the present Session will be held on Tuesday, the 16th instant, at the Society's Rooms, Somerset House Terrace (King's College Entrance), Strand, W.C., when the President, James Heywood, Esq., M.A., F.R.S., will deliver his Inaugural Address, and present the Howard Medal to the successful candidate—this being the first award; and Dr. W. A. Guy, F.R.S., will read a paper on John Howard's true place in History, a supplement to his paper entitled John Howard as Statist. The chair will be taken at 7.45 P.M.

BELLIGERENT STUDENTS.

THE new session at Heidelberg was inaugurated by a pitched battle between those members of the University who are natives of Prussia, and those of the other German provinces. The combat assumed such alarming proportions that the whole police of the town had to be called in, and it was only possible to restore order by the arrest and imprisonment of the ringleaders.

HEALTH OF FOREIGN CITIES.

WE learn from official sources, that the population of the twenty-two Indian and foreign cities from which the Registrar-General is favoured with weekly returns, is estimated at about ten millions of persons, and the death-rate therein during the third quarter of this year averaged 28.9 per 1,000, against 23.8 in the eighteen largest English towns. In these foreign cities, the death-rates ranged from 20.9 and 21.4 in Turin and Vienna, to 39.4 in Berlin and 48.6 in Alexandria. Typhoid fever was somewhat prevalent in Paris; both typhus and diphtheria in Berlin; fevers in Rome and Naples; and small-pox and diphtheria in New York. So far as the classification of diseases adopted in the different towns renders a comparison possible, the annual death-rate from diarrhoea last quarter was but 0.13 per 1,000 in Turin, and less than 1 per 1,000 in Amsterdam and Rotterdam; whereas it was 6.0 in Christiania, 6.5 in Munich, and 11.9 in New York. In the eighteen large English towns, the diarrhoeal rate averaged 3.6 per 1,000, and ranged from 1.6 in Bristol to 9.2 in Leicester. Infant mortality, measured by the proportion of deaths under one year to births, which averaged 222 per 1,000 in the large English towns, was equal to 136 in Turin, 238 in Naples, 283 in Rome, 290 in Hamburg, and so high as 508 in Berlin.

DOCTORS AND BONE-SETTERS.

SOME time ago we alluded to the difficulties which have arisen in some of the Welsh quarrymen's medical clubs, in consequence of the predilection of the members for employing bone-setters. The troubles occasioned by this question are not yet settled. A recent correspondent of the *Carnarvon and Denbigh Herald* calls Dr. Roberts of Penygroes to account for allowing his name to be affixed to a set of rules issued by the Nantlle Vale Club, wherein his name stands side by side with a bone-setter; the rule permitting the members to have "the service of a qualified doctor and a bone-setter". We consider that the correspondent is in the right, and that it is much to be regretted that members of our profession should consent to co-operate with bone-setters. It would be much better for them to refuse to have anything to do with clubs that employ unqualified practitioners. Societies for the relief of sickness should be officered by none but fully qualified men. Disastrous results will almost inevitably arise from pursuing any other course; and members of the profession had far better keep entirely aloof from such doubtful arrangements.

PATENT MEDICINES.

THE *Boston Medical and Surgical Journal* reports: "At the meeting of American pharmacologists, Professor Maisch made some very sensible remarks on the disgrace of the great traffic in patent medicines. We are glad to see the matter taken up by this body; for the pharmacologists can do more, we think, to remedy the evil, than the physicians. We must disagree with Professor Maisch, however, when he says that apothecaries can do nothing as long as quack medicines are called for. They always will be in demand till the millennium, but the demand will be lessened if they cannot be procured from respectable druggists. Professor Maisch stated that the question had been agitated as to the best means of informing the public of the dangerous nature of many of these nostrums. Dr. Frederick Hoffman of New York had suggested the publication of a health-almanack similar to those issued by the proprietors of patent medicines, which should contain analyses of such preparations. Circulars had been prepared upon this subject, which Mr. Maisch desired to have distributed to the Association."

SCOTLAND.

AN epidemic of measles and scarlet fever prevails to such an extent in the village of Bunhill, that the School Board, acting on the advice of the medical authority, have resolved to close the public school for a fortnight.

THE general health of Edinburgh is excellent, although there is still a large amount of scarlet fever in the town. The general death-rate for last week was at the low rate of 19 per 1,000. Of the 73 deaths, 23 were due to zymotic diseases, of which 17 are ascribed to scarlet fever.

WATER FOR DUNFERMLINE.

MESSRS. J. and A. Leslie, C.E., Edinburgh, have been recently instructed by the Town Council of Dunfermline to make surveys, with the view of ascertaining the best source of water-supply for the town. They have submitted a report, in which they express a very decided opinion that the only adequate source of supply is in the district of Glendevon. To obtain a supply of one million gallons a day from Glendevon to Craighiscar, they propose to construct a reservoir on Glenquey capable of holding 21,000,000 cubic feet of water, which will be of sufficient capacity to afford liberal compensation, and to supply water for Dunfermline much above its requirements for some years to come. When the consumption of water becomes greater than can be obtained for a reservoir of this size, it can be easily extended. The adoption of iron pipes is recommended. The total cost of the works proposed would not exceed £65,000, of which it will only be necessary at present to expend £42,000. A Bill to further this object is to be brought before Parliament in the ensuing session. The new waterworks at Dundee have cost upwards of £300,000, and a supply of about six million gallons a day is now being received, while the works are constructed to carry eight million gallons. Last week, a testimonial was presented by the inhabitants of Dundee to Bailie Robertson, the chief magistrate, who has been the principal instrument in carrying the undertaking to a satisfactory issue.

THE UNIVERSITY OF EDINBURGH.

IN his opening address to the students on the 1st instant, Sir Alexander Grant announced that the subscriptions towards the new University buildings reached nearly £80,000. As showing the urgent necessity for increased accommodation, he quoted from the Report of the Duke of Devonshire's Commission on Scientific Instruction the statement that "the Professor of Pathology has to lecture in a room which is used only one hour before he enters it by the Professor of Moral Philosophy, and one hour after he leaves it by the Professor of Geology". The Report, he said, spoke strongly in favour of a Government grant being given in aid of the extension scheme. He announced, in a later part

of the address, that Professor Huxley would again take the place of Professor Wyville Thomson, and deliver the summer course of Natural History, as the voyage of the *Challenger* is to be prolonged for a few months more than was intended. The total number of students matriculated last academical year was 2,076; being an increase of 146 on the previous year. This increase was made up of 82 in the Faculty of Arts, 60 in the Faculty of Medicine, and 7 in that of Theology. In 1868, there were only 445 medical students; last year, there were 899. Shortly before the close of the address, allusion was made to the recent visit of the Association, and the part which the University played in their reception.

ROYAL MEDICAL SOCIETY OF EDINBURGH.

THE session of the Royal Medical Society of Edinburgh opens on Friday, November 12th, when Mr. Annandale delivers an address. The rooms are on this occasion thrown open to all students of medicine, as has been the case on the opening night for some years past.

THE GLASGOW INFIRMARY AND THE POLICE BOARD.

THE directors of the Glasgow Royal Infirmary and the Police Board have had a conference on the much disputed question of the admission of fever-patients into the infirmary from the suburban burghs, but it did not result in much. The managers of the infirmary denied that they had enabled the authorities of the neighbouring burghs to evade their duties, by admitting their patients. The committee of the Police Board assured the managers of the infirmary that they only desired, for the safety of the citizens, that all cases of epidemic disease should be reported to them. This was ultimately agreed to; but the managers of the infirmary declined to interfere in any way between the Health Committee and the authorities of the neighbouring burghs.

THE PRELIMINARY EXAMINATION IN THE UNIVERSITY OF EDINBURGH.

THE preliminary examination in Arts required by medical students at the Edinburgh University is by no means a mere form. Last month, about 118 or 120 candidates presented themselves at the University, of whom over forty, or more than one-third of the whole, were found wanting, and referred to their school-work. We are glad to find that the examiners are somewhat stringent, as it is very desirable that all members of the profession, and especially those who aspire to the high degree of M.D., should have a thoroughly good preliminary education in general knowledge.

IRELAND.

MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

A QUARTERLY meeting of the Belfast Branch of this excellent Society was held at Belfast on the 3rd instant, under the presidency of Dr. T. H. Purdon. Donations were announced from the chairman, who has, in the aggregate, contributed the handsome sum of £500 guineas to the funds; £100 from Lady Johnson; £150 from Dr. H. M. Johnson; besides a long list of smaller sums. Special allusion was made in the report to the liberal contribution to the funds received from the medical students of Queen's College, Belfast, as showing to the students of other colleges an example worthy of imitation.

THE VICE-PRESIDENCY OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE following have been mentioned as likely to succeed the late Mr. John Hamilton as Vice-President of the Irish College of Surgeons: Mr. Ledwich, Dr. Kidd, Mr. R. McDonnell, Mr. Stapleton, and Mr. Smyly. We understand that the first three are the favourites, and that these gentlemen will arrange among themselves so as to avoid a contest. It would be premature to make any decided announcement as to the matter. It is the custom at the Irish College of Surgeons, that the Fellow chosen as Vice-President should succeed to the Presidency the following year without opposition.

DUBLIN HOSPITAL SUNDAY FUND.

NEXT Sunday, the 14th instant, will be the second Dublin Hospital Sunday. Collections will be made in upwards of 180 churches in Dublin and its vicinity. We regret that the Roman Catholics still abstain from taking any part in the movement. The average collection last year was over £20 per congregation; at the same rate, a sum of close on £4,000 should be obtained this year.

ROTUNDA LYING-IN HOSPITAL: ELECTION OF MASTER.

DR. GEORGE JOHNSON'S term of office having expired, the usual septennial election for master of the Rotunda Hospital was held on the 6th instant, when Dr. Lombe Atthill was chosen master by a large majority over his competitor, Dr. Cronyn. We shall not enter into a comparison between the two candidates, who had both served the office of assistant-master in the Rotunda Hospital, and are both well known obstetricians. We have no doubt Dr. Atthill will fulfil the anticipations of his supporters. Dr. Atthill's work on *Diseases of Women* has already established itself as a text-book, and gained for its author a high reputation as a gynæcologist. The high estimation in which Dr. Atthill is held by Dublin obstetricians is proved by his position as President of the Obstetrical Society. Dr. Atthill's experience as a clinical teacher, gained at the Adelaide Hospital, to which he has been long attached, will prove highly beneficial to the School of Midwifery at the Rotundo Hospital. We cannot wish Dr. Atthill better than that he should prove as successful and popular a "Master of the Rotunda" as his predecessor.

THE SURGEONCY TO THE QUEEN IN IRELAND.

THE office of Surgeon-in-Ordinary to Her Majesty in Ireland, vacant by the death of Mr. John Hamilton, is now the cause of much speculation as to who is to occupy the vacant post. Mr. Edward Hamilton, President of the College of Surgeons; Mr. William Colles, the Regius Professor of Surgery to the University; Mr. Rawdon Macnamara, formerly a President of the College of Surgeons, and now its representative in the General Medical Council; Mr. Philip Smyly, and several others, are mentioned. It is believed that the honour will be conferred upon a political supporter of the powers that be; and, such being the case, it is evident that the chance must rest between the President of the College of Surgeons and Mr. Smyly.

PHARMACEUTICAL SOCIETY.

At a meeting of the Council held last week, it was finally decided by a large majority, that there should be but one qualification for those compounding medicines in Ireland, and that it should be that of pharmaceutical chemistry. An amendment was moved by Dr. R. Macnamara that there should be two classes, viz., pharmaceutical chemists, and chemists and druggists; but the original resolution was carried.

BALLYNAHINCH CHALYBEATE SPA.

DR. HODGES of Belfast, last week, drew the attention of the members of the Chemo-Agricultural Society of Ulster to an analysis he had made of a sample of the above waters, as it was supposed by some, Sir R. Kane among the number, that this spring did not contain any chalybeate properties. During a visit to the Spa this year, he had made an examination of the water, and found it to yield about two grains of oxide of iron per gallon; an imperial gallon on evaporation left 25.2 grains of oxide of a light brown colour, 9.1 grains of which consisted of organic and volatile matters. The mineral and saline matters consisted of peroxide of iron, 1.82 grains; carbonate of lime, 7.70 grains.

PRESENTATION.—Mr. W. J. Fleetwood, who has been connected with the Chester General Infirmary for four years—at first as visiting, and afterwards as house-surgeon—was presented on his resignation, on October 14th, with a handsome case of operating instruments by the visiting-surgeon, matron, dispenser, nurses, and servants of the institution.

THE OPENING OF THE MEDICAL SESSION IN DUBLIN.

DURING the past week, the Dublin hospitals and schools opened their doors for the session 1875-76. The prospects of the session in Dublin seem bright, although the exact number of new entries cannot be ascertained until after the 25th instant, when it is the custom to close the entry-books in Dublin.

ROYAL COLLEGE OF SURGEONS IN IRELAND: SCHOOL OF SURGERY.—This school was opened by an introductory address by Dr. Little, the professor of medicine; the President of the College occupying the chair. Dr. Little's address consisted chiefly of the usual advice to medical students, given, we are glad to say, in an unusually brilliant and attractive manner. The professor dwelt specially on the importance of hospital attendance and clinical work. Dr. Little criticised ably and soundly the recent changes in the condition of the medical department of the army. Dr. Little concluded as follows. "I would have all of you, both those who are beginning their studies in this school and those who, having passed that stage, are entering on the active duties of life, to remember the responsibility and dignity of the profession in the ranks of which you have enrolled yourselves. Do not listen to those who tell you that professional success is to be obtained by outward display, by an affectation of solemnity or an affectation of benevolence, by servile ways and cunning devices; rest assured that those who do so obtain success pay far more dearly for it than those who gain it by the labour of their hands and the labour of their brains; do you start with the determination that, beneath your professional robe, you will ever wear the invulnerable armour of an honest purpose, and that for victory you will rely on the invincible weapons industry and perseverance; patience and self-denial you may need; but by no other course can you earn a fair fame and secure the richest of all this world's rewards—an approving conscience."

THE UNIVERSITY SCHOOL OF MEDICINE.—This, the largest and most flourishing of the Dublin schools, was opened in its ordinary quiet way, without any display or special address. Each professor said a few words of encouragement to his class, and at once plunged into the active business of the session.

DR. STEEVENS'S HOSPITAL AND MEDICAL SCHOOL.—This, the oldest of the Dublin hospitals, was opened without any ceremony whatever, introductory addresses having for several years been abandoned.

THE LEDWICH SCHOOL OF MEDICINE.—This school was opened by an address by Dr. Ward, who, we regret to state, spoiled an otherwise excellent lecture by references to medical students and their conduct, which have caused no small annoyance among the members of many of the medical classes in Dublin. We refrain from quoting the ill-advised remarks of the lecturer, which we have already heard made use of to increase the false opinions often held with regard to medical students.

THE MEATH HOSPITAL.—The address of Dr. J. W. Moore, the newly appointed physician to this hospital, was of a character far superior to the usual run of inaugural addresses. We regret our space does not permit us to quote more largely from it; but we cannot refrain from quoting his concluding remarks, which were most appropriate. "To be entrusted with the duty of helping to sustain the reputation of this hospital is indeed a high honour; but it brings with it grave responsibilities. My colleagues have each and all recognised this fact, and, without flattery, I may say right well have they so far fulfilled the trust. But for me, if I am spared, my spurs are yet to be won. As far as punctual attendance and diligence in the wards are concerned, I think I may pledge myself, should health permit. But, fellow-students, unless my efforts are seconded by you, they will utterly fail to secure good and lasting results. As you value your success at your final examination, your prosperity in after life, but, above all, your patients' welfare and happiness, be diligent clinical students of disease. Be punctual in your attendance in the wards, lose no opportunity of making yourselves thoroughly and practically acquainted with sickness in its Protean forms; every hour, every moment of your undergraduate life, of your hospital course, is more precious than gold. Above all things, shun, as you would the yawning precipice or the treacherous quagmire, the perilous delusion of merely 'walking' the hospital. Let each one of you become a 'practising pupil' in the fullest sense of the term. In your relations with the sick, make every allowance for their weak and prostrate condition. Act towards them as you would towards the

nearest and dearest of your own loved ones when laid on a bed of sickness. Let no thoughtless levity or want of sympathy on your part repulse the sufferer. Win his confidence by gentleness and loving kindness. 'Be pitiful; be courteous'. And, lastly, let us all remember how great is the privilege of ministering in some degree to the alleviation of the sufferings of our afflicted fellow-creatures: who it was that said, 'I was sick and ye visited me'; the question of surprise, 'Lord, when saw we thee sick and came unto thee?' the glorious answer of the King, 'Inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto me'. It only remains that, on the part of my colleagues and myself, I should bid those of you who are now about to enter the wards for the first time a hearty welcome. Your fellow-students who are already our friends will likewise greet you, and give you many useful hints. Remember that there is no clashing in the attendance on the medical and surgical *cliniques*, which are held on alternate days. Let us all—teachers and pupils—resolve to be punctual and attentive, and the session which is this day inaugurated will, like many that are past, prove a prosperous, an instructive, and a happy one." The greater portion of the address was devoted to a medical history of the Meath Hospital.

RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS.—The opening address was delivered on Monday last by Mr. Thornby Stotar, one of the surgeons to the Richmond Hospital. Mr. Stotar paid a worthy tribute to the memory of Mr. Adams and Mr. Hamilton, late surgeons to the hospital, who had been removed by death during the past year. The lecturer, having referred to the list of great men who had from time to time advanced the roll of officers of the hospital, concluded with a few words of advice to the students.

THE CATHOLIC UNIVERSITY SCHOOL OF MEDICINE.—The address in this school consisted of an able review of ancient and modern medicine by Dr. Macswiney. The following passage is specially worthy of note:—"The false science I denounce ignores God; but true science, far from taking us away from God, brings us nearer to Him.

'One rule our life was fashioned to fulfil,
That he who tends Truth's shrine, and does the best
Of science with a humble, faithful will,
The God of truth and knowledge serveth best.'

You will find no principles of unbelief amongst the members of the calling you have adopted. The study of medicine has no tendency to create sceptics. This charge has been often preferred against the science of medicine; but the lives of its greatest men triumphantly refute the calumny."

THE MATER MISERICORDIÆ HOSPITAL.—Dr. Hayden delivered an inaugural address. The address consisted chiefly of a review of the relations which the different branches of medical science have to one another. The importance of preventive medicine was specially dwelt upon, and reference made to the recent Public Health legislation for Ireland. Dr. Hayden's address was one of the most suitable to which we have listened, and was free from that glorification of his own institution which, we believe, first brought introductory addresses into disrepute.

IS THE FLESH OF DISEASED CATTLE WHOLESOME?

SOME passages in the Annual Report of the Veterinary Department of the Privy Council Office raise the important question as to whether or not the carcasses of animals slaughtered in consequence of their being affected with pleuropneumonia are fit or unfit for human food? On this question, two departments of the Government are divided in opinion. It appears that the owners of such cattle receive compensation for the loss they have sustained, and that it is a general practice in estimating this loss to consider the flesh as fit for consumption. With reference to this practice, the Local Government Board state that, though not possessed of any conclusive evidence that the flesh of pleuropneumonia animals is hurtful, they are advised by their medical officer that it is unsafe for use as human food. The Lords of the Council, in reply to this opinion, express their regret that the Local Government Board is advised that the flesh of animals which have been the subject of any febrile disease should be considered unsafe for human food, and proceed to point out that, if such an opinion were acted upon, it would entail so large an outlay that they would hesitate to continue their order rendering the slaughter of such cattle compulsory. The importance of the question can hardly be overrated; and though no definite conclusion on the subject has as yet been arrived at, it has been the subject of investigation by some of our most competent physiologists with whom we have been in correspondence. The conclusion at pre-

sent arrived at is, that when the disease is recognised in so early a stage that the animal is killed before general constitutional disorder has been set up, *i. e.*, before the muscular tissue has undergone those changes which, in all febrile diseases, attend the development of the febrile state, it is not unfit for consumption. Consequently, the question whether any given carcass is fit for human food must be judged in each case on its own merits. If, on inspection, the muscular tissue be found to be in a perfectly natural state, and there be evidence to show that reasonable despatch has been used in killing the animal before it has begun to be seriously ill, then it would be unjust for the law to interfere; for, as regards pleuropneumonia, there is not the slightest reason for believing in the existence of any specific contagium in the organism of such a nature as to be itself injurious, irrespectively of the alteration of tissue produced by the morbid process.

In the contrary case, it is undoubtedly highly improper for the meat to be used as food. Hence, we have two practical alternatives: inspection or prohibition. If inspection can be carried out so as to ensure that only such meat as is in a wholesome—that is in a natural—state, is offered for sale, then the use of the flesh of pleuropneumonic animals may be permitted *under this guarantee*. But if such inspection is impossible, the only way is to prohibit the use of diseased meat altogether, for otherwise the public are exposed to the risk of consuming meat unfit for use; not on the ground of any specific infective ingredient it may be supposed to contain, but on the ground of the altered condition of the flesh of animals in advanced febrile disease.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE consideration of the proposition of Mr. Marshall for the establishment of a preliminary examination in anatomy at the end of the first winter session was discussed at a meeting of the Council on the 11th instant. It was resolved that there be a committee appointed to consider the question of an examination in elementary anatomy and other subjects at some period previous to the time of admission to the first examination for the membership and fellowship. At the same meeting of the Council, Mr. John Birkett, one of the vice-presidents of the College, was elected a member of the Dental Board, in the vacancy occasioned by the resignation of Mr. Hancock.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

The Deanship of the Faculty of Medicine.—Clinical Instruction in Paris.—The Chair of Clinical Medicine at the Charité Hospital.—Short-sightedness in France.—The Trepaine Treatment of Diseased Bone.—The Fork-swallower.—Kangaroo-Meat.

THE term of the autumnal holidays having expired, the various political, scientific, and literary bodies have resumed their work, and, as announced in my last, the School of Medicine has reopened its doors for the winter session. The latter institution has been for some time, and is still, in a somewhat anomalous position, owing to its having no dean, as M. Wurtz sent in his resignation some time ago, and, strange to say, the Minister of Public Instruction, in whose hands lies the appointment, cannot find a successor. The appointment has been going a-begging since M. Wurtz gave it up; but none of the other professors seem disposed to accept the offer. The deanship of the Faculty of Medicine of Paris is a very onerous office; and the Minister of Public Instruction is, therefore, devising means to render it more acceptable. One of the projects in contemplation is to appoint two assessors to assist the dean, and thus relieve the latter of a good deal of routine work. A committee has been appointed to investigate the subject, and it is hoped that, under such favourable circumstances, there will be no difficulty in finding a dean.

Many other reforms are in contemplation, and, among others, I may mention that the system of clinical instruction is to be revised, and a committee has been appointed to inquire as to the best means of improving and completing it. Clinical instruction in Paris, although not inferior to that in any other school, is yet very defective, not so much in the character or quality as the difficulty attending its being imparted or received; and this is owing to the system of centralisation rife in France, and which is so ruinous to the country. You are aware that there are only three or four hospitals in Paris (Hôtel Dieu, La Charité, La Pitié, Hôpital des Cliniques) where clinical lectures are officially delivered by professors appointed for the purpose; the consequence is,

the wards of these professors are so overthronged by students, that it is simply impossible to get near the bed of the patients. Many students, however, desirous of becoming thorough practitioners, resort to other wards where they can with ease auscultate, percuss, or examine the patients according to the nature of the case. Any reform, therefore, that may be carried out in this direction would be welcome; and one of the means that suggests itself consists in increasing the number of clinical professorial chairs; even one of medicine and one of surgery to each hospital would be none too many, as, under the present system, there are times when there are as many as a hundred disciples of all ages that may be seen in one ward alone of a clinical professor.

By the retirement of Professor Bouillaud, the Chair of Clinical Medicine at the Charité Hospital has become vacant. In the order of seniority, Professor Hardy, so well known as a "skin-doctor", but who is also professor of medicine at the Faculty, has a right to promotion; but it is anticipated that he would rather forego it than give up his appointment as physician to the St. Louis Hospital, which he has held for the last twenty years, and where he had acquired his reputation for his knowledge of skin-diseases. This, by the way, would be a favourable opportunity for creating a special chair for skin-diseases. Specialties are not officially recognised by the French Faculty of Medicine, and yet there is perhaps no country in the world where a knowledge of special diseases is so thoroughly acquired, owing to the facilities for study, which are liberally offered even to foreigners.

The number of short-sighted persons in France is said to be steadily on the increase; and, as this condition would constitute a serious inconvenience in a military point of view, the authorities have become anxious about the matter, and have requested the Academy of Medicine to investigate the cause, and, if possible, to remedy the evil. The subject has been lately discussed at the Academy, but the conclusions arrived at are not yet known. I should not be at all surprised if the use of spectacles be introduced in the French army. Hitherto only officers have been allowed to wear spectacles; but the privilege will have to be extended to the soldiers in the ranks, if it be desired to muster a strong army, particularly as it has been discovered that, in many cases, myopia is artificially produced, in order to escape the conscription. This is done by reading with strong concave glasses so graduated as to reduce the visual power to the use of the No. 2 or 3 glasses. It is known that the German soldiers who are short-sighted are allowed to wear spectacles, and this does not seem to render them less effective, as was proved in the last war.

Professor Gosselin of the Charité Hospital lately read a very interesting paper at the Academy of Sciences on the use of the trephine as a remedial agent in the treatment of diseased bone. After having referred to the works of David of Rouen, of Sédillot and Sir Benjamin Brodie, M. Gosselin attempted to prove that, in several of the cases in which the trephine was used by the latter surgeon for the opening of abscesses in the substance of bones, there was no discharge of pus or any other fluid indicative of inflammation; but the patients were relieved of the most urgent symptom, pain, and ultimately cured of what was supposed to be abscess of bone. From this circumstance, M. Gosselin concludes that there is such a disease as neuralgic osteitis ("ostéite névralgique"), which up till now has not been recognised in surgical works, and which is perfectly curable by the same method of treatment as in genuine suppurative osteitis; viz., the application of the trephine. But it strikes me that there is some incongruity in the term employed by the worthy professor; for, in pathology, all words ending in "itis" imply the morbid condition known under the name of inflammation. It would, therefore, in my opinion, be more correct perhaps to designate the disease referred to by M. Gosselin osteoneuralgia, or neuralgia of bone, and not neuralgic osteitis, the former of which terms implies absence of inflammation, or of any of its products, in the morbid process under consideration. The object of M. Gosselin's communication, however, is not so much to explain the morbid anatomy of the disease in question as to prove the value of trephining in all cases of diseased bone, whether of an inflammatory or neuralgic character, as in both cases the result is relief of pain, if not cure of the disease; and, as the operation is perfectly safe, he would recommend it to the favourable notice of surgeons for more general adoption.

In a former letter, I related the case of a young man in Paris who, about eighteen months ago, swallowed a fork, and to whom in consequence the appellation of "l'homme à la fourchette" was given. It will be remembered that the case was very properly not interfered with, either medically or surgically; and the daily papers now announce that this young man is not only still alive in his native town, but, notwithstanding the presence of the fork in his stomach, he is as well as if nothing had happened to him. Moreover, being without employment, he has turned his attention to music, and has even recently composed a

polka and a waltz which would reflect credit on a composer of greater pretensions.

The "Jardin d'Acclimatation" in the Bois de Boulogne has just been enriched by the arrival of some hundreds of kangaroos from Australia. Thanks to the efforts of the directors of the garden, this animal may be now considered perfectly acclimatisable in France, and several landed proprietors have introduced them to their grounds, where they are hunted like other game. The flesh is now sold in the markets as an article of food, and is considered a great dainty. Thus we have another viand in the market which is heartily welcomed, as the price of butchers' meat is so high as to be inaccessible to the working classes, who stand most in need of the most substantial food.

BIRMINGHAM.

[FROM OUR OWN CORRESPONDENT.]

Hospital Sunday.—*Medical Institute.*—*Midland Medical Society.*—*Dr. Richardson's Address.*—*Sanitary Improvements.*—*Medical Appointments.*—*Female Medical Education.*

IN the notice of the Hospital Sunday collection, in last week's JOURNAL, there is a printer's error substituting 3 for 5; the total amount now is £5,650, being several hundreds more than in any previous year. As almost all this goes to the Queen's Hospital, and as it has been given at a time when other large subscription lists are open for other public purposes, it is commonly regarded as a substantial vote of confidence in the hospital management and in the recent changes.

The committee of the Midland Medical Institute have arranged with the Council of Queen's College to rent part of their building for library and other purposes. This is considered a very satisfactory arrangement; the rooms and the position are excellent; the local school of medicine is rightly brought into closer connection with the institute; and there is evidence of a burial of the hatchet and smoking of the calumet that is of good omen for future unity.

The library subcommittee have already taken over the periodicals and books of the Midland Medical Society, which has now modified its programme, and has resolved in general meeting: "That it be for the future carried on as a Society for the Promotion of Scientific and Practical Medicine and Surgery by the delivery of addresses, the reading and discussion of papers, and by pathological and other demonstrations." The books belonging to the Society are presented to the Institute, and the subscription fee is lessened.

The Society's Inaugural Meeting, which has become now an annual institution, was held on Wednesday evening, under the presidency of Dr. Johnston, J.P., and was very largely attended. A cordial address of thanks and appreciation was presented to the much esteemed Treasurer Mr. Hamar; and afterwards an able address was delivered by Dr. B. W. Richardson, on the Treatment of the Dying. He observed that Dr. Alison's description of four modes of death required more detail to be useful, and twelve modes might be described as follows:—1. From degeneration of tissue—natural decay; 2. From structural degeneration—as of heart or lung, cancer, etc.; 3. From cold—temperature of 28 deg. Fahr.; 4. From displacement of oxygen of blood or prevention of its combination (this was caused by septic products; and an experiment showed that vaccine lymph liberated oxygen from peroxide of hydrogen; quinine would, to some extent, prevent this); 5. From loss of blood; 6. From cranial pressure, as in apoplexy (the lecturer had proved direct communication between the cerebral and iliac veins by injecting mercury, and also by lighting at a tube in the cranial substance gas injected into the ascending iliac vein); 7. From uræmia; 8. From shock, arterial spasm, accumulation of motor force (this occurred in narcosis from chloroform and other anæsthetics of the same series—probably from irritant action); 9. From arterio-paresis, as in congestions of the lung or kidney; 10. From muscular spasm, tetanus, colic; 11. From pectous change, as of blood and nerve-tissue—as in croup, pneumonia, rheumatism, and *post partum*; 12. From true asphyxia. Dr. Richardson then proceeded to consider modes of treatment available for some of these—as in 5. transfusion; in 6, 7, 8, and 9. bleeding, which he strongly urged, relating cases; in 10. nitrite of amyl, showing his own plan and Mr. Smith's inhaler; in 11. the administration of liquor ammoniæ to saturation of blood, preserving the horizontal position—he instanced striking cases of recovery after pyæmic symptoms from solution of heart-clot; finally, in 12. artificial respiration after tracheotomy by means of most ingenious bellows, or rather air-cylinders, calculated to remove from, or pump into, the lungs fifteen or thirty cubic inches of air at a time. This, he said, promised to be a most valuable resource, especially in hospital practice; it had not been described before. The

lecturer was listened to with the greatest interest, and received a most hearty vote of thanks.

The early and energetic use which this town proposes to make of the Dwellings' Improvement Act has become well-known throughout the country. We have even seen a French paper containing a fairly accurate account of the scheme, and drawing the attention of its readers to the remarkable fact that it is possible to be a radical and yet an administrator. The original plan, involving an expenditure of one and a quarter millions, was carried by a very large majority of the Town Council, and awaits now a further sanction of the Central Board. The officer of health has now sent in, in due form, a notice that another and neighbouring area is also, to a large extent, "unfit for human habitation". Of the truth of this, there can be no doubt; and the contrasted death-rates of certain streets supplies Dr. Hill with a cogent argument. Whilst the average death-rate of the borough is 26.78, that of some streets named stands respectively at 32, 38, 43, 54, and even 73! After an explanation that this extension of area would not involve more expenditure, but would allow more selection of sites, and that the destruction and reconstruction would be spread over a long time, this addition to the scheme has been carried to-day by the Town Council, with one dissentient only.

At the Children's Hospital, Dr. J. B. Welch has been elected acting physician, and Dr. Warner extra-acting physician. Mr. J. N. Ravenhill has been elected honorary surgeon to the Lying-in Charity. A vacancy for another demonstrator of anatomy at Queen's College will be announced shortly.

The Mayor, as the Chairman of an Association, has written to the Committee of the Queen's Hospital to inquire if women students can be admitted there for clinical instruction in the event of a new medical school being founded for them. The letter has been acknowledged, and its consideration deferred till the next meeting.

ASSOCIATION INTELLIGENCE.

THAMES VALLEY BRANCH.

THE first meeting of the above Branch will take place at the Board Room of the Richmond Infirmary, on Wednesday, November 17th, at four o'clock.

Papers will be read by—

1. Dr. Milner Fothergill: On the use of Digitalis in Aortic Disease.
2. Dr. Donkin: On the Nomenclature of Bright's Disease, clinically considered.
3. Dr. Wiltshire: On the Pathology, Diagnosis, and Treatment of Uterine Polypi.
4. Dr. Fenn: On the Pathology and Treatment of Acute Rheumatism.

There will be a dinner afterwards at the Greyhound Hotel at six o'clock. Charge, 7s. 6d. each, exclusive of wine.

F. P. ATKINSON, M.D., *Hon. Sec.*

Kingston-on-Thames, November 2nd, 1875.

SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT MEETINGS.

THE next meeting of the members of the above District will be held on Wednesday, November 24th, at 3.30 P.M., at the Royal Pavilion, Brighton; Dr. HENRY MOON in the Chair.

Dinner at Markwell's Royal Hotel at 5.45 P.M. Charge, 5s., exclusive of wine.

The Aquarium, Sussex County Hospital Museum, and the Museum and Picture Gallery of the Town, will be open to members. The first named on presenting their cards.

Sir Cordy Burrows will relate a case of Hip-joint Disease.

Notice of intended communications is requested by the Secretary by Tuesday, the 16th instant.

THOMAS TROLLOPE, M.D. Cantab., *Hon. District Secretary.*

35, Marina, St. Leonards-on-Sea, November 9th, 1875.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

THE next meeting, to be held in the Music Hall Buildings, Aberdeen, on Saturday, December 4th, at 3 o'clock in the afternoon, will be devoted to a debate on the proper place of Alcohol in Therapeutics. The debate will be opened by Dr. Urquhart, Aberdeen.

J. URQUHART.
ALEX. OGSTON.

November 11th, 1875.

WEST SOMERSET BRANCH.

MEMBERS of this Branch are requested to take notice that Henry Alford, Esq., Taunton, will perform the duties of Honorary Secretary and Treasurer during the temporary absence of Dr. Kelly, who has gone to Mentone for the winter.

GLOUCESTERSHIRE BRANCH.

THE annual meeting of the above Branch will be held on Tuesday, November 16th, at 6.30 P.M., in the Masonic Room at the Bell Hotel, Gloucester.

The supper will be at the Bell Hotel at half-past Eight.

Business of the Meeting.—Election of officers for the ensuing year.

Insular Sclerosis. By Dr. Wilson, Cheltenham.

The attitude of the University and other Examining Boards, and the Medical Profession generally, in relation to the questions connected with the Medical Education of Women. By Dr. Batten, Gloucester.

RAYNER W. BATTEN, M.D., *Honorary Secretary.*

Gloucester, October 8th, 1875.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

A MEETING was held on October 14th, at the White Hart Hotel, Reigate; J. WALTERS, Esq., M.B., in the Chair. Eleven members were also present; and, as visitors, Sir Thomas Watson, Messrs. Flood, M.B., and Hawken.

Medical Advertising.—Dr. HOLMAN proposed, Mr. E. H. GALTON seconded, and it was carried unanimously:—"That, in the opinion of this meeting, the practice of continuous advertising of medical books in the non-medical public papers is derogatory to the interest and dignity of the profession, and should be abandoned."

Treatment of Colles's Fracture.—Dr. WALTERS read notes on the treatment of Colles's fracture. He advocated the use of a straight wooden splint, padded in the middle, for three or four weeks; then the application of a gutta-percha gauntlet, which keeps at rest the ends of the bone, but allows free movement of the fingers.—Dr. HILL exhibited Gordon's splints for the same injury, and affirmed that, under treatment by them, cases were cured in three weeks, with free rotation of the radius at the end of that time.—Messrs. CHALDECOTT and CHAMPNEYS took part in the discussion.

Specimens.—Dr. WALTERS exhibited the Head and Neck of a Femur removed by himself, also an Uterus and Vagina, with rupture of the latter, which occurred during labour, the patient remaining without untoward symptom for three days.

Acute Dropsy in a Boy.—Dr. CHALDECOTT read a case of acute dropsy, with convulsions, in a boy aged 8. The urine was slightly albuminous and loaded with triple phosphates, contained no casts or blood-cells. The convulsions ceased after the removal of four ounces of blood by bleeding.—Sir THOMAS WATSON and Drs. LANCHESTER and GALTON made remarks on the case.

Specimens.—Mr. CHAMPNEYS exhibited a very small foetus, half an inch in length.—Dr. GALTON exhibited a specimen of salivary calculus from the submaxillary duct.

Femoral Hernia.—Dr. GALTON read notes of two cases of femoral hernia, in one of which erysipelas of the face occurred ten days after the operation, with recovery; in the other, inversion of the patient to an angle of 45 deg. for twelve hours previous to the operation had no good effect.

Fistulous Opening in Neck.—Dr. HOLMAN mentioned a case of fistulous opening at the side of the trachea, which was stated by Sir James Paget to be a still perforate branchial cleft.

Anæsthetics.—A discussion on anæsthetics was introduced by Dr. LANCHESTER, in which opinions were expressed by Drs. Holman and Walters in favour of a mixture of alcohol, one part; chloroform, two parts; and ether, three parts.

Puerperal Fever.—Dr. HOLMAN read notes of four cases of puerperal fever. No. 1, aged 36, nursed a child with scarlet fever at six months' and a half pregnancy. Labour came on three weeks after the child's convalescence. She died on the ninth day. A slight rash appeared just before death. There was no sore-throat. No. 2 recovered. No. 3 had a bad attack, which was conveyed to No. 4. He insisted strongly on the necessity of precaution.—Sir THOMAS WATSON and others made remarks.

Next Meeting.—It was agreed that the next meeting should be held at Croydon on December 9th; Dr. ADAMS in the Chair.

Dinner.—Ten members and two visitors sat down to dinner.

CORRESPONDENCE.

COMPULSORY REGISTRATION OF DENTISTS.

SIR,—Permit me to express my full concurrence in the remarks of both Mr. Napier and Mr. S. Hamilton Cartwright, lately brought forward in your JOURNAL, on the subject of dental reform, and which you so ably criticised a few weeks since in one of your "leaders". Still I cannot but think, putting aside much that was objectionable, that the late meeting at Manchester with regard to the compulsory registration and education of dentists had many good points attached to it as a step in the right direction to bring about (doubtless in a small degree at first) the reform so much needed.

I am, sir, yours faithfully,
HAMILTON CRAIGIE.
13, Portland Place, Cavendish Square, W., Nov. 6th, 1875.

SIR,—Will you kindly allow me a few lines in reply to a letter which appeared under the above heading in last week's JOURNAL?

It might be inferred that Mr. Napier was advocating a new system of practice in deputed to skilled mechanics the purely mechanical part of his work; but it is well known that this is, and has been for years, the general custom among dentists; and that this work is done sometimes in and sometimes out of the house, according to the convenience and extent of practice of the dentist, the advantage of work done in the house being, that it is more directly under the supervision of the dentist at the various stages of its construction.

But surely the place in which the work is done is a matter of very small importance in the discussion. The real question appears to me to be (and this was mooted some time since in the BRITISH MEDICAL JOURNAL) whether the dentist shall give up to the mechanic the entire mechanical branch of the profession, including the adjustment of teeth in the mouth, or not. To this question, the answer must be that he should not; for this requires not only mechanical skill but surgical and anatomical knowledge, as well as æsthetic taste.

I maintain that the dentist who prepares the mouth for artificial teeth, superintends their manufacture, whether in his own house or not, and adjusts them in the mouth, is in exactly the same position as the surgeon who supplies his patients with and adjusts splints and other surgical instruments. I believe that, in this view, I shall have the concurrence of all who are practically acquainted with the subject, and it is to guard against any misconception that might arise from a misunderstanding of Mr. Napier's letter that I trouble you with these remarks.

I am, sir, yours faithfully,
ASHLEY GIBBINGS, M.R.C.S., L.D.S.
Nov. 1875.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

A MEETING of ratepayers has been held and a resolution passed, to form a local board in the parish of Sheepshed, Leicestershire.

THE SKIPTON GUARDIANS.

THE proverbial and often false economy of so-called guardians of the poor is exemplified in the recent action of the Skipton Board towards their medical officer, who, after holding his appointment for a year, has applied for an advance of salary, basing his claims thus:—1. The salary has been the same for the past twenty-five or thirty years; 2. An infirmary for contagious and infectious diseases, for the whole union, has been added to the workhouse, without any additional salary; 3. The number of inmates in the workhouse has nearly trebled. To the intelligent minority of the guardians, their medical officer's claim seemed most reasonable; but, on a vote, it was decided to give no advance. The workhouse doctor consequently resigned; and, as his professional brethren in the town are sensible of the justice of his claim, they all refuse to apply for the post. In this dilemma, the guardians are advertising the appointment, and it now remains to be seen whether anyone, or who, will assist the guardians in frustrating the apparently just claims of their medical officer. Considering that there is not a breath of complaint against his professional skill or attention to the sick poor, we hardly think any medical man would be justified in offering himself to fill the vacancy.

EPIDEMIC OF TYPHOID FEVER AT FORT CUMBERLAND, PORTSMOUTH.

THE notice which appeared in the *Times* of Tuesday last respecting an outbreak of typhoid fever amongst the recruits of the Royal Marine Artillery stationed at Fort Cumberland, Portsmouth, is correct in all its details. The origin of the epidemic has been distinctly traced to sewage-pollution. There have been four fatal cases, sixteen pronounced cases, and about forty cases of indisposition arising from the same cause. The whole of the recruits who tenanted the fort have been withdrawn, and sent for the present to Forton, and the cholera-hut at Eastney has been converted into a temporary hospital for the isolation and treatment of the patients, who will be all removed from the hospital in Fort Cumberland. This occurrence should bring about the building of a permanent hospital at Eastney for the use of the sick in the division stationed there, as has, we believe, been frequently recommended by the Director-General of the Medical Department of the Navy.

THE WORKHOUSE AND ITS MEDICAL OFFICER.*

THE general orders of the Poor-law—now Local Government—Board relating to the duties of the medical officer, though defined with much official exactitude, are, on many important matters, perfectly silent, for the reason, as it appears to us, that, in accordance with the traditions of the department, they were originally drafted by some person or persons completely ignorant of matters medical. Dr. A. Sheen, the medical officer of the infirmary and workhouse at Cardiff, having had, during the five years' tenure of his appointment, to educate himself in the duties and obligations of his office, in the *brochure* before us, puts together in easily understood language a ready means whereby the workhouse medical officer, in his noviciate, may without difficulty obtain all the information which will enable him with facility to carry out his varied duties. Considering that such a publication will be of much service to certain of the 665 of our medical brethren who hold these appointments, we will proceed briefly to review his production. It would appear that, when Dr. Sheen was originally appointed, it was obligatory on him, in return for a stipend averaging £104 yearly, to provide all medicines and appliances save cod-liver oil, quinine, iodide of potassium, morphia, and tincture of opium. Since that time, thanks to the continuous agitation of the Poor-law Medical Officers' Association, the salary has been raised to £120 a year, the guardians undertaking to provide all medicines and appliances; not too much, by the by, when it is considered that the workhouse averages 365 inmates, the schools 260 children, and that there is a separate hospital built for 130 beds. Dr. Sheen very properly points out that an establishment of this size should have a resident house-surgeon, and further suggests that the head nurse might be taught to perform all ordinary dispensing. We would, however, much prefer to see introduced into England the plan adopted in similar-sized Irish workhouses; viz., the appointment of a resident apothecary who, by virtue of his professional knowledge, could see every inmate on admission, send for his chief when necessary, and prepare and dispense all medicines. Nevertheless, the idea of instructing the paid nurse of a smaller institution in the knowledge of dispensing is not without value. Dr. Sheen would abolish the system of rating sick poor persons as paupers, and in this we entirely agree. One of the greatest blots of the English method of dealing with pauperism consists in placing those seeking relief in consequence of sickness on the same level as those requiring it through idleness, improvidence, or intemperance. Whilst the latter should be sternly dealt with in workhouses, in our judgment the largest consideration should be shown to those chargeable to the rates through the accident of illness.

Passing to another point—the list of formulæ for workhouse hospital practice—we have much pleasure in commending it to our readers' notice, as it contains many valuable prescriptions that might be beneficially adopted in a more exalted sphere of action. There is, however, one subject to which we desire to draw special attention, and it is that of the dietary table introduced by Dr. Sheen. We write advisedly when we state that there is no more fertile source of contention between the master and the medical officer than the diets ordered by the latter, and everything which tends to harmony between these two officers it is at all times desirable to encourage. We do not find in the list any arrangement whereby the jaded or imperfect appetites of the severely sick can be readily dealt with. In certain workhouses with which we are acquainted, a dietary is specially framed to meet this too frequent class of cases. This consists of either fish, a chop, eggs, beef-

* *The Workhouse and its Medical Officer.* By Alfred Sheen, M.D. Cardiff: Lewis. 1875.

tea, arrowroot, or milk, and is called *ad libitum* diet. The nurse of the ward enters on a card daily the diet which the patient has selected, only one of the six being allowed; at the end of the week, the master or his clerk takes out the total of each diet, which he distributes on his side of the medical relief book among those persons who have been receiving this exceptional diet. This method admits of the fancies of sick people being gratified with a minimum of trouble, and without unnecessary expense.

With this criticism of Dr. Sheen's pamphlet, we commend it very heartily to the attention of all workhouse medical officers.

SIR,—Would it not be far more praiseworthy on the part of such Boards as St. Giles' (the majority of whose members had determined to elect their "chum", regardless of the interests of the parishes and ratepayers of St. George's and St. Giles'), ere the advertisement be issued soliciting candidates for the position of medical officer of health, to first of all record their votes, and subsequently advertise in such a manner as to comply with the Act of Parliament? Such a course would save candidates really qualified to fulfil the duties of medical officer of health the annoyance and, I was going to add, degradation of seeking at the hands of those persons with whom rests such appointments "the favour of a hearing". In the advertisement issued by the clerk of the St. Giles' and St. George's Board, we were told: "Personal canvass of the members of the Board was strictly prohibited"; he might have added, "personal application for the appointment by qualified gentleman and outsiders will be considered an insult, and treated with the wrathful rigour of constituted authority." Joking apart, can nothing be done to fully expose such jobs? or is the pigmy to usurp the giant's seat for aye? I am, faithfully yours, SPERO MELIORA.

November 8th, 1875.

POOR-LAW MEDICAL APPOINTMENTS.

ARCHER, George, M.R.C.S.Eng., appointed Medical Officer to the Fifth District of the Guiltcross Union, *vice* A. C. Farrington, L.R.C.P.Ed.
 BAILEY, James B., M.D., appointed Medical Officer and Public Vaccinator for No. 6 District of the Bath Union.
 BELLMONT, James T., L.R.C.P.Ed., appointed Medical Officer and Public Vaccinator for the Parish of Dalkeith, *vice* Robert R. Jeffries, M.R.C.S.Eng., deceased.
 BRODIE, Malcolm, L.R.C.P., appointed Medical Officer and Public Vaccinator for No. 2 District of the Bellingham District, Northumberland.
 BROWN, Philip, M.D., appointed Medical Officer to the Winlaton District of the Gateshead Union, *vice* A. Megget, M.D.
 CALDWELL, Samuel, L.K.Q.C.P.I., appointed Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Crossbane Dispensary District of the Bailieborough Union, county Cavan, *vice* John Atkin, M.D., resigned.
 CALLAN, Patrick, L.K.Q.C.P., appointed Medical Officer to the Workhouse and Fever Hospital, Ardee Union.
 CLARKE, Thomas, M.D., appointed Assistant Medical Officer to the Workhouse, Brownlow Hill, Liverpool, *vice* A. M. S. Hamilton, M.D., resigned.
 CLARKE, Thomas F., M.D., appointed Medical Officer to the Bradninch District of the Tiverton Union, *vice* S. R. Potter, M.B.
 GRANT, James, L.R.C.P.Ed., appointed Medical Officer and Public Vaccinator for the parishes of Birsay and Harray, Orkney, *vice* G. Garson, L.R.C.S.Eng., resigned, and of Hoy and Gramsay, *vice* C. Macpherson, M.B., resigned.
 GRAY, John R., M.B., appointed Medical Officer for the Knayton District of the Thirsk Union, Yorkshire, *vice* J. H. Buchanan, M.D., resigned.
 HEALY, Michael J., L.K.Q.C.P.I., appointed Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Monasterboice Dispensary District of the Drogheda Union, *vice* P. Callan, L.K.Q.C.P.
 IRELAND, Arthur J., M.D., appointed Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Ardahan Dispensary District of the Gort Union, county Galway, *vice* W. J. Nally, L.R.C.P.Ed.
 MOORE, John B. G., L.R.C.P., appointed Medical Officer and Public Vaccinator for the No. 1 District of the Ongar Union, Essex, *vice* T. Markby, M.R.C.S.Eng., resigned.
 PATERSON, William, M.D., appointed Medical Officer for the Chorley No. 1 District of the Chorley Union, *vice* George Tobin, M.R.C.S.Eng., resigned.
 NALLY, William J., M.R.C.S.Eng., appointed Medical Officer and Public Vaccinator to the Kinvara Dispensary District of the Gort Union, county Galway.
 POWER, Joseph, L.R.C.P.Ed., appointed Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Borrisoleigh Dispensary District of the Thurles Union, county Tipperary, *vice* J. P. Quinlan, L.R.C.S.I., resigned.
 SANDIFORD, Thomas H., M.D., appointed Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Kilshanny Dispensary District of the Mallow Union, co. Cork.
 SCOTLAND, Thomas, M.B., appointed Medical Officer for the No. 1 District of the Newcastle-on-Tyne Union, *vice* T. C. Nesham, M.D., resigned.
 SOMERVILLE, Thomas A., M.R.C.P.Ed., appointed Medical Officer and Public Vaccinator for the Wilmslow District of the Altrincham Union, Cheshire, *vice* Joshua Bower, M.R.C.S.Eng., deceased.
 SUTCLIFFE, Edward, M.D., appointed Medical Officer to the Peters-Marland District of the Torrington Union, *vice* H. B. Pattinson, M.R.C.S.Eng., resigned.
 SUTHERLAND, William, L.R.C.P.Ed., appointed Medical Officer for No. 6 District of the Bellingham Union, Northumberland.
 TOBIN, George, M.R.C.S.Eng., appointed Medical Officer for the Chorley No. 2 District; and Public Vaccinator for the Chorley and Coppull Districts of the Chorley Union, *vice* J. M. Rigby, L.R.C.P.Lond., resigned.
 TREUTLER, William J., appointed Medical Officer and Public Vaccinator for the Maresfield District of the Uckfield Union.
 WALSH, Samuel, M.B., appointed Medical Officer and Public Vaccinator for the Brewood District of the Penkridge Union, Staffordshire, *vice* Thos. Crean, L.K.Q.C.P.I., deceased.
 WARREN, Alfred, L.R.C.P.Ed., appointed Medical Officer and Public Vaccinator for the No. 8 or Wooburn District of the Wycombe Union, Bucks, *vice* W. H. Hayden, L.R.C.P., resigned.
 WHITE, Richard, M.B., appointed a medical officer for the Carrignavar Dispensary District of the Cork Union.

MILITARY AND NAVAL MEDICAL SERVICES.

FLEET-SURGEON SETON WADE (says the *Army and Navy Gazette*) has been appointed to supersede Fleet-Surgeon James Lilburne at Deptford Dockyard, and this last-named officer has received from the Admiralty a highly complimentary letter, in which their lordships convey to him their approval of the manner in which he had discharged his duties during the three years he had been attached to the yard.

ARMY MEDICAL REFORM.

SIR,—Would you allow me to make one or two observations on a letter which has just appeared in a contemporary? The writer, in his communication, states that the older surgeons have no grievances, that the younger ones are as pleasantly situated, and that it is only his class, who entered under the warrant of 1858, who have any grievance at all. It is such advocates of sectional grievances and reforms who have kept our profession from rising to its proper position in the military service, and whose policy it is to foster such dissensions in order to avoid any reform at all. We can only succeed as a branch of the medical profession by being united on all vital points, no matter how much we may differ as to minor details. Our demand as an united body should be, as it has always been, that, sharing as we do with the combatant officer and the soldier the dangers and vicissitudes of war and tropical service, we should have a corresponding share in the privileges and honours of the army.

To state that in advocating these principles we neglect those committed to our professional care, and are unmindful of the interests of the soldier, is a statement known to be untrue; for, although we are not faultless, we are as humane and kind to the sick as we ever have been as a body of officers. That young men are induced to enter a service under adverse conditions, is no reason why these conditions should not be improved. Such an idea, if acted upon, would preclude all advancement of military science and medical research. To say that the army medical service has produced of late years no great men is probably true, if judged by the green-eyed monster of corps professional jealousy, but it is not true if judged by the current literature of the profession. *Personne n'est prophète dans son pays.* In making demands for an improvement of our position, we are only following the example of the rest of the army, who are constantly obtaining increased and new privileges, while we as a body are as constantly retrograding.

X. Y. Z.

SURGEONCIES IN THE GUARDS.

MUCH surprise has been felt in well-informed circles that, whereas the surgeon-major of the Blues has been forced to retire on reaching the prescribed limit of fifty-five years, the senior medical officer of the Foot Guards is permitted to enjoy the sweets of office, in spite of having considerably overpassed the same period of life. It is well known that Dr. Logie's services were highly appreciated in his regiment, and that he quits active service with regret; and we cannot but feel that he has very good grounds of grievance against the military authorities who have drawn so invidious a distinction in his case.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

EXAMINATIONS FOR THE DEGREE OF M.B.—Examinations for the degree of Bachelor of Medicine will be holden in the second and third weeks of December. The second or final examination will commence on the 6th. The first or scientific examination will commence on the 13th. Candidates are requested to forward their names to the Regius Professor of Medicine before November 23rd.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—Second M.B. Examination, 1875. Pass List.

First Division.

Batterbury, George Henry, King's College
 Batterbury, Richard Legg, King's College
 Garlick, George, University College
 Hetley, Henry, Guy's Hospital
 Hobson, Lewis John, University College
 Hullard, Jean Arthur, B.Sc., University College

Jameson, Leander Starr, University College
 May, Bennett, Birmingham General Hospital and Sydenham College
 Rose, William, King's College
 Smith, Herbert Alce, St. Bartholomew's Hospital
 Vesco, Joseph Cooke, St. Bartholomew's Hospital
 Voelcker, George Henry, University College

General Practitioners.

Bogg, Thomas Wemyss, University College
 Buchanan, Arthur, Guy's Hospital
 Cresson, Edgar Reginald Legassick, Guy's Hospital
 Crétin, Eugene, St. Bartholomew's Hospital
 Maclean, Thomas Edwin, University College
 Moore, George Edward, King's College
 Palmer, Frederick John Morton, Guy's Hospital

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Court of Examiners on the 9th instant; and, when eligible, will be admitted to the pass-examination.

Messrs. J. R. Clark, G. H. Burnham, Colin McLarty, M. D. Stark, and Thomas Millman, students of Toronto; John Christian, W. R. Davies, J. H. March, S. F. Proctor, and E. P. Thurston, B.A. Cantab., of St. Thomas's Hospital; F. H. Lewis, W. A. Dingle, W. F. Mayne, and W. H. T. Winter, of St. Bartholomew's Hospital; Thomas Jones, C. G. W. Lowdell, and J. H. Poland, of Guy's Hospital; C. S. Rundle, C. S. Kilner, and G. A. Walker, of Edinburgh; W. F. Hopwood, and H. A. Lutton, of University College; F. C. Beale, B.A. Cantab., and J. C. Saunders, B.A. Cantab., of Cambridge; Charles King, of the Liverpool School; A. T. Wilkinson, of the Manchester School; H. H. P. Bussy, of the London Hospital; W. D. Jefferson, of King's College; and H. W. Thomas, of the Birmingham School.

Twelve candidates out of the forty-one examined, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their studies for three months.

The following gentlemen have lately been elected Fellows of the College.

Bennett, Joseph Blacker, L.S.A., Cleckheaton, Normanton, diploma of membership bearing date May 18th, 1840.
 Briscoe, John, Oxford, August 15th, 1842.
 Burroughs, John Brames, Clifton, Bristol, January 25th, 1848.
 Flower, Thomas Bruges, Bath, July 9th, 1841.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, November 4th, 1875.

Betty, Samuel George, Park Street, Regent's Park
 Heard, Charles Goodridge, Truro, Cornwall
 Jackson, Edwin, Whalley Range, Manchester
 Kay, Alfred, 311, Commercial Road East
 Knight, John Tomlinson, Sandiacre, Derbyshire
 Marsh, Edwin Addison, 5, Arthur Road, Brixton
 Parkinson, Sidney George, Infirmary, Northampton

MEDICAL VACANCIES.

The following vacancies are announced:—

ARDWICK and ANCOATS DISPENSARY, Manchester—Resident House-Surgeon.
 BURTON-ON-TRENT UNION—Medical Officer. Applications on or before the 15th instant.
 CARMARTHEN UNION—Medical Officer.
 CHARING CROSS HOSPITAL—Assistant-Physician, and Physician or Surgeon. Applications on or before the 15th instant.
 CHORLTON-ON-MEDLOCK, RUSHOLME, and MOSS SIDE DISPENSARY, Manchester—House-Surgeon.
 CRICKHOWELL UNION—Medical Officer and Public Vaccinator. Salary, £35 per annum, exclusive of extra medical fees and vaccination fees. Applications on or before the 15th instant.
 DENBIGHSHIRE INFIRMARY—House-Surgeon. Salary, £85 per annum, with board, washing, and residence.
 DOVER HOSPITAL and DISPENSARY—Resident Medical Officer. Applications on or before the 30th instant.
 EAST SUFFOLK and IPSWICH HOSPITAL—House-Surgeon. Applications on or before December 8th.
 HOSPITAL FOR THE INSANE, Barnwood, near Gloucester—Assistant Medical Officer. Salary, £100 per annum, increasing £10 annually to £120, with board (exclusive of wine), lodging, and washing.
 HUDDERSFIELD INFIRMARY—Physician.
 INFIRMARY FOR CONSUMPTION, Margaret Street, Cavendish Square—Physician in Ordinary. Applications on or before the 18th instant.
 LIVERPOOL INFIRMARY FOR CHILDREN—House-Surgeon.
 LONDON LOCK HOSPITAL—Surgeon and Surgeon to Out-patients. Applications on or before the 17th instant.
 METROPOLITAN FREE HOSPITAL—Honorary Assistant-Physician. Applications on or before the 15th instant.
 MIDDLESEX HOSPITAL—Resident Physicians' Assistant. Applications on or before the 15th instant.
 NORTH STAFFORDSHIRE INFIRMARY, Hartshill, Stoke-upon-Trent—House-Physician. Applications on or before the 16th instant.
 PLYMPTON ST. MARY UNION—Medical Officer. Applications on or before the 18th instant.
 RADCLIFFE INFIRMARY, Oxford—House-Physician. Salary, £105 per ann., with board and lodging. Applications on or before the 24th instant.
 ROSS UNION—District Medical Officer and Public Vaccinator. Salary, £100 per annum. Applications on or before the 22nd instant.

TONGUE and FARR, District of, County of Sutherland—Medical Officer. Salary, £150 per annum, and house.
 TRINITY COLLEGE, Dublin—Professor of Botany. Applications on or before January 22nd, 1876.
 WESTMINSTER GENERAL DISPENSARY—Hon. Physician. Applications on or before the 22nd instant.
 WESTMINSTER HOSPITAL—Resident Obstetric Assistant. Applications not later than the 17th instant.
 WEST RIDING PRISON, Wakefield—Resident Surgeon. Salary, £400 per annum, with house, coal, gas, and water. Applications before November 15th.
 WORCESTER GENERAL INFIRMARY—Physician. Applications not later than the 17th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BRIGGS, H. B., M.R.C.S., appointed Resident Accoucheur to King's College Hospital.
 CROWDACE, James H., L.S.A., appointed Assistant Medical Officer to the East Riding of Yorkshire Lunatic Asylum, Beverley.
 FOOTNES, J. B., M.R.C.S., appointed House-Surgeon to King's College Hospital.
 FOWLER, J. K., M.R.C.S., late House-Surgeon, appointed Assistant House-Physician to King's College Hospital.
 GOULD, A. Pearce, M.B., B.S., appointed Surgical Registrar to University College Hospital, *vice* R. J. Godlee, M.S., resigned.
 GROUND, E., M.R.C.S., appointed Assistant House-Surgeon to King's College Hospital.
 HEBB, R. G., B.A., M.B., appointed House-Physician to King's College Hospital.
 MADZERY, Edward, M.R.C.S. Eng., appointed House-Surgeon to the Provincial Hospital at Port Elizabeth, Cape of Good Hope.
 WARNER, Francis, M.D., appointed Extra Acting Physician to the Children's Hospital, Birmingham, *vice* John E. Welch, M.B., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTH.

LINDSAY.—On November 4th, at 21, Grange Loan, Edinburgh, the wife of Robert Lindsay, F.R.C.S.E., Army Medical Department, of a daughter.

MARRIAGE.

LUCE—RYAN.—In Winchester Cathedral, on the 4th November, by the Venerable the Archdeacon of Winchester, assisted by the Rev. Cresswell Strange, M.A., Vicar of Holy Trinity Church, Southampton, James Johnstone Luce, Esq., M.D., Stratford-on-Avon, to Mary, widow of the Rev. John Ryan, Curate of Holy Trinity Church, Southampton, eldest daughter of the late William Barry, Esq., Kilbarry, co. Cork, and grandniece of the late Matthew De Kinzy, Esq., D.L., Clobeson Hall, co. Wexford, Ireland.

DR. BENJAMIN BARKUS and Dr. ROBERT JOSEPH BANNING have qualified as Justices of the Peace for the borough of Gateshead-on-Tyne.

DR. TAYLOR of Paisley, on stepping from a tramway car in Partick, Saturday evening last, was knocked down by a passing lorry, and sustained injuries which will confine him to the house for some time.

MR. EDWARD BELLAMY will commence his course of twelve lectures on the Anatomy of the Human Form, at the National Art Training School, South Kensington, on Monday, the 15th instant. Last session, H.R.H. the Princess Louise, Marchioness of Lorne, was a frequent attendant.

MR. CHURCHILL'S WILL.—In the will of the late Mr. John Churchill, the well-known medical publisher, which has just been proved, the following remarkable statement is made in connection with one of the legacies to Professor Wilson, to whom, when he was a pupil, says the testator, "I was introduced by Mr. Liston to direct the drawings for his *Operative Surgery*", requesting him to purchase with the amount of such legacy "some memorial, especially to commemorate his being the father of my series of manuals, a series which added so much to my reputation as a publisher, and produced the substantial reward of a clear profit of *twenty thousand pounds*". Mr. Churchill bequeaths also to his dear friend Dr. Carpenter, F.R.S., with whose literary career both as editor and author I have been so closely connected, the sum of fifty guineas, to purchase some memorial of the unbroken confidence and personal regard that has ever existed between us throughout our intimate association". To each of his three daughters he bequeaths £12,000; and adds, "I have such faith in the integrity and honour of my three sons-in-law, Dr. Clapton, Captain Pepper, and Colonel Robertson, that I have made no settlement of my daughters' legacies, and it gratifies me to give them this proof of my confidence". The following institutions also benefit under the will: the Medical Benevolent College, £500; and the Medical Benevolent Fund, £500. To five religious societies he bequeathed £200 each.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY**Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
- TUESDAY**Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
- WEDNESDAY** ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
- THURSDAY**St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.
- FRIDAY**Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
- SATURDAY**St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY**.—Medical Society of London, 8.30 P.M. The discussion on the Case of Excision of the Astragalus, shewn by Mr. Watson on Monday last; Dr. Drysdale, "For and Against Animal Vaccination".
- TUESDAY**.—Pathological Society of London, 8.30 P.M. Dr. Crisp: Fractured Bones of Gorilla—Rickets in Pheasants. Dr. Hilton Fagge: Distended Diverticula of Intestine—Pulmonary Embolism. Dr. Barlow: Tubercle of Pancreas. Mr. Marsh: Tumour of Jaw. Mr. Fairlie Clarke: Tubercular Lupus of Tongue. Mr. Maunder; Fatty Tumour of Male Breast. Dr. Goodhart: Hydatid in Heart. Dr. Dowse: Eliosarcoma of Brain. Mr. Clement Lucas: Larynx after Tracheotomy. Mr. John Morgan: Dilatation of Bile-Ducts. Dr. Frederick Robinson: Aneurism of Aorta. Dr. Habershon: Obliteration of Superior Cava—Ulceration of Duodenum. Mr. Marsh, per Dr. Hlott: Congenital Malformation of Oesophagus. Dr. Dowse: Syphilitic Growth of Cerebral Sinuses. Mr. Alexander Morison: Disease of Pulmonary and Tricuspid Valve. Mr. Thomas Smith: Hæmorrhagic Peritonitis. Dr. Gowers; Elixoma of Brain—Fatty Tumour of Spinal Cord. Dr. Wickham Legg: Congenital Deficiency of Common Bile-Duct.—Statistical Society, 7.45 P.M.
- THURSDAY**.—Harveian Society, 8 P.M. Dr. J. E. Pollock, "On certain varieties of Heart-disease, with reference to Prognosis and Treatment".

NOTICES TO CORRESPONDENTS.

- CORRESPONDENTS** not answered, are requested to look to the Notices to Correspondents of the following week.
- PUBLIC HEALTH DEPARTMENT**.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with *Duplicate Copies*.
- AUTHORS** desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.
- CORRESPONDENTS**, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.
- WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.**
- COMMUNICATIONS** respecting editorial matters, should be addressed to the Editor: those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

EUCALYPTUS.—We do not know. The information could, however, be obtained by writing to Dr. Bond, Medical Officer of Health, Gloucester.

ESERINE DISCS IN TIC.

SIR.—Allow me to explain to Kilogramme that the eserine discs are to be put into the eyes; not to be used internally, as he seems to me to think—I am, yours faithfully.

Cupar Fife, November 8th, 1875.

P.S.—While writing, I may mention that I have lately received from Messrs. Savory and Moore, of New Bond Street, soft gelatine discs, saturated with the extract of Calabar bean (of the kind proposed some years since by Mr. Ernest Hart), for ophthalmic use, which suit very well. One or two as a dose. They may be more easily obtained than the eserine discs.

A DRUGGIST'S OPINION.

AT a recent inquest at Redruth, Mr. S. T. Rowe, druggist, gave the following evidence. He had been giving the deceased medicine for some time. She could not sleep without it; her nerves were out of order; and the object of the medicine he gave was to quiet the nerves, and produce sleep. He had been frequently called to her in the night, when she was in a state of frenzy. The draught which he prepared for her husband on Monday, contained precisely the same quantities of the various ingredients as the draughts usually administered to her. His opinion (without *post mortem* examination) was that death was caused by concussion of the brain. The jury returned a verdict "Died from concussion of the brain, the effects of a fall". Is not such an inquest and such evidence something worse than a farce?

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W. C., and not to the Editor.

PHYSIOLOGIST (Weston-super-Mare).—1. (Elementary) Huxley's *Elementary Physiology*, and Huxley and Martin's *Lessons in Biology*; (advanced) Hermann's *Physiology*, edited by Gamage. 2. Parkes on *Hygiene*; Hart, Corfield, and Wanklyn's *Manual*. 3. Chambers's *Manual of Diet*, or Dobell's *Handbook of Diet*.

TREATMENT OF INCONTINENCE OF URINE.

SIR.—In reply to the letter of a "Country Practitioner" in your last issue on the above subject, I beg to say that, if the patient have a long prepuce and phimosis, it will be found that "circumcision availeth" something, if not "a new creature". If this condition be not present, the extract of belladonna given internally in doses of one-sixth of a grain, gradually increased till its physiological action is produced, will be found most valuable. Lying on the back favours the occurrence of the accident; a cotton reel tied with tape, so as to press on the spine when the patient turns over from his side, will make him "feel his position acutely", and help to prevent him from wetting the bed.—I am, sir, yours obediently,

Long Stratton, November 8th, 1875.

X. Y. Z.

SIR.—In reply to "A Country Practitioner" inquiring what should be done in a case of obstinate enuresis, I would recommend the trial of a seton in the back, over the region of the sacrum, kept open for a few weeks. This succeeded with a patient of mine after trying everything I could think of—my case was older than his patient at the time of using this remedy; and so completely was he relieved, that he afterwards entered the Marine Artillery, where, as far as I know, he still is. The affection was present from childhood; and the young man was so disgusted at his complaint, that he willingly subjected himself to any treatment.

I am, sir, yours truly, F. R. C. S. Eng.

SIR.—I think that if your correspondent, "A Country Practitioner, Dublin", were to give his patient ten grains of hydrate of chloral, with five minims of tincture of belladonna, in an ounce of orange-flower water every night as bedtime, I have no doubt he will find that it will check the incontinence of urine.

I am, faithfully yours, EDWARD IRELAND.

The Limes, Linton, Cambridgeshire, November 7th, 1875.

SIR.—Allow me to inform "A Country Practitioner", through your valuable medium, that I have had several cases similar to the one he mentions, and also one in a young girl, all of which I have cured and prevented the bad habit by means of chloral-hydrate, given every night about seven or eight o'clock, for a few times consecutively, and then gradually less frequently. I would also (as I always do) advise the patient not to be spoken to hastily, or his condition will be aggravated. If a "Country Practitioner" will kindly communicate the result, either publicly or privately, I shall be glad—I remain, yours very truly,

Maryport, November 6th, 1875. WM. HV. SPURGIN, M.R.C.S. Eng. & Ed.

SIR.—In the JOURNAL of last week, I notice an inquiry concerning the treatment of "enuresis", dated from Dublin, and signed by "A Country Practitioner". I would humbly suggest the trial of the following remedies. 1. Time and patience. 2. Attention to the position in bed; keep the patient from lying on his back. 3. Plenty of outdoor exercise, coupled with good food and the abandonment of too confining an occupation, should such an one come into consideration. 4. Total abstinence from all drugging. 5. Let the patient refrain from taking large quantities of fluid during at least two hours before going to bed. 6. Let him not forget to pass urine immediately before going to bed. It will be well, also, to let the patient know that no effect of weakness can possibly be a disgusting habit, and that it certainly is not a disgraceful one. In conclusion, if the inquirer will but admit time and patience more especially into his medicine chest, he will find more success in the treatment of such cases.—I am, sir, yours truly,

Kirkoswald, November 8th, 1875. MAX R. J. BELVUNDT.

W. T. M. states that the following remedy has acted very satisfactorily, when all others had failed, in stopping the habit. R. Liquoris strychniæ B.P. ʒss; liq. ferri perchloridi fort. ʒss; aquæ ʒviij. Half an ounce three times a day in water.

A. B. (Wrexham).—1. Tilbury Fox, on *Diseases of the Skin* (Churchill and Sons); 2. Brudenell Carter, on *Diseases of the Eye* (Macmillan), will, we think, perhaps best answer the requirements of our correspondent.

A. B. (Lincoln).—Under the regulations of the University of Cambridge, the examination in State Medicine alone is relied on as a test, and no curriculum is required—a very wholesome precedent, which, we trust, will be followed widely.

MANCHESTER PROVIDENT DISPENSARIES' ASSOCIATION.

SIR.—I am sorry to see, from your remarks in the BRITISH MEDICAL JOURNAL of the 6th instant, that you give such implicit credence to Mr. O'Hanlon's letter on the existing relations between the medical men in Manchester and the Council of the Provident Dispensaries. Mr. O'Hanlon himself proves that the admission of friendly societies into the provident dispensary scheme is a "direct violation of the terms of the original scheme". That scheme was, that no member should be in the receipt of more than an income of 30s. per week; but the Council, finding the admissions were so few on these terms, resolved, contrary to the wishes of the whole of the medical staff, to raise the limit to 35s. Now, in Mr. O'Hanlon's letter to you, he acknowledges that the income of many of the members of friendly societies exceeds that limit; therefore, apart from a distinct understanding which existed from the first, that friendly societies, as a body, should not be admitted into the provident dispensary, I think you will allow that your correspondent of the 16th October was correct in this part of his statement.

"The very temperate terms" used by Mr. O'Hanlon in his letter to you are not at all in accordance with his conduct to the medical men connected with the provident dispensaries. From the first, if they have dared to differ with the Council (or, in other words, with Mr. O'Hanlon), they have had the threat held out, that if they did not concede to terms, others would be found who would do so. Much to their disgust, and without their sanction, whole districts have been canvassed by house-row, and the canvasser paid a commission on the number of members he obtained, whilst thousands of the enclosed hand-bills and pamphlets have been freely distributed. Under such management, you will readily believe that the provident dispensary charity is more abused than ever any hospital was.—I am, sir, your obedient servant,

JOHN WATSON.

Ardrick Provident Dispensary, Manchester, Nov. 9th, 1875.

SIR,—At the entrance of the rules of the above Association stands, bar-like, the following: "The members shall be artisans or others in receipt of weekly wages, whose average family earnings do not exceed thirty-five shillings a week." Of friendly societies, Mr. O'Hanlon admits "that the income of some of their members would, no doubt, exceed the limit fixed by their rules"; and the correctness of that doubt is not doubted by any one. Yet, the extraordinary meeting of the 23rd August noways rescinding or altering the above commanding preamble, that rule of rules, but allowing it to stand untouched, resolved to admit members of friendly societies as such, without any limitation whatever as to income. If this be not *fragmenta secum frontibus aduersa confusa*, I know not what is. However, Mr. O'Hanlon "fails to see that there has been in this way any violation of the original scheme"; and goes on to say that "a violation can only mean that its rules have not been observed." Thus, speaking of "alterations in the scheme" and "in the rules", he does not see that, whilst they remain unaltered, they have simply been broken. Indeed, he is solicitous only to vindicate the proper observance of the prescribed technicalities. In this, however, he is singularly unlucky. For, first, it does not appear in the rules that it is the business of an extraordinary meeting to "revise the principles upon which the federation is based", that power being vested expressly in the annual general meeting. Again, the notice of the "alteration proposed", if, according to the rules, it ever were forwarded to, appears never to have reached, *e.g.*, the Committee of the Provident Dispensary in Dawson Street, since none of the three medical men attached to it, and of whom I am one, ever heard there anything of such notice. Still further, notice of any proposed "alteration" has to be given in the daily papers one month, not "some weeks", as Mr. O'Hanlon has it, before the date of an extraordinary meeting; yet such notice was not given, as I find, before the 5th August, only eighteen days, that is, prior to the meeting. In that notice, moreover, as you will see in the enclosed copy, the subject of the admission of friendly societies occupies but a secondary position at the tail of the advertisement, whilst assuredly it needed to have had special prominence given to it. The fact that, "at such a meeting, the committee of each medical charity and provident dispensary in the federation are entitled to attend and vote", did and does not now appear to me to imply that all the medical officers are thus entitled; and it was just on that ground that, very reluctantly, I stayed away from the meeting. What "the chief mover of the present opposition to the Association" (?), whoever he may be, may have agreed to at the meeting of his dispensary, is irrelevant. That only three out of the twenty-three medical officers were present at the extraordinary meeting—which was held in the small room where the Council are wont to meet—may have been owing to the neglect of proper notice, asserted above; again, to the ignorance on the part of some as to their right to attend and vote, or to professional engagements. Of the twenty-three medical officers, only one had, so far, been admitted to a seat in the Council; and it so happens that he was one of the three present at the meeting, and that he joined his two colleagues in opposing, though vainly, the infringement of the fundamental rule involved in the admission of members of friendly societies as such.

When, therefore, the great majority of the real workers among the medical officers sent in their protest against the resolution of the meeting, they would have done better, in my opinion, in substantiating their legal and practical objections. However, it was only after the adverse reply of the Council to that protest had been received, that I first heard of the existence of a disagreement. The avowal that the Council for such a reply, on such grounds, had to be indebted to "the recommendation of two of our leading medical men, managers of the two largest hospitals in the city"—whomever that may mean—is, though funny, anything but complimentary to either the counsellors and the counselled. From sincere disapprobation of the course followed by the Council, I did not hesitate to join my name to those of the officers who have sent in a three months' resignation, and, with them, to decline any terms short of the withdrawal of the obnoxious and downright illegal resolution of the 23rd August. Of the pressure and instigation alleged to have been required and exercised, I am totally ignorant. The comparative calculations into which Mr. O'Hanlon enters, I hold, in the present stage, to be beside the question; and their accuracy I am as unable as unwilling to impugn. I cannot refrain, however, from inviting your attention to the contradictory terms of the unhappy resolution of the 23rd August, a copy of which I enclose. We find it there resolved: "Firstly, that a branch or lodge shall join collectively, each member attaching himself to the district in which he may reside"; and, "secondly, that the secretary of such branch or lodge shall pay to the treasurer of each dispensary at the rate of twopence halfpenny per quarter for each member who may have joined such dispensary". Here, then, we have compulsion tempered by option; the latter being more explicitly authorised by this further provision, "that the secretary of any branch deciding to associate itself with the provident dispensaries, shall send a list containing the names and full addresses of the members who may have chosen to join, with the names of the doctors chosen by each of them. The requisite number of cards will then be supplied upon payment of twopence each, and the quarterly subscription of twopence halfpenny per member." It is true that I have been informed privately, by a member of the Council, that they really mean compulsion, whatever they may say to the contrary. Old chaos is come again.

Like three others among the gentlemen who have signed the resignation, I had attached my name to the list of medical officers of the association solely from the desire to signalise my thorough appreciation of its aims. Practically, I have no work to do, and absolutely no advantage to gain. A devoted well-wisher from the first, I know that the exertions of the Council, and especially of Mr. O'Hanlon, are worthy of the highest commendation. It is impossible for a citizen of Manchester not to feel proud of the initiative in so thoroughly patriotic and eminently educational a movement. Yet the Council have still up-hill work before them; for not quite twenty out of the hundreds of general practitioners in Manchester and Salford have as yet joined the Association. No "radical alterations" need, however, be made "in the conditions upon which medical men may become connected with it". Let the Association but religiously observe the law of individualising scrutiny that fronts their codex, and there will then be no need to despair of the sustaining power of that other vital principle—viz., that the members shall have their free choice among the affiliated practitioners in their districts.

A very serious defect in the composition of the Council, which should be remedied as speedily as possible, is the all but entire exclusion from it of the medical workers of the dispensaries. Of the twenty-three at present enlisted, there is, as I said before, but one on the Council; whilst the three or four other members of the medical profession belonging to it are, from their position and career, notoriously and, to their credit be it said, avowedly more or less incompetent to fully understand and fairly represent those interests of the bulk of our profession which are involved in the working of provident dispensaries.—I am, sir, etc.,

Manchester, November 8th, 1875.

A. SAMELSON, M.D.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

THE SURGEON-GENERAL OF THE EGYPTIAN ARMY, who left his country three years since to serve in the army of the Khedive of Egypt, states that, just as he had reached the highest position in that service, the office of Surgeon-general of the Egyptian army, he was attacked with ophthalmia of a malignant form. After combating it by every possible means in Cairo, he was finally compelled to go to Paris for treatment, after six months of which he is now left with one eye permanently enfeebled, while the oculists declare that if he returns to Egypt the right eye will be compromised as well. He has accordingly obtained an authorisation to practise in France.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Bristol Daily Post; The Evening News; The Sheffield Post; The Metropolitan; The Blyth Weekly News; The Edinburgh Daily Review; The Glasgow Herald; The Western Daily Press; The Merthyr Telegraph; The Leighton Buzzard Observer; The Bristol Daily Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Sunderland Daily Echo; The Co-operative and Financial Review; The South Wales Daily News; The Macclesfield Courier; The Melbourne Argus; The Southampton Times and Hampshire Express; The Jarrow Express; The Birmingham Daily Post; The League Journal; The Sheffield and Rotherham Independent; The Derbyshire High Peak News; The Liverpool Daily Courier; The National Food and Fuel Reformer; The Worcester Herald; The Norfolk News; The Worcester Chronicle; The North British Daily Mail; The Social Science Review; The Carlisle Express; The Sussex Daily News; The Royal Leamington Spa Courier; The Bethnal Green Times; The South London Press; The Hampshire Advertiser; The Worcestershire Advertiser; The Newcastle Weekly Chronicle; The Worcester Journal; The Hobart Town Mercury; The Weekly Times; The Mid-Weekly Hampshire Independent; The North British Mail; The Western Mail; The Redruth Times; The Indian Statesman; The Birmingham Morning News; etc.

* * * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, &c., have been received from:—

Dr. Robert Barnes, London; Dr. Rayner W. Batten, Gloucester; Dr. Cobbold, London; Dr. Dickinson, London; Dr. J. Milner Fothergill, London; Mr. W. Fairlie Clarke, London; Mr. Jonathan Hutchinson, London; Dr. Leith Adams, Dublin; Dr. Finlayson, Glasgow; Mr. John Layton, London; A Recipient of a Vaccination Grant; Dr. W. Newman, Stamford; Dr. R. J. Lee, London; An Old Member; Mr. R. S. Fowler, Bath; Dr. Jukes Styrar, Shrewsbury; The Secretary of the Clinical Society; Dr. Ogston, Aberdeen; Mr. N. Baker, London; Dr. Rutherford, Edinburgh; Dr. St. George, Lisburn; A Member of the Association; Mr. Mitchell Banks, Liverpool; Dr. Beddoe, Clifton; Dr. Edis, London; The Registrar-General of England; Dr. Cheadle, London; Mr. Perks, Burton-on-Trent; The Secretary of Apothecaries' Hall; Mr. A. S. Cooke, Stroud; Mr. Eastes, London; The Registrar-General of Ireland; Dr. Brown, Rochester; The Secretary of the Statistical Society; Dr. Althaus, London; The Secretary of the Pathological Society; Dr. Sawyer, Birmingham; The Secretary of the Royal Medical and Chirurgical Society; Mr. W. C. Heane, Cinderford; Dr. Morton, Glasgow; Mr. A. Haviland, Northampton; Our Birmingham Correspondent; Mr. Hamilton Craigie, London; Dr. Macnaughton Jones, Cork; Mr. Royle, Milnthorpe; Mr. W. H. Spurgin, Maryport; The Secretary of the Harveian Society; Mr. Chambers, Chester; Mr. Sewill, London; Mr. John Greene, Birmingham; Mr. Allen, Walsall; Mr. Myers, London; Mr. Lund, Manchester; Mr. Holmes, London; Mr. Eassie, London; A. F. B., York; Mr. Lister, Edinburgh; Dr. Charles, Cork; Mr. C. A. O. Owens, Long Stretton; Mr. Pranker, Langport; Surgeon-General Maclean, Netley; Dr. J. W. Langmore, London; Dr. Nicolson, Portsmouth; Dr. Carroll, New Brighton; Mr. Ireland, Linton; Dr. Braithwaite, Leeds; Dr. Arthur Farre, London; An Associate; A Member, Algiers; Our Glasgow Correspondent; Our Paris Correspondent; Mr. Henry Griffith, Cork; Army Surgeon; Mr. Sydney Jones, London; Spera Meliora; Dr. Farquharson, London; Dr. J. K. Spender, Bath; Mr. Maunder, London; M.R.C.S., Leeds; Dr. Arnold, Belfast; Dr. Joseph Rogers, London; Dr. C. Theodore Williams, London; Mr. Richard Davy, London; Dr. Grimshaw, Dublin; Mr. Arthur W. Kempe, Darlington; Dr. Wynn Williams, London; Mr. F. S. Palmer, East Sheen; Mr. Spencer Watson, London; Our Dublin Correspondent; Mr. Gibbings, London; Dr. McVail, Kilmarnock; Mr. Rivet, Manchester; Mr. A. T. H. Kerr, Preston; Dr. Alfred Carpenter, Croydon; Dr. Burdon Sanderson, London; Dr. Trollope, St. Leonards-on-Sea; Dr. Kelly, Taunton; Dr. Munro, Cupar Fife; Dr. Hardwicke, London; Mr. C. Macnamara, London; Dr. A. Samelson, Manchester; Our Manchester Correspondent; Mr. J. Russell Smith, Turnham Green; Dr. W. Brett, London; Dr. Lownds, Egham Hill; Eucalyptus; Mr. John Watson, Manchester; Mr. J. Higham Hill, London; Mr. J. K. Fowler, London; Dr. E. Williams, Wrexham; Mr. Ashburton Thompson, London; Mr. J. B. Brierty, London; Dr. Acland, Oxford; Physiologist; Mr. A. D. Stewart, Greenock; Dr. Haddon, Manchester; Mr. E. Nettleship, London; Clin and Co., Paris; Dr. A. D. L. Napier, Frasersburgh; etc.

BOOKS, ETC., RECEIVED.

Transactions of the Medical Society of the State of New York for the year 1875. New York: G. P. Putnam's Sons. London: Sampson Low, Marston, and Searle. 1875.

CLINICAL LECTURE

ON

VARICELLA-PRURIGO.

By JONATHAN HUTCHINSON, F.R.C.S.,

Senior Surgeon to the London Hospital, and to the Blackfriars Hospital for Skin-Diseases.

GENTLEMEN,—We meet occasionally with an eruption in children, concerning which it might, with some plausibility, be asserted that it is a kind of persistent chicken-pox. When the eruption first shows itself, it either is chicken-pox, or exactly like it. The cases, from the observation of which I make these statements, have seldom been of less than some months' duration, and in nearly all the mother of the patient stated that the doctor who first saw the case said that the rash was chicken-pox. In a few, the original diagnosis had been "modified small-pox"; and in some others it had followed so closely on vaccination that it was attributed to it. In a few others, no medical opinion had ever been obtained, but the mother described the eruption as having come out copiously, and as having consisted of clear watery vesicles. I think, therefore, that I am safe in stating that it is probable that these cases do begin as *bonâ fide* varicella. Their peculiarity consists in that the eruption, instead of disappearing in a few days, is indefinitely prolonged by the succession of fresh crops, and that the spots ulcerate and scab, sometimes becoming large sores. Great irritation is produced, and the child becomes fretful and thin. The eruption may last for months, and the spots then come to resemble ecthyma on the one hand, or yet more frequently the disease known as "lichen urticatus".

I do not think that after the first stage we ever notice any vesicles so similar to those of varicella as to be likely to be mistaken for them, but throughout its course the disease is attended by the successive formation of fresh vesicles of a certain kind. On parts where the skin is thin, these vesicles are like those of pemphigus on a small scale, become turbid very quickly, and are soon broken by the patient's scratching. On the palms of the hands and soles of the feet, however, it is not uncommon to find perfectly transparent vesicles somewhat deeply placed, which persist for a few days. Wherever on the thinner parts of the skin the miniature bullæ have been broken, red excoriated or scabbed patches result, and on the scalp thick heaped-up scabs like those of porrigo may sometimes be seen. The eruption is attended by intense irritation, and everywhere the child's skin shows the effects of scratching. It is not uncommon for the mother to assert that the child scarcely sleeps at all. Now and then this eruption, as I have said, is attributed to vaccination; but in these cases there is usually the history also of a varicella-like eruption. Some years ago, Dr. Flack of Shoreditch brought me an interesting example of this occurrence. He had himself vaccinated the child, and when the rash not long afterwards came out, he made no question that it was chicken-pox. The rash, however, did not disappear, but persisted for three months, covering the whole surface and wearing the child out by the irritation produced.

I saw this child only once; but, on inquiry some time afterwards, I learnt from Dr. Flack that the eruption had persisted in spite of treatment, and had ended in death. I will read to you Dr. Flack's note, which contains some further particulars of this interesting and important case. It is the only one in which I have ever known death to follow, but in several others the patient has been very ill.

"56, Shoreditch, May 2nd, 1871.

"DEAR SIR,—I find the child you inquire about gradually went from bad to worse, and died in August, 1866, after suffering for nearly five months. Treatment entirely failed. Dr. P. saw the child afterwards, and was of opinion that it was syphilitic, but I could obtain no history to confirm it. I may say that the mother, for eight months of her pregnancy with this child, suffered extremely from pruritus of the vulva, so much so, that fears were entertained of her mind giving way; and this continued within twenty minutes of her confinement. The child was apparently healthy, and very clear in the skin till three months old, and was then vaccinated. The pustules were good and the inflammation not great; but, as the scabs began to form and dry, the eruption appeared with all the symptoms you so well describe. I have thought the sufferings of the mother might have produced such an irritative state of the child's system, that it only wanted an exciting cause to develop it.

"I am, yours truly, JAMES FLACK."

Dr. Flack's suggestion that the child inherited a pruriginous skin is, I think, highly probable. In several other examples of the malady, I have found that there was a history of pruriginous or urticarious complaints in the child's family; possibly it is chiefly in such that vaccination-rashes and varicella become pruriginous and persist. I may add that I had carefully examined this child as to inherited syphilis, and could find no reason to suspect it. An antisyphilitic course which was carried out (not on my recommendation) did no good whatever. This is the only actually fatal case which has come to my knowledge.

It becomes a most interesting question in such cases as this to determine as to what connection the vaccination had with its sequences. It is possible that it has none at all, and that the eruption is a true varicella; for the age at which vaccination is usually performed is the same as that at which varicella is most likely to occur. We must remember, however, that, according to the observations of Mr. Ceely and many others, various forms of exanthem-eruption do occur as the direct results of vaccination, and that a vesicular one is the most common. Indeed, the wonder is not that vaccination should sometimes produce an exanthem, but that it should ever be without one.

A portrait (No. 32*) which has been issued by the New Sydenham Society, illustrates remarkably well the local conditions of the disease under consideration. It was taken from a child, aged three months, in whom the diagnosis of varioloid had in the first instance been given; but as it occurred during the epidemic of small-pox in 1871, it is probable that not a few cases that were really varicella, got the name of the more severe disease. I show you the portrait of the patient referred to, and may remind you that, on a former occasion, you had an opportunity of seeing the child itself. The following are the notes of the case.

George Thornton, aged three months, and at the breast, was admitted on April 21st, 1871, with an eruption which had then lasted for six weeks. It was stated that the rash came out rapidly at first, chiefly on the arms and legs, and that it was said to be small-pox. The patient had never been vaccinated at the time when he was brought to the hospital. No one else in the house had had either small-pox or chicken-pox. The two other children in the house had had no eruption of any kind. The mother described the rash as consisting at first of large clear watery spots. When first seen, the child had a copious eruption of vesicles and pustules on the hands, feet, arms, and legs, and a crop of large porrigo patches on the head. There was no evidence of the existence of itch-mites.

I will now read to you the notes of some other cases of a similar kind. I may here observe that all of these have been sporadic. I have never met with this form of persistent pruriginous varicella, or, more strictly speaking, of persistent vesicular rash following varicella, as an epidemic malady. In a former lecture, however, I quoted a passage from one of Trousseau's lectures, which stated that, during an epidemic of varicella at the Necker Hospital, some cases were protracted for six weeks, and passed into an ulcerating form of eruption, looking like pemphigus. You will find the lecture in the second volume of the New Sydenham Society's *Translation*, and it is well worth reading. Trousseau does not mention prurigo as having been a marked symptom, nor does he say anything about the eruption having occurred on the palms or soles, and he mentions the period of two months as if it had been the extreme limit of duration. Now, in all my cases, the pruriginous element has been a very marked one; the condition of the palms and soles has been a peculiar feature; and the duration of the eruption has been much longer.

CASE I.—Rosina Childs, aged 18 months, was admitted on Feb. 19th, 1869, suffering from a very copious eruption of vesicles or small bullæ on the extremities, trunk, and face. It avoided the flexures, but was very marked on the soles and palms, and this latter feature led to the suspicion that the case might be scabies, but there was no evidence of the presence of the itch-mite. The vesicles when commencing were very firm, and felt quite shotty. The eruption had already lasted four months, and the mother's clear statement was, that it appeared all over the body at once, and that the doctor to whom she took the child considered the disease to be small-pox. She stated that there had been some spots on the head. The rash was attended by great itching. The patient was pale, but seemed in other respects healthy. She remained under treatment for five months without any material permanent improvement. The spots altered somewhat in character; some of the later bullæ were as large as peas, and it was noted after the child had been attending for some months, that many of the spots passed into pustules. As the child was eighteen months old, no doubt she had been vaccinated, but my notes do not mention this point.

CASE II.—Edward Barfoot, aged 16 months, came under my care in

* See my Catalogue of the *Atlas*, p. 107.

May 1869. He was pale, and seemed out of health. He presented a copious eruption of vesicles and papules in various stages, and affecting the face, trunk, and limbs, and, to a slight extent, the scalp. The fresh spots consisted of elevated pointed papules, feeling very firm, and each surmounted by a small vesicle. In the older ones the vesicle had sometimes broken, but in the greater number it had dried up; on the scalp, the spots had sometimes run on to porrigo. There were a few on the palms and soles. The eruption avoided the flexures; was more abundant on the back than on the chest and abdomen. It was evidently excessively pruriginous, and there were numerous scratches. The mother's history was, that the rash had appeared when the child was three months old, and soon after vaccination, and that the medical man in attendance told her that it was "glass-pock". The eruption had varied in intensity at different times, but had never been quite well since its first appearance. He remained under care only two months, and I cannot tell you the final result.

CASE III.—Sarah Richardson, aged 11 months, was brought on June 22nd, 1869, with a papular and vesicular rash on the trunk, limbs, and scalp; it affected the palms and soles. The spots were at first small papules, apparently devoid of fluid; presently these became inflamed and red at the base, while at the top was formed a yellowish point, in the centre of which a little dot was seen; while still later, a considerable red areola was present, and a concave scab was formed on the top of the spots. The mother stated that the eruption had been present for five months, and that it came soon after the child had been vaccinated. When it first came out, she thought it was chicken-pox, on account of the "clear watery heads" which were present at that time. An only sister of the infant was free from any eruption.

CASE IV.—Sarah Ann Tosland, aged 19 months, was admitted on July 13th, 1869. She was suffering from a pruriginous rash on the body and on the backs of the hands and soles of the feet; some of the spots were very like wheals of urticaria. The history given was of a gradual onset of the eruption at the age of five months, the mother thinking that it was like chicken-pox. It was said to have been well in winter. The child was of fair complexion and very stout, and seemed muscular and strong, notwithstanding the constant itching she suffered from the rash. She was the youngest of eight children, and the only one who had suffered from any skin-disease. This case is not very well characterised.

CASE V.—Isabella Brown, aged 12 months, a fair-skinned light-haired child, was brought on account of an eruption in September 1869. The rash was general and pretty thickly distributed; it affected the soles, the face, and the scalp, but not the palms. The flexures were avoided. It was distinctly vesicular, and in parts impetiginous from scratching, but there were no large pustules. It had already lasted seven months, and was said to have come out soon after vaccination. The child was nearly well in six weeks.

CASE VI.—Walter F. Seymour, aged 12 months, in good health, was brought on September 24th, 1869. He had a copious itching eruption of papules and vesicles, with some pustules. The parts affected were the trunk, palms of the hands, dorsal surface of the feet, scalp, and, to a less extent, the face. The bulk of the rash was papular. There were, however, some large irregular vesications, with areolæ of congestion, and containing turbid fluid; other spots looked as if they had been about to suppurate, but had dried up before pus was formed in sufficient quantity to break the cuticle; some, especially on the hands and feet, were distinctly vesicular. The rash had been taken in the first instance for chicken-pox. Under treatment, the rash improved for a few weeks, but very soon relapsed and became as bad as ever again.

CASE VII.—Walter Thompson, aged 10 months, admitted on April 2nd, 1869, on account of a very copious pruriginous eruption. He was stout and healthy-looking, and was said to have an excellent appetite. He had been nursed till 11 months old. The eruption had appeared for the first time at the age of 15 months, and it came out about three weeks after vaccination; the vaccination spots having done well. His nurse thought it was chicken-pox; but, from her statement, it seemed probable that the spots were not so distinctly vesicular as in that disease. The eruption had steadily become worse until he was brought to the hospital. There was no reason to suspect contagion from scabies or pedicularia as the cause. The eruption consisted, when first seen at the hospital, of very numerous isolated spots, most of them papular and of dusky colour. The early stage, as seen in some recent spots, appeared to consist in the formation of a vesicle on an indurated base; the vesicles were deeply placed, and contained but little fluid, and it seemed that subsequently they either dried up or had their tops removed by scratching. The rash was most abundant on the limbs and face, the forearms and legs being more thickly covered than the arms and thighs; it occurred in tolerable abundance on the palms and soles.

There were no spots on the scalp or forehead, and the eruption specially avoided the parts where the skin was thinnest, the flexures of the joints and the interdigital clefts. Looking at the soles and palms only, we might easily have mistaken the case for scabies; but its symmetry and uniformity, and its avoidance of some parts, such as the bends of joints and the spaces between the fingers, served to distinguish it from that disease. He got quite well in six weeks under arsenical treatment, and remained well for about eight months, when he again (in April 1870) came under care for a dry lichenous rash. This time, however, there were no vesicles, and the palms and soles remained free.

CASE VIII.—Alfred Vernon, aged 2 years, admitted on September 7th, 1869. His mother stated that the eruption, on account of which she brought him to the hospital, began suddenly when he was three months old as an eruption of clear vesicles. She was told that it was chicken-pox. There was no contagion either to herself or the girl who nursed the patient. When first seen, the child presented a copious itching, scratched, papular, and vesicular rash. The vesicles were most conspicuous on the feet. The rash was most abundant on the outer parts of the arms and thighs, on the backs of the forearms and fronts of the legs; it avoided the flexures in a very marked way. The backs of the hands were almost free from spots. He was of fair complexion, and had a thick upper lip and fine downy hair on the general surface of the body; he was much emaciated, probably in part from the incessant irritation. He remained under notice, more or less regularly, for more than a year, and improved very much during the earlier part of his attendance while taking bromide of potassium, cod-liver oil, and quinine, and using an ointment of mercury and lead. The eruption, however, relapsed somewhat towards the end of the time.

CASE IX.—Frederick Manger, aged 1 year and 9 months, was admitted on May 9th, 1871, with a pruriginous eruption of nine months' duration. There were five other children in the house, and none of them had suffered from it. The mother thought it was chicken-pox when it first appeared; but the medical man considered it not to be that disease. The child was not known to have had chicken-pox. The rash had never been well since its first appearance.

CASE X.—Samuel Bristowe, aged 15 months, came on October 12th, 1869, and was under notice, more or less regularly, for about thirteen months. He had a severe papular, vesicular, and pustular eruption, which was worst on the legs; the soles and palms were also severely affected. There were spots on the face. It avoided the flexures. It was then of eight months' duration, and was stated to have come out immediately after vaccination, and to have been considered by the medical man to be chicken-pox. There was great itching, and the child was said to be often awake most of the night. The scratching had produced large porriginous scabs in some parts. The child was somewhat relieved for a time, but the rash relapsed several times. There were three other children in the house, none of whom had had any eruption, excepting one who was subsequently brought to the hospital with eczema-porrigo of the scalp from lice.

CASE XI.—Anne Criland, aged 34 years, was brought for an eruption of prurigo urticans in March 1871. It was stated that she had been liable to the rash since an attack of chicken-pox at the age of 2 years.

[To be continued.]

THE FEVER AT CROYDON; AND INTERMITTENT WATER-SUPPLY AS A CAUSE OF TYPHOID.

By ALFRED CARPENTER, M.D.

THE occurrence of an epidemic of typhoid fever in the district of Croydon, after the cessation of any tendency to that disease for a period of nearly ten years, is worthy of something more than a passing notice, both as to causation and to removal. I propose, therefore, to place the whole of the facts which have come to light with reference to the outbreak before our associates, feeling sure that it contains a lesson worth remembering.

Croydon was visited in October 1865 by an epidemic, which I had good reason to remember. Previously to that date, the ventilation of the sewers in Croydon had been at first suggested to the local authority, and then demanded by those who studied the subject; but for a long time the demand was not acceded to. The facts which presented themselves to the inhabitants at the time of that outbreak were such that the local board, after a long continued struggle against facts, carried out, in 1865, an extensive plan of ventilation by means of shafts connected with the crown of the public sewer, which were placed on the arterial sewers at distances of about a hundred yards from each

other. Energetic means were taken to remove the causes which produced that epidemic, viz., the contamination of the water-supply, and defilement of the upper rooms of the houses of the residents by sewer-gas, which was conveyed by pipes in immediate connection with the sewer, and also by soil-pipes discharging sewer-gases directly into the houses.

On December 6th, 1865, a series of resolutions were accepted by the Local Board, and made to have the effect of bye-laws, by which it was hoped that Croydon would, in the future, be entirely free from typhoid. This was the case, as far as epidemics were concerned, until March last, a period of nearly ten years. The local board of health, impelled at length by a proper sense of responsibility, saw what was wanting, and provided for the want with immediate and excellent effect. Typhoid as an epidemic entirely ceased. Nevertheless, it occasionally happened that a sudden development of slight or more severe illnesses took place in single houses or blocks of houses, in which almost every inmate suffered more or less from sickness, diarrhoea, continued indigestion, or sudden feverish disturbances, which affected most of the inmates in a similar manner in each block.

Having carefully noted the situation of these anomalous attacks, I found that they were generally in the higher parts of the district; that they occurred at rare intervals; that, on three or four occasions since 1865, cases of typhoid fever had occurred in houses in which the sewers were properly ventilated, which had a superior water-supply from the public works, and in which it was supposed that every sanitary requirement had been complied with. After a time, I noted another circumstance, viz., that those cases in which the whole household had suffered from a general cause occurred soon after the district had been placed under an intermittent water-supply, in consequence of the demand for water being greater than the quantity which could be supplied; or because an engine or a boiler required repair; or during a hot season, when the pumping power and the waste together were not equal to the demand made upon the waterworks. Another point was also noted; that, in some cases, the occupants had complained that the water smelt badly, and was not fit to drink, although looking as clear as usual. Occasionally it was discovered to be dull, cloudy, and containing foreign matters. I examined the water obtained from some of these houses; and on several occasions I discovered evidence of sewage-contamination quite sufficient to account for the illness under which the inmates had suffered. The cases which occurred in this way were rare, and in units only compared with the tens which arose before the ventilation of the sewers was provided for. They were, however, sufficiently numerous and sufficiently distinct to make it certain that impure water did find entrance into the service-pipes, which impure water was not supplied by the local authority in an impure state when first sent into the mains. The contamination must have taken place, therefore, at some point between the local board's well and the service-tap in the house. It did not appear that this could be the case on ordinary occasions; for the majority of the mains had a constant pressure from within outwards, often equal to four atmospheres, or 132 feet head of water. But I also observed that, when from any cause, such as from a cessation of pumping at the works, or because the supply was cut off to allow new connections, the water which was drawn from the pipes after such intermission of supply contained a large quantity of fixed air, which escaped as soon as the water was drawn from the tap, the water exhibiting a milky appearance, as if chalk were suspended in it. That it was not chalk was at once manifest; because it cleared immediately, and became as bright as usual. I concluded, therefore, that, when the supply was intermittent, the mains did not continue charged (as in the London district), but that the mains and services emptied themselves; that air did find admission at some points, allowing exit of water at others. This explained the cause of the great waste which occurred in the Croydon water-district—a waste which led to the apparently enormous consumption of fifty-six gallons per head daily.

It is evident that, whilst the pressure was continuous, there could be only leakage outwardly, and no impure water or foul air could find entrance into the fully charged water-pipes; but the moment the pressure was removed, there was no longer pressure from within. If, at that time, the taps on any of the lower parts of the water-district were opened, water might be obtained if there existed any means by which air could be admitted into the services at any portion of the upper parts of the district. Wherever, therefore, there were defects in the services, or faults in the construction of the taps, so that leakage occurred, then, at the moment when the supply which was intended for constant service became intermittent, contamination became possible, and even certain.

The supply-pipes which run from the mains into the houses are often carried through made ground, through a subsoil soaked with old

sewage matters, and abounding with nitrates. The services become rapidly corroded, and a pin-hole pipe results, which lets water out under pressure. When that pressure is removed by a falling water-line on the water-main, there is intermission of supply, nasty water is drawn into the pipe, and is delivered to some one below the point of entrance; or above them if the pressure happen to be restored before the contaminated water is drawn from the pipe. The water which is thus sucked in if the pipe happen to be near to a faulty sewer, may be simply diluted sewage, which even when mixed with a large volume of water is strong enough to do much evil. In Croydon, there was a worse danger even than this from defective services, because much more multiplied. A kind of tap has been allowed to be continued in use among the cottages called a screw-down tap, which is placed on a service-pipe coming direct from the main, and delivering into the pan of the water-closet, by which the pan of the water-closet itself is placed in direct communication with the water-service. If taps of this kind be used without the intervention of a cistern, it necessarily follows that it is only required for the tap to be left partly open to be a channel by which regurgitation becomes certain as soon as the pressure of the head of water is removed, by a cessation of pumping at the engine-house, or by a closure of the valves on the ordinary mains. It is impossible for the majority of persons using these kinds of taps to know whether they are closed or open, if the water-service happen to be intermittent at the time of use. Children especially are unable to close them; and as a consequence, in a great number of instances, they are left open. Thus a direct communication exists between the pan of the water-closet and the interior of the water-main. If a person at this juncture visit a water-closet at a few feet lower level than the first one, water is discharged into the pan of the closet, air rushing in to supply its place from the pan of the first closet, the tap of which has been left open. If, as sometimes happens in poor districts, the water-closet be allowed to choke up, and the pan to become filled with faecal matter, the most dangerous material may actually find its way into the services, and be supplied with water for dietetic purposes to the next house, or, indeed, to any house on that particular main. This event has actually happened. Its possibility places a serious responsibility upon those who, having the good fortune to determine that a constant supply is the right thing, yet allow their arrangements to get into such a condition as compels a return, if only for a short season, to an intermittent one.

For like reasons, when a constant supply is afforded to urinals, or other similar places, it should only be allowed through the intervention of a proper cistern, or with proper stop-valves, which should be imperishable and self-acting; otherwise, when the supply becomes intermittent, there will be a rush of air through the open pipe, carrying with it ammoniacal odours from the urinal, which must necessarily contaminate the water-supply, and may even convey matters which are capable of setting up specific epidemic disease.

I have described the condition of a large part of the old district of Croydon as it now exists, viz., that in which the water-works were first laid down twenty-four years ago. About three thousand screw-down taps exist in association with as many water-closets, which are at this moment violating one of the laws of hygiene, viz., that no water-pipe should be allowed to continue in immediate and direct communication with any part of a sewer-system, and also bringing unnecessary discredit on water-closets. I pointed this condition of things out very forcibly in 1865 to the local authority, but without convincing them of the extreme danger of leaving the closets in the state mentioned. It was considered by many of the members to be a "notion" of mine scarcely worth debating. A resolution was, however, adopted that no new house should be allowed to have any direct communication between the water-pipes and the sewers; and also that all overflow pipes from cisterns, baths, waste water-sinks, or housemaids' closets, should in every case be severed from immediate connection with the sewer. The screw-down taps originally put up were allowed to remain; and although several bye-laws were adopted as to new houses, they were not carried into effect by the then officers of the board, because they were considered to be facts of mine, and altogether unnecessary.

It was only by a steady and persistent following up of individual cases by various persons, and by showing the frequent connection between the want of ventilation in the sewers, or the contamination of the water-supply in a similar manner, that the public were convinced of their connection as causes of disease (and the illness of the Prince of Wales seemed to prove the truth of my deductions).

Another cause of trouble was the persistent refusal of the plumbers to loyally carry out the regulations of the board. Every kind of subterfuge was employed to defeat the object; dummy pipes were put up, so as to apparently comply with the bye-laws. When in real communi-

cation, the ventilators were often twisted and turned about at any and every kind of angle, so as to be perfectly useless for the purposes of ventilation. The sewers, although thoroughly ventilated on the general main, were not as efficiently treated in the house-services and in the branches as they ought to have been.

Nevertheless, from 1865 to this present year, no epidemic of typhoid has ever appeared. Yet I never heard of the possible contingency of intermittent water-supply, without a little terror lest we should have a return of our old enemy; and year after year urged upon the local authority the duty of removing the great blot in our sanitary work, but without great effect. In the year 1870, I prevailed upon the board to have a large number of old iron services taken up and relaid with lead, as more enduring in our subsoil, lead also being unacted on by hard chalk-water, such as ours. This act led to a great diminution of waste, and gave greater power to the local authority to keep up a constant supply, and postponed the evil day.

Still it was, for various reasons, intermittent at times. It was so in the month of January last for a few hours in the daytime. It is important to note this; because there does not appear to be the same excessive danger attending an intermittent service in the night-time: the consumption of water after most persons had retired to rest is very small compared with the quantity used in the daytime. Hence it happened that it might be intermittent for several hours in the night without serious evil; for the mains only emptied by slow leakage, and air might be supplied from pure sources; but, when the pressure was removed in the daytime, the whole of the mains would be completely emptied in a single hour. It is always liable to be intermittent in certain districts when extensions or repairs are being made, or in case of fire; and local danger did continually arise.

In February last, three cases of typhoid were known to be in the district. Two of these were imported cases; and I knew of their presence. The water-committee of the local board, at this juncture, proposed an intermittent supply to the water-district for several days, to allow of some repair to some portion of the engine. I most strongly protested against this course in my place at the local board, and wished my protest to be entered on the minutes of the board. The water-committee carried their point against me; and, from March 16th, there was a water-supply provided for six hours a day only. This limited supply was continued for six days; not long afterwards, it was manifest to the medical men that an epidemic of fever was amongst us. By the 30th of April, upwards of four hundred cases were reported as existing in the water-district by Dr. Philpot, the medical officer of health. The subject was at once brought to the notice of the local authority; but the water-committee declined to allow that the water had anything to do with the disease; some members of the board alleging that fever existed elsewhere; that some unknown causes, independent of waterworks, were acting; that it was the heavy rain; that it was atmospheric; that the disease was not propagated by the water. I steadily opposed these notions; but, the water-committee being supported by one portion of the local press, I was assailed in the most virulent manner as a public enemy for the course I took in the matter. My arguments were not listened to; and ultimately I was refused a hearing by the local board; because it was said that my statements tended to bring the town into disrepute, and did harm to its trade and damaged its property. One portion of the local press contained virulent attacks, with not a single line of regret for those who were the victims of the disease. I then published an account of the matter in a comprehensive letter to the *Times*, which brought down upon me the wrath of everyone who had opposed my view, and refused to be parties to the only remedy which could be effectual in preventing a recurrence of the disease. The remedy I had suggested was that the canon law applying to waterworks should be used in its integrity; viz., that, under no pretence whatever, ought a direct channel between the water-services and the sewers to be allowed. To effect this object, all screw-down taps and defective services ought to be removed; and, as a sequence to these repairs, a constant service would be then attainable with the present water-supply. In my communication to the *Times*, I had suggested, as, indeed, I had continually done at the local board meetings, that, if the supply were again made intermittent, a more severe epidemic would immediately follow. For this prediction, I was accused of wishing to bring about a panic, and it was said that there was no foundation for my idea.

The local board determined, however, to meet the case of a constant supply by taking measures for supplementing the present pumping power; digging a new well, and providing a more powerful engine, at an expense of £20,000.

In the meantime, the epidemic of April subsided; typhoid continued to hang about houses with defective and badly ventilated sewers. These were rapidly remedied, when the continued recurrence of cases in houses

satisfied the occupiers that they were in danger. As these were removed, the cases diminished, and the scare was almost forgotten by the general public. At the end of September, however, medical men practising in Croydon were aware that there was a recurrence of a more severe attack of the disease, and that many fatal cases would occur. On comparing notes, it appeared that, whilst the severity of the attack was greater, it did not cover so much ground as on the former occasion, but was in a great measure limited to less than half the water-district; and that that half corresponded with the portion which was commanded by the water-tower, and which constituted what is called the high level. On further inquiry, it also appeared that, on September 16th, the high-level supply had been intermittent in the daytime for five hours and a half; and just as in the former case the height of the epidemic was about five weeks from the time of the intermittent supply, so in this case, at the end of five weeks, it was manifestly and rapidly declining. I believe our energetic and observant medical officer, Dr. Philpot, will eventually have all the facts and all the statistics of this marked outbreak in a form available for publication. In this communication, I only, as chairman of the sanitary committee, wish to point out the principles which have produced the epidemic, and to publish the cause of its appearance in our town. The most marked result after that of the epidemic has been that the local authority has at last determined to follow advice, and to determine that, in the future, the channels by which contamination is possible shall not be allowed to remain; that the water-system shall be put upon the same principles as apply in the London districts; and contamination by regurgitation shall be a thing of the past. This was resolved on, November 2nd; and that which I tried very hard to carry into effect ten years ago, is now accomplished, at the cost of nearly a hundred lives, and very much suffering to many hundred others.

I have been obliged to use the personal pronoun rather more frequently than is pleasant; but as the principle for which I have contended, for the last twelve years, has been mainly promoted by myself in our local board of health—now, however, ably supported by the medical officer of health—it has been almost a matter of necessity for me to write in the singular number.

At the last meeting of the local board, the following recommendation of the sanitary committee was unanimously agreed upon. The epidemic was able to do that which was beyond the power of an individual member; viz., compel the board to obey a canon law of hygiene. The first paragraph of the report contains a law which cannot be disobeyed without mischief resulting sooner or later, viz.:

"The committee are of opinion that it is highly dangerous, and contrary to the first principles of hygiene, to allow the possibility of intercommunication between the contents of sewers and the water-services. That it is very desirable that immediate measures be taken to prevent possible contamination by such channels for the future. The committee recommend that a list of all houses in which screw-down taps are used in the water-closets be at once prepared; and that the water-committee be requested to advise the board as to the most rapid way in which contamination may be prevented in the manner which, at any rate, now appears to be possible. They would also suggest that the services in all these cases be examined, and that inquiry be made as to any possible source of contamination in connection with the water-mains or well.

"The committee again draw the attention of the inhabitants to the fact that, on a request being made to that effect, an immediate examination of drainage arrangements would be made by the board's officers in cases where illness has occurred, or defects suspected.

"The committee directed that a list of urinals which have no back-pressure valves be presented, and also a list of those urinals which have no water laid on."

I have inserted the whole of the recommendations made by the committee. The board also directed the water-committee to give notice to all persons having improper fittings, that such fittings were to be changed, and that it was their intention to institute proceedings against everyone who continued to use defective services after due notice had been given for their alteration.

As regards the fever itself, it is again on the wane; and, if the alterations suggested be carried out in good faith, it is not likely to again arise. It is requisite that the supply shall be continuous in the daytime. It is right to state that Dr. Philpot is also of opinion, in which I certainly concur, that it is not safe even to allow a removal of pressure in the night; but intermittent supply in the small hours of the night has not the serious significance which it has when consumption of water is great, as in the day.

The first epidemic in March and April last was general, and appeared all over the water-district simultaneously; most of the cases which arose from the intermission of the water-supply occurred within

a month of the act. This act of intermission continued in operation for seven days.

The epidemic then subsided; but a large number of sporadic cases occurred in houses in which epidemic cases had been introduced, and in which it was afterwards found that serious defects existed in the house-drains. These defects seemed to expose the inmates to fresh sources of contagion; and others then suffered from the disease who did not in the first instance get a sufficient dose of the typhoid contagia to set up the fever.

The second epidemic, which followed upon the intermission of water-supply on the 16th of September, has not been at present succeeded by these sporadic cases. The larger number of the cases have occurred in the high level district, which includes a large number of the best houses in the neighbourhood, and those which have the best arrangements as to drainage. The first outbreak affected this district equally with the second. The second outbreak mainly affected this district, but including those parts of the low level which are in immediate communication with the high level water-mains. Both epidemics came to a climax five weeks after the act of intermission was committed; but the second has been more simultaneous than the first, because the act was committed for a few hours only, whilst in the first instance it extended over several days. The second, although it occupied a less extended area, has been more general and more severe, which may be easily understood, considering that the foci of contagia were much more numerous on the second occasion than on the first, and the chances of escape from their influence much less.

There are many other points of considerable importance which are worthy of record, and which may form the subject of another notice. One, however, may be mentioned here; namely, that in a certain street the houses are supplied with water from two different sources; those on the right by the Croydon Waterworks, those on the left by the Lambeth Company. The sewer is in the middle of the road, and is common to both. The fever affected only those who were supplied with water from the Croydon waterworks.

OBSTETRICAL STATISTICS.*

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THE importance of obstetrical statistics must, at the present time, be obvious to every one who is much engaged in the practice of midwifery. In no department of the healing art is there a greater need just now for clear and definite principles by which we may shape and guide our future practice. Within the memory of most of us, the changes in this department have been so strange and sweeping, that they constitute little less than a revolution. During the last half-century, the practice of medicine and the practice of midwifery seem in this respect to have changed places. The *medicina perturbatrix*, that heroic system of treatment which prevailed in the time of our fathers, is, in these days, superseded by a more careful and expectant plan; whilst, on the contrary, the somewhat timid *laissez faire* policy of waiting upon Nature, and giving her no assistance until she had proved herself incompetent to do her work, has, in the hands of the modern accoucheur, given way to an active anticipation of her wants, and sometimes, I fear, to an officious interference with her operations. To bring these changes to the test of time and experience, which alone can decide upon their respective merits, we require records of cases accumulated by a great number of independent observers during many years of private practice, in addition to the valuable statistics which we already possess from the various lying-in institutions. If every man who is in extensive midwifery practice would keep accurate notes of all his cases, and, on relinquishing the active duties of his profession, would follow the good example set by Dr. Churchill of Dublin, and publish a statistical account of them, what a mass of valuable information we should obtain! The records of lying-in charities are, in their way, most important contributions to obstetrical science, as all must acknowledge who have read, for instance, Dr. Johnston's masterly report of the Rotunda Hospital at Dublin for last year; but they are incomplete in one respect; viz., that they furnish statistics of labour amongst the lowest grade of society only; whereas every one who has been much engaged in private practice knows that the process of parturition is much affected by station and habits of life. It is only, therefore, from careful records of private practice that we can obtain statistical evidence of the manner in which the process is performed in the upper and middle classes of society.

* Read before the Obstetric Medicine Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

Most accoucheurs who have been many years in full practice have had a tolerably wide experience of all classes; for their career usually commences amongst the poor and ends amongst the rich. Hence they are well qualified to make a comparison between the mode in which the process is performed in one class and in the other. And all who are in a position to do this must, I think, be prepared to admit that those who work hard for their daily bread have an advantage in this respect, and that, by a natural rule of compensation, a hard life tends to produce an easy labour. That the function of parturition should be thus affected by habits of life is not so much to be wondered at, when we see how evidently the function of lactation is modified by the same conditions. We all know that, amongst the labouring classes, a woman who cannot nurse her child is a rare exception, whilst amongst the rich and luxurious it is equally uncommon to find a mother who can nurse properly; on the contrary, the milk is deficient either in quality or quantity, and we see the same course of events recurring, and hear the same old story repeated with tiresome reiteration; the mother has nothing, or next to nothing, for the baby, and the child, thus deprived of its natural food, cannot digest the artificial food which is substituted for it, diarrhoea sets in, and the doctor who is called in to prescribe for this state of things is obliged to recommend that the natural deficiencies of the mother should be supplied by a hireling substitute drawn from another grade of society.

In order to institute a fair comparison between the process of parturition amongst the rich and amongst the poor, we require the records of a large number of cases of each sort attended in private practice. By this I mean that, amongst the poor, the patients ought to be attended at their own houses, and not at a lying-in hospital, because there are certain special risks connected with these institutions which would render the comparison an unfair one. It is necessary also that all cases to which the practitioner has been called in in consultation should be carefully distinguished. These conditions being observed, we may class amongst the rich all those who can afford to pay well for the attendance upon them, and amongst the poor all those who are attended gratuitously in connection with some lying-in charity. Most men who have had much experience will have met with a considerable number of cases of each kind, the earliest patients belonging to the poor and the latest to the rich class; and a number of records of this kind will give trustworthy data for making such a comparison as that I have indicated. I have the means of doing so on a small scale from the records of my own practice. During the time I was a student, and during the first years of practice, I attended more than 250 poor patients at their own houses in connection with two lying-in charities. I am, therefore, in a position to compare the first two hundred of these cases with the last two hundred of my patients in private practice, dating back from the end of last June. In both sets of cases, I have excluded those to which I was called in consultation. I have not sufficiently correct notes of the duration of labour in my earliest cases to enable me to compare the first and second stages of labour in each set; my remarks now will be entirely confined to the third stage of labour and its attendant dangers and difficulties. And here I find that, in two particulars, there is a decided advantage in favour of the poorer class.

In the first place, with regard to *post partum* hæmorrhage arising from inertia of the uterus, I find that, in the 200 cases of the poorer class, there were seven cases of *post partum* hæmorrhage, whilst there were as many as twelve, or nearly double, in the 200 of the richer class. Again, none of the seven cases out of the first 200 were very severe, but were readily controlled by such means as cold, pressure, ergot, and the introduction of the hand. On the contrary, some of the twelve cases in the second class were very severe, and two of them required, in addition to the means above mentioned, the injection of perchloride of iron. I should mention that the first 200 cases were attended previously to the year 1846, and the last from February 1872 to July 1875. During the time when I was attending the first set, I was called in to one consultation case which was not severe; whilst I was attending the last 200, I was called in to two cases which were both very severe, one terminating fatally within six hours. These cases are not included in either list. These figures show, then, a percentage of $3\frac{1}{2}$ cases of *post partum* hæmorrhage in the poorer class of patients,* and 6 in the richer class: a fact which confirms the belief which I had previously entertained, that the latter are more prone to *post partum* hæmorrhage than the former. This hæmorrhage arises not so much from a want of contraction in the uterus immediately after delivery, as from a want of persistent contraction during the first hour afterwards. The uterus contracts and again relaxes, so as to allow a considerable accumulation of blood within its cavity.

* Dr. Johnston's report, above alluded to, shows a percentage of little more than 2.

I remember that when, in the early years of practice, I attended chiefly amongst the poor, I was constantly in the habit of leaving the patient in half an hour after the birth of the child, provided there had been no trouble with the placenta, and that the uterus remained well contracted; and I never once had cause to regret having done so. Moreover, I never took any particular trouble about the bandage. Now, however, I never dare to leave a patient within an hour after delivery, even after I have carefully bandaged and left the uterus apparently well contracted. Were I to do so, I should very probably be hastily summoned back to her, and find her at death's door on my arrival.

With respect to adhesion of the placenta, the difference between the two classes is still more striking. I have no single instance of this complication recorded in the first 200 cases, and not fewer than fourteen, or 7 per cent., in the last, besides four consultation cases, which are not reckoned. Dr. Johnston records only two instances in 1,236 in his report of the Rotunda Hospital for 1874. In a paper which I published in the BRITISH MEDICAL JOURNAL for June 19th, 1875, I endeavoured to account for this great disparity by the theory that the deposits of lymph which are always observed upon the placenta in cases of adhesion are due to a depraved condition of the blood, analogous to what is considered to exist in a rheumatic or rather gouty diathesis, and that this condition is caused by high feeding and insufficient exercise. Hence its prevalence in the richer class.

However this may be, my own statistics certainly show that two dangerous complications of labour are much more common amongst the rich than amongst the poor; and I firmly believe that, if we could obtain sufficiently extensive statistics of labours amongst the rich and amongst the poor (not attended in lying-in hospitals), we should find that the puerperal mortality of the former would exceed that of the latter, notwithstanding the want of good nursing and other disadvantageous circumstances accompanying confinements amongst the poor.

It is very difficult to obtain correct information as to the number of puerperal deaths which occur in private practice; but, if it could be procured, such information would be very valuable. There is perhaps no one point connected with midwifery practice about which so many loose statements are made. I have often heard men who have been in extensive practice for many years boast that they have never lost a lying-in patient. As Dr. Matthews Duncan remarked in his Address in Obstetric Medicine last year, "All such beliefs, reports, and statements are mere incumbrances of inquiry, and are to be thrown overboard, if not more ungraciously dealt with". By a careful comparison of the registers of births and deaths in Edinburgh and Glasgow during 1869-70, Dr. Duncan estimates that the mortality of lying-in women is as high as 1 in 120 within the month. And he further remarks that "even now, in 1874, we are only striving to reach a sound conclusion as to this mortality; and, after all our labour, official and private, have no statistics to be relied on for the comparison of the results of successive decades or of longer periods".

In estimating the amount of puerperal mortality in my own practice, I have excluded all cases which I attended as a student, and also all cases to which I was called in consultation by other practitioners. I exclude those which I attended when a student, because such cases were exposed to special risks at that time, when the causes of septicæmia were not so well understood as they are now. At that time, I was a dresser at a large hospital where erysipelas was very prevalent, and I was also much engaged in dissections and *post mortem* examinations. I exclude the consultation cases, because it is obvious that they must be abnormal cases of unusual severity. My whole number of cases is thus reduced to 1,069. In this number, there were five deaths, or one in 213½; viz., one from septicæmia, one from scarlatina, one from ruptured uterus, one from pneumonia (coming on before delivery), and one from convulsions during pregnancy.

This rather low rate of mortality is to be attributed more to my good fortune than to any other cause; for I have never had two consecutive cases of puerperal fever or septicæmia of any kind, nor am I aware of having ever conveyed any infectious disease except scarlatina, which I once communicated to a patient, but she happily recovered. In the death from scarlatina which I recorded, the patient herself caught the disease about a week before her confinement.

The cases which I attended as a student, and which are not included in the foregoing list, presented two deaths; viz., one from septicæmia, and one from phthisis. The list of deaths in cases to which I was called in as consultant is, as might be expected, a rather formidable one, and yet I have omitted in this list a good many deaths from puerperal fever, because my notes of the cases are very incomplete, as I saw many of them some days after labour, and not more than once, twice, or, at most, three times. Out of the consultation cases to which I was called during or just after labour, I have recorded 22 deaths; viz., 7 from septicæmia, 5 from convulsions, 2 from *post partum* hæmorrhage, 2 from ruptured uterus, 1 from hæmorrhage from placenta prævia, 1 from bronchitis, 1 from metritis, 1 from exhaustion after obstinate vomiting, 1 from jaundice and albuminuria, and 1 from Cæsarean section.

The relative frequency of the different cranial presentations has long been a *vexata questio* amongst obstetric authors, and we yet need more extensive statistics to settle the disputed points satisfactorily. Many believe with Baudelocque and the older authorities, that the second position of the head in which the occiput is turned towards the right acetabulum, is next in frequency to the first; whilst others, such as most British accoucheurs, hold Nægele's opinion that the second position is the most rare of all, nearly all the reputed cases of this position being in reality cases of the third position which had been thus converted during the course of the labour. Dr. Leishman, in his work on the *Mechanism of Parturition*, considers that Nægele's views have been too implicitly adopted by British accoucheurs; and the late Dr. Uvedale West, who investigated the subject very carefully, arrived at the same conclusion. I published a paper on this subject in the BRITISH MEDICAL JOURNAL in 1852, and I have just communicated another, based on more extended observations, to the *Obstetrical Journal*. The latter was founded upon statistical observations of 1,000 consecutive cases of vertex-presentation, dating back from the end of last June. My own views as to the relative frequency of the first and second positions are opposed to those of Nægele; and, contrary to the experience of most other accoucheurs, I find that the fourth position is more frequent than the third. The following figures will show the result of my observations.

First position	...	...	...	792
Second "	...	...	...	152
Third "	...	...	...	19
Fourth "	...	...	...	37
				1,000

My own observations also show that it more frequently happens that the third and fourth positions remain unchanged throughout the labour, than that they become converted to the second and first.

The superiority of the practice of midwifery in the present time to that of the past is shown in nothing more signally than in the much greater use which is now made of the forceps in tedious and difficult labour. Up to the year 1844, according to Dr. Churchill's statistics, the forceps was used in British practice only about once in 342 cases. Now, however, as the report of the Rotunda Hospital for last year will show, it may be used as often as once in every nine or ten cases, and with the best effects, provided the operator be skilful and judicious. The above report shows a maternal mortality of about 1 in 27, and an infant mortality of about 1 in 7, which is a considerable improvement upon the mortality after forceps-cases in British practice up to 1844; for the maternal deaths were then as high as 1 in 20¼, and the infant deaths as 1 in 4¾. But there is one striking peculiarity in Dr. Johnston's report which would startle many an accoucheur of the past generation who believed and taught that one of the essential conditions for the application of the forceps was, that the os uteri should be fully, or nearly fully, dilated. Out of the 138 forceps operations already mentioned, Dr. Johnston gives the particulars of 42 in which the os was not fully dilated, and in the greater number of these the os was dilated to the size of a crown-piece only. Dr. Johnston has the best of arguments in favour of this practice; viz., its success. The deaths of but two mothers and four children are recorded. In by far the greater number of instances, the operation was resorted to on account of early rupture of the membranes, and escape of liquor amnii before the dilatation of the os, thereby allowing the foetal head to press injuriously on the soft parts of the mother. The os, however, must not be rigid or unyielding. I was called in very lately to two cases of this kind myself, and used the long forceps with the best results, although the os uteri was scarcely three inches in diameter. Beyond this, however, I have very little special experience of my own which will bear upon this question. I had never used the forceps before when the os was so little dilated, although I had many times employed it before the os was fully dilated, especially in those cases where the membranes have ruptured, and where the head, being from some cause arrested at the brim, does not descend upon the os uteri so as to complete the dilatation. I confess, however, that the bare possibility of the forceps coming into general use as a remedy for protracted first stage is enough to make one shudder. What has been said of opium may be well applied to this instrument also—

"Sicut vitæ anchora circumspicere agentibus,
Cynthia Charontis in manu imperitii."

The forceps is a powerful instrument for good or for evil, according to the skill of the operator, and its abuse in unskilful hands may lead to

much worse consequences than are likely to ensue from a protracted first stage: a thing which in itself is very seldom a source of danger. There is too much reason to fear that, by some practitioners who have a large amount of union practice, ergot of rye is sometimes given more with a view to save the attendant's time than to promote the welfare of the patient, and there is no doubt that a similar abuse of the forceps would produce far greater mischief.

With regard, however, to the more frequent use of the forceps in a protracted second stage, my own experience is greatly in its favour. I find that, in my first two hundred cases (after excluding those to which I was called in by others), the forceps was used but twice, and with a favourable result as regards both mother and child; whilst craniotomy was had recourse to three times, the child in one case being previously dead. All the mothers made a good recovery. In my last two hundred cases, the forceps was used seventeen times, with a favourable result to all the mothers and also all the children except one, whilst craniotomy was performed twice, the child in each case being dead before the operation. The result in both cases was favourable to the mothers.

My notes of all the forceps-cases I have had since I commenced practice conclusively prove the safety of the operation. The total number is 138; of these, 54 were patients I was originally engaged to attend, and 84 patients to whom I was called in in consultation. None of the 54 died, and the deaths of but two infants are recorded. Out of the 84 consultation cases, 4 mothers, or 1 in 21, died. Two of these deaths were caused by septicæmia, one from scarlatina, and one from bronchitis. The deaths of 17 infants are recorded. Most of these consultation cases were difficult and dangerous, and, therefore, a maternal mortality of 1 in 21 is not to be considered excessive. On adding the two groups of cases together, the maternal mortality will amount to 4 in 138, or scarcely 3 per cent.

In my own 54 cases, three-fifths of the patients were primiparæ, and the operation was performed on account of delay in the second stage of labour, with scarcely an exception; whilst, in the 84 consultations, the operation was performed in several on account of complications dangerous to both mother and child, such as convulsions, prolapse of the cord, etc., and, therefore, the extra mortality is not to be wondered at, especially if we take into consideration lost time and other unfavourable circumstances. Most of these also were primiparæ. We still require additional statistics to show the relative utility and safety of the long forceps and of version in slight narrowing of the brim of the pelvis. That turning will often succeed in these cases when the forceps will not, is proved by three cases reported in the *Lancet* of March 25th, 1871, by Dr. Phillips of Guy's Hospital. In each of these cases, the long forceps was first tried and failed, and version was then had recourse to with complete success, both as regards the mothers and the children. I myself lately succeeded in delivering two living children by version, in a case in which I induced premature labour at the end of eight months. I had ascertained by measurement that the conjugate diameter of the pelvis was not more than two inches and three-quarters, and in consequence it had been previously deemed necessary to induce labour at seven months on four occasions; but the children were so feeble at this early period, that only one of them had survived. The twins above mentioned are still alive and well.

With respect to the comparative safety of the two operations, I do not think we have yet sufficient data wherewith to form a conclusion, and further statistics are still needed for this purpose.

The rules for the treatment of puerperal convulsions, after having been for a long time extremely definite and settled, have of late years become indefinite and unsettled, chiefly, I think, on account of the altered views which now generally prevail on the subject of bleeding. This, then, is another point which requires to be cleared up by satisfactory statistical information. If there were any disease in which the good effect of bleeding was recognised almost beyond dispute, it was puerperal eclampsia. Now, however, this mode of treatment is very generally discountenanced, for no better reason that I can find than that in the treatment of all diseases bleeding is gone quite out of fashion. So much is this the case, that it requires some moral courage to recommend bleeding for any complaint whatever; and my esteemed colleague Mr. Michell Clarke, in his recent presidential address to our Bath and Bristol Branch of this Association, regards me as a remarkable phenomenon because I so strongly advocate it in puerperal convulsions. I certainly cannot find any statistical basis for the condemnation of bleeding in this disease. It is true we have of late years acquired two most valuable agents in the treatment of eclampsia, viz., chloroform and chloral; and these have, perhaps, to some extent, caused us to lose sight of the value of bleeding. But yet, it is not the propriety of bleeding only that is now being questioned, but that of another remedy, the efficacy of which has hitherto been universally acknowledged in this country—I mean delivery. For instance, I find in Schroeder's *Manual*

of Midwifery the following remarks respecting the treatment of this disease: "The condition of the woman contraindicates obstetrical manipulations, and every irritation of the uterus, such as introduction of the hand for the purpose of turning, application of the forceps, or even mere friction of the fundus, is apt to cause a fresh attack by reflex action;" but the author adds this qualification: "In the interest of the child, however, active procedure may become necessary."

My own experience of puerperal convulsions being rather large in proportion to my experience of other complications of labour, it may be worth while to examine a little in detail the notes which I have made of these cases. Since beginning practice, I have attended twenty-six cases of puerperal convulsions. With the exception of three, all these were cases to which I was called in by others. Eighteen of the twenty-six cases were primiparæ, or more than two-thirds. This agrees with the experience of most other practitioners. For instance, Drs. Johnston and Sinclair give the particulars of sixty-three cases of puerperal convulsions, out of which forty-nine, or more than three-fourths, were primiparæ.

My own cases of convulsions may be divided into three groups, viz.: 1. Convulsions coming on during pregnancy, before the full term, and accompanied with no symptoms of labour; 2. Convulsions coming on during labour, and in some cases continuing afterwards; 3. Convulsions not commencing until after labour. There are seven cases of the first group; fifteen of the second; and four of the third. Convulsions accompanying labour are, therefore, the most common.

Convulsions of the first kind are, according to my experience, the most formidable and fatal of all. Out of the seven cases, five mothers died and all the infants.

In the second class, or those which accompany labour, there were two maternal deaths in the fifteen cases, and eight deaths out of seventeen children (there being two cases of twins). In the third class of *post partum* convulsions, out of the four cases recorded, no mother and no infant died. Convulsions belonging to this class are, therefore, far less dangerous than the others. It will thus be seen that the total mortality amounted to seven maternal deaths in twenty-six cases, or more than one-fourth; and an infant mortality of fifteen in twenty-eight, or rather more than half. These figures are quite sufficient to show that eclampsia is one of the most dangerous complications of labour.

In the treatment of puerperal convulsions, the three most important remedies are bleeding, anæsthetics, and delivery. The secondary remedies, which were used in nearly all my cases, are purges of calomel and jalap, enemata of turpentine, castor-oil, and assafœtida, cold applications to the head, and counterirritation by blisters, sinapisms, etc. I need not stop to discuss the efficiency of these last, but will merely state briefly my experience of the first three.

Bleeding (the quantity of blood abstracted varying from ten ounces to thirty ounces) was resorted to in twenty out of the twenty-six cases. In fourteen, it was decidedly beneficial, and appeared to be the most efficacious remedy employed. After the bleeding, the fits either ceased or were suspended for a time, or were mitigated both in frequency and in severity. In some few cases, convulsions, which had continued after the use of anæsthetics and delivery, ceased immediately after the abstraction of blood. In case 14 (a case of twins) the fits which continued after delivery and after opiates, at once ceased after bleeding, at the same time the albumen in the urine rapidly disappeared. The relief afforded by bleeding is most marked and striking in convulsions which commence after delivery. In nearly every case in which it was employed, venesection rendered the breathing less stertorous, and the pulse more tranquil and steady. The benefit derived from bleeding arises, I believe, from the diminished stress upon the vessels of the brain, and perhaps of the kidney. At all events, it seems to remove that peculiar condition of the kidney which causes albuminuria.

By anæsthetics, I mean either the inhalation of chloroform or the administration of chloral, either by the mouth or the rectum. These two remedies, which are similar in their action, have now quite superseded opium. They are both very valuable, especially chloral. In four cases, the symptoms were much relieved, or altogether cut short, by chloroform, and in three by chloral. In one case, No. 26, bleeding gave relief for a time, but, the fits returning, the patient was kept under the influence of chloroform for seven hours, and had no more convulsions. In another case, No. 22, chloral in large doses was equally efficacious.

Delivery gave decided relief in seven cases. In five, the forceps was used; and in one, craniotomy; and in one, turning. These two last were desperate cases, but, in all seven, delivery either abolished the convulsions, when other means had failed, or else appeared to complete the cure which had been begun by bleeding and anæsthetics. I cannot, therefore, look upon this remedy as valuable only for the child's sake.

The seven fatal cases of eclampsia, which I have recorded, were thus treated :

1. Date 1854. Convulsions in seventh month. No sign of labour. Bleeding to twenty ounces, six leeches, cold to head, purgatives, sinapisms, etc. Died undelivered.

2. 1863. Convulsions in seventh month. Bleeding to fourteen ounces, purgatives, cold to head, chloroform. Fits ceased, but she died soon after giving birth to a dead child.

3. 1868. Convulsions at commencement of labour. Seven leeches, chloroform, cold to head, purgatives, etc. Delivery terminated speedily after dilatation with Barnes's bags. No more fits; but she died on the third day, from total suppression of urine.

4. 1868. Convulsions at full term. Bleeding to fifteen ounces, purgatives, cold to head, etc. Gave birth naturally to a dead child; no more fits; but she died comatose the following night.

5. 1869. Convulsions in eighth month; no sign of labour. Bleeding to fourteen ounces, purgatives, cold to head and blisters. Twenty-six fits before bleeding, and none after. However, she gradually sank, and died undelivered on the next day.

6. 1872. Convulsions in eighth month; no sign of labour. Bleeding to eighteen ounces, purgatives, cold to head, delivery by turning, chloroform. Fits still continued, abating gradually; she died suddenly at the end of three weeks.

7. 1874. Convulsions in ninth month; no sign of labour. Cold to head, purgatives, chloral in two doses of thirty grains. No fit for an hour after last dose; os too rigid to turn; delivery by craniotomy; convulsions returned two hours afterwards, and she died.

In this last, which was the worst case of all, bleeding was not resorted to, because the pulse was feeble from the commencement. From my own experience, I am inclined to consider bleeding and anæsthesia as the two important remedies, I can scarcely say which is the most important; whilst delivery is very little inferior to them, its inferiority being chiefly due to the circumstance that it is not so universally applicable. I have, on previous occasions, given cases which undoubtedly show that bleeding is very speedily followed by a great diminution in the amount of albumen contained in the urine. To this cause I believe that it owes its great power as a remedy.

The last subject I shall indicate to which statistical investigation may be most advantageously applied, is the etiology of what is commonly called puerperal fever. This is very extensive, and has been so fully discussed lately, that I need not enter upon it at any length. It has been abundantly proved that the same train of symptoms may be produced in a pregnant woman by the absorption of a variety of animal poisons; these symptoms, in general, are rigors on the second or third day after delivery, followed by headache, fever, great rapidity of pulse, and elevation of temperature, suppression of the milk and lochia, and generally local tenderness and pain in the uterine region, spreading over the whole of the abdomen, and accompanied with much tympanitic distension. In order to demonstrate what are the peculiar poisons which most frequently give rise to this train of symptoms, so that we may more effectually guard against them, we need a great number of independent observations, especially from men engaged in country practice who are able to isolate their cases. The poison which contaminates the blood of a woman lately delivered may be generated within herself, or, as no doubt more frequently happens, be introduced from without in various ways. Scarletina, as Dr. Braxton Hicks has shown, is the poison which is most frequently introduced from without, and next to this perhaps erysipelas. When scarlatinal poison has been absorbed, I have observed, in several instances, the rash and sore throat characteristic of this disease. But more frequently, I think, these are absent, and only the ordinary symptoms of puerperal fever are recognizable. The same may be said of erysipelas. As an example of the first, I may mention a case which came to my own knowledge lately. A medical man, whose children were ill from scarlatina, was sent for on a Saturday to attend a lady in her confinement. On the Tuesday following, she developed symptoms of puerperal fever, such as I have mentioned above, and on the next Friday the husband, who fetched the medical man, was attacked with scarlet fever in its usual form. Now, there can be no doubt, I think, that though these two diseases were different in symptoms, they were derived from the same source. The poison of erysipelas may thus be modified in a similar manner. My friend Mr. Waugh of Midsomer Norton, Somersetshire, gave me the particulars of some cases which lately came under his notice, and which I hope he will shortly publish. A midwife, who had been nursing a case of erysipelas, attended a poor woman in her confinement. This woman was attacked with puerperal fever, which ended fatally in a few days. A woman, who had been washing some linen soiled with the discharges of this patient, was attacked with severe phlegmonous erysipelas of the arm and shoulder. Thus it appears that a poison of

a specific kind may give rise, in a woman lately confined, to a peculiar train of symptoms which go by the name of puerperal fever, and yet this woman may communicate the original disease, whether it be erysipelas or scarlatina, to another person. We need a number of very careful observations to show what differences are occasioned in the symptoms produced by scarlatinal poisoning in women who have had scarlatina previously and in those who have not. There is every reason to believe that women who have had scarlatina before, may, if recently confined, be reinfected and have the symptoms of puerperal fever, in the same way that other persons, who have had scarlet fever before, sometimes get a troublesome sore throat, after nursing scarlatina patients. The name puerperal fever is generally applied to severe cases; but there is no doubt that when this disease is very prevalent slight cases of septicæmia often occur, just as cases of diarrhoea are frequent when cholera is prevailing; but these are not considered to be cases of puerperal fever. I believe that many cases of puerperal mania are, in reality, the result of blood-poisoning; for I have frequently noticed, before the attack of mania, the occurrence of rigors, some fever, hysterical excitement, sallowness of skin, and especially loss of sleep. Phlegmasia dolens is generally ushered in by symptoms of this kind, and I have often observed them before the outset of mammary inflammation and abscess. I regret very much that, although I have seen at different times a great many cases of puerperal fever, my notes of these cases are so incomplete that I can bring forward no statistics of any value. Nearly all the cases I have seen have been very severe ones, to which I was called in a day or two before the fatal termination; and I have no complete notes of them in the earlier stages. I trust, however, that before long such deficiencies will be supplied by others, who have had opportunities of watching these cases from the commencement, and who have been so unfortunate as to have two or three consecutively. Such information is very difficult to obtain; two or three cases of this kind make such a stir in a quiet country village, and are so injurious to the medical man in attendance on them, that he is glad to have the matter hushed up in every possible way; and to request him to publish the cases is very like asking a witness to criminate himself. All the more honour, then, is due to those practitioners, who for the benefit of medical science and for the public good, nobly come forward, undeterred by any fear of risking their reputation, and publish a candid statement of their experience.

HYDATID DISEASE :

AS ILLUSTRATED BY SPECIMENS CONTAINED IN THE PATHOLOGICAL MUSEUMS OF THE METROPOLIS AND IN OTHERS ELSEWHERE.

By T. SPENCER COBBOLD, M.D., F.R.S., F.L.S.,
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III.

QUITE recently, I had an opportunity of inspecting the collection at St. Thomas's Hospital, which I found to be particularly rich in entozoa of various kinds, especially tapeworms and hydatids. I encountered 76 preparations of internal parasites; and, of these, 42 were of the hydatid kind, representing at least 33 different cases. I say "at least," because it is often impossible to decide in instances where no history of the specimens can be obtained. Thus, there are three similar preparations of hydatids passed by the urethra; and, from their appearance, I judge them to have come from one and the same patient; yet there is no statement in the catalogue to that effect.

Of the 33 cases of hydatids represented in the museum, I reckoned 18 as referable to the liver, 2 to the brain, 2 to the bones, 2 to the urinary organs, and 1 to the lung, spleen, uterus, and soft parts of the thigh respectively. There are also 3 that may be classed as peritoneal. There is another choice example in which the disease cannot be referred to any particular organ. I allude to Dr. Peacock's case already published (*Pathological Transactions*, vol. xv), where the lungs, liver, heart, spleen, and some other organs were all occupied by hydatid formations. As an instance of extensive visceral infection by echinococci in the human subject, I believe this case to be unique. The brain-hydatids are particularly fine. In the specimen presented by Mr. Boot of Lincoln, the hydatid, two inches in diameter, is lodged in the anterior horn of the left ventricle. One of the peritoneal cases is remarkable for the amount of forward displacement of the pelvic viscera, caused by four or more hydatids, each of them nearly as large as a cricket-ball. Amongst these abdominal cases, I have also included a recent preparation, to which Mr. Stewart called my attention. The hydatid in question, of the size of a large lemon, existed near the fundus of the

bladder; its walls being one-third of an inch in thickness, and forming an unusually firm tumour. Of all the five specimens of hydatids in the collection, however, none have struck me so much as those affecting the bones. There is a humerus, taken from a man thirty-four years of age, in which the shaft is occupied throughout by small hydatids that have destroyed almost all the cancellous structure; in some places also, the absorption of the cortical layer has gone on to such an extent as to have left little more than the periosteum. Of course, the bone was at last fractured easily. It is a beautiful specimen; and the existence of echinococcus-heads was proved by microscopic evidence. Scarcely less interesting are two preparations illustrative of Mr. Travers' case of a man, thirty-eight years of age, in whom numerous small hydatids occupied both the head of the tibia and the lower end of the femur. Each set of parasites freely communicated with the knee-joint, necessitating amputation of the limb.

The very large museum connected with Guy's Hospital is rich in hydatids. When, some time ago, I spent several days in going over the collection, I examined 76 preparations, representing apparently 70 separate cases of this affection. Amongst the noteworthy specimens, one lung-hydatid was intimately associated with a thoracic aneurism, two others being connected with the pleura; and, of seven abdominal cases, five were connected with the peritoneum, one with the mesocolon, and one with the aorta. This last mentioned instance occurred in a woman of sixty years who, until her death, was treated for dropsy. She complained of incessant pain, which was only relieved when she rested on her hands and knees. Of the three cases affecting the heart, one has been published (Mr. Henderson's), where the patient, a girl of nineteen years, died suddenly whilst in the apparent enjoyment of perfect health. In one of the other two cases (Mr. May's of Tottenham), the left lung was also involved. One case of hydatid disease affecting the spinal column appears to have been originally an ordinary liver case. In Mr. Cock's example of genuine mammary hydatids, the hooklets and echinococcus-heads were detected; but I am not sure that this result of microscopic examination was obtained in the equally interesting example of hydatids of the thyroid gland (also removed by Mr. Cock). There are five bladder-cases, all apparently genuine (of which one has been published); and there are also five other cases referred in the catalogue to the kidneys, of which I regard two as doubtfully parasitic in character. Of three cases of hydatid growths occupying the soft parts of the thigh, two were under Mr. Bryant's care. The museum likewise contains an old preparation of hydatids of the tibia, but its history has been lost. There are also two brain-cases, besides upwards of a score of more or less characteristic and instructive cases of hydatids affecting the liver.

Scattered amongst the museums connected with the larger provincial schools and recognised hospitals, there must be a great many valuable preparations of hydatid disease; at all events, I judge so from the inspection I have incidentally made of a few of the collections.

Of eleven preparations of human hydatids which I observed in the Cambridge Anatomical Museum, apparently representing the same number of cases, seven were connected with the liver and one with the lungs. Those hydatids displayed in the "special series" of entozoa were of uncertain seat. From the recently published and valuable "notes" by Dr. Bradbury, I have no doubt that considerable additions have been made to the Cambridge collection since my last visit.

The museum at Oxford contains some choice specimens of hydatids, but I have only personally inspected a few of them. In the absence of original notes, however, I am indebted to the kindness of Mr. W. Hatchett Jackson for supplying me with several interesting particulars. The anatomical department of the Oxford collection shows from one particular case two hydatids that were found "under the dura mater". In the pathological department, we find one hydatid from the liver of a male subject, and also a preparation showing a number of small hydatids that were "coughed up from the lungs of a female". There are also in this department (Dr. Acland's) two examples of hydatids from the diaphragm, apparently belonging to two separate cases. One is described as a large "hydatid in the diaphragm covered by the pleura"; whilst the other is spoken of as "springing from the diaphragm and projecting into the sac of the pericardium". There is likewise a preparation showing a number of small specimens of hydatids that were passed *per anum* by a female. It is conjectured that they came from the liver.

The small pathological museum attached to the Brighton and Sussex Hospital is particularly rich in hydatids. Amongst others, it contains preparations illustrative of the remarkable case of hydatids in the region of the prostate, communicated by Mr. Lowdell in the *Lancet* in 1846.

The comparatively large museum adjoining the Norfolk and Norwich Hospital displays a choice series of hydatids, chiefly from the collection

of the late Mr. Crosse. That eminent surgeon prepared a special set of specimens to illustrate the process of natural cure by calcareous degeneration; and I may here, perhaps, be pardoned for mentioning that it was the study of these and other entozoa in Mr. Crosse's collection, some thirty or more years ago, that first drew my attention to the phenomena of parasitic life. Illustrations of the helminths in question are still in my possession. In one case (which is instructive as indicating the possibility of death from the simplest form and commonest habitat of an hydatid), a lad, twelve years old, received a slight blow from a playmate. Something gave way, and death speedily followed. It was found by *post mortem* examination that a solitary liver-hydatid, rather larger than a cricket-ball, had been ruptured. Almost unique as the case undoubtedly is, it is nevertheless by no means pleasant to reflect upon the fact that under similar circumstances a friendly "poke in the ribs" might prove fatal to any one of us.

POST PARTUM HÆMORRHAGE TREATED WITH- OUT, AND UTERINE HÆMORRHAGE TREATED WITH, IRON: RESULTS SUCCESSFUL.

By ALEX. MCCOOK WEIR, M.D., L.R.C.S. Edin.,
Assistant Medical Officer, County Asylum, Nottingham.

I AM induced by the invitation of Mr. Boddy to record briefly, and from memory, my experience of uterine hæmorrhage. When assistant to a gentleman in the North of England, about two years ago, I was called to the bedside of a young unmarried woman four miles in the country, and found, on my arrival, the head low in the pelvis, with good pains at regular intervals. It was just midnight, and I anticipated a comparatively short stay, though I always made it a point to remain an hour with a patient after delivery. The pains ceased in their frequency after my arrival, which I attributed to timidity of the patient under her rather trying circumstances; and I was contemplating the use of the long forceps (Barnes's), when a good pain expelled the head; and soon afterwards a plump healthy male child, of more than average size, was born. The placenta was somewhat tedious in coming away, and a little pressure was exercised on the abdomen, and the cord very gently drawn. It soon yielded; and I observed that it was of more than ordinary size, soft and pulpy. I could not now distinguish the uterus from the outside, but conjectured that it had followed the placenta, and was contracted deep in the pelvis, when, to my horror, an instantaneous gush of blood, that inundated the bed and streamed on the floor, took place. The woman turned ghastly pale, closed her eyes, groaned, was pulseless at the wrist, and to all appearances dead. I called for a basin of cold water and a towel, which I instantly saturated and applied over the womb; and forthwith insinuated my left hand (the patient, fortunately, was delivered on her right side) into the vagina, and thence into the uterus. I then found this organ to be as flaccid as an empty bladder, and so extensively dilated on all hands, that my elbow reached the vulva before my fingers impinged on the fundus uteri, and were distinctly traceable through the abdominal parietes by the outside hand. But the cold shocks to the belly, and irritation within, failed to produce contraction; and in a few minutes I withdrew my hand, and was more horrified to see another gush of blood. I instantly reinserted my hand and arm, and there retained them, as a source of irritation and an effectual plug, until the uterus was stimulated to contract by large imbibitions of rum, the only stimulant in the house. As soon as contraction was well begun, I gradually withdrew my left hand, and followed the uterus into the pelvis by the right or abdominal hand, and kept up pressure with the latter for fully two hours. I then applied a thick book, enveloped in flannel, as a pad; and, having bandaged the patient firmly, sustained pressure over the uterine site for nearly two hours longer. In the meantime, the patient, who had had a whole bottle of rum, vomited, opened her eyes, said feebly that she was "better", and gradually assumed a less ghastly colour. I may add that, the moment the first gush of hæmorrhage took place, I pulled away all the pillows, pounded the bedding, and thus left the patient's head considerably lower than her chest. I concluded that the heart, thus relieved, kept up a very feeble action, that fed the brain and sustained weak respiration, though to outward observation she was pulseless, motionless, and dead. I attributed the uterine contraction more to reflex stimulation and sympathy with the stomach on the introduction of the rum, than the improbable effects of absorption; and my hand and arm *in utero* acted as an effectual plug. The patient swallowed the rum automatically. This encounter with death lasted in all about four hours; and, as soon as vomiting ceased, I gave a twenty-five minim dose of tincture of ergot, and left the

patient asleep at 6 A.M. A stupid nurse allowed her to get out of bed, contrary to my positive orders; but I found the mother and child comparatively comfortable at one o'clock next day. She made a rapid recovery, backed, no doubt, by a good constitution; and soon afterwards was married. I do not hesitate to say that, had the perchloride been injected into a womb so unduly dilated, the shock alone must have killed the woman, as it evidently did in Mr. Boddy's case.

The second case was hæmorrhage in a woman aged 50, whose menstruation had degenerated into a "bloody flux", which was slowly undermining her health, and had left her already pale and wan, with anæmic symptoms and inferior appetite. Constitutional remedies altogether failed to arrest the discharge, and Barnes's system was decided upon. Although my principal approved, yet he could not be present; but I nevertheless made a solution of the perchloride (one part in twenty); gave the patient a stiff dose of brandy; and, having filled, pushed the nozzle of a Higginson's syringe well up towards the fundus uteri, and very slowly injected, watching the patient all the time, and pausing to count the pulse occasionally. There was a slight shock (the patient was very nervous) to begin with, and a little pain, which soon passed away. I continued to inject until all traces of blood had disappeared, and left the patient, who was recumbent all the time, pretty comfortable after the operation. The bleeding did not return; but the prolonged anæmia had given rise to such gastric irritability, that the patient persistently refused food, and fell a victim in ten days, as much to her obstinacy as her disease, and certainly not to the operation or its results. I conclude from this case that washing out the uterus with a mild solution of the perchloride in cases of chronic hæmorrhage from a variety of causes cannot possibly do harm, if the operation be judiciously performed; the patient slightly stimulated beforehand, and her attention fixed on the operator all the time, so that the slightest change of countenance may be taken as an index to desist at once.

I may add, for the sake of young practitioners, that it is well to give the placenta good time; and, should a pain not come to expel it in about half an hour after delivery, it is better to insinuate two or three fingers, or even a hand, and grasp the body of the organ, than run the risk of detaching it in part by drawing the cord. This method and gentle manipulation over the abdomen will hardly fail to provoke a pain that will expel the placenta and contract the uterus simultaneously. I suspected partial detachment in my case; but whether it was so in Mr. Boddy's does not appear from his account.

CLINICAL MEMORANDA.

DANCERS' CRAMP.

IN the last number of the BRITISH MEDICAL JOURNAL appears a very interesting leading article, in which some observations on dancers' cramp by Schulz of Vienna are embodied. I have been unable to see the original article by Schulz; but, from the abstract in the BRITISH MEDICAL JOURNAL, the following appear to me to be the main facts. 1. Dancers' cramp occurs in those female dancers who are accustomed to balance themselves on the points of the toes. 2. It does not occur either in male or female dancers who are not called upon to execute this *pas*. Dr. Schulz then states that this pointing of the toe is mainly effected by the abductor, adductor, and flexor nerves of the big toe; and he further informs us that the first of these muscles is very highly developed in the foot of the dancer. The explanation which Dr. Schulz offers of the morbid phenomena is as follows.

"The work done by a muscle depends partly on the strength and partly on the amount of contraction, the former being in proportion to the transverse section of the muscle, the latter to its length. Hence, in the above-named muscles, in consequence of the increase of their transverse diameter by frequent exercise, the voluntary contraction easily passes into a painful tetanus-like one."

Does Dr. Schulz mean to assert that the more highly a muscle is developed, the more liable it becomes to tetanus-like contractions? And, if so, I should like to know whether this is in accordance with the experience of the profession. It certainly is at variance with my own experience, and I have not observed that the muscles of athletes are more liable to cramp than those of other people. On the contrary, it is in the early days of his training that the athlete suffers, and not after his muscles have become developed by exercise. Again, if the mere size of the muscle were the cause of the cramp, surely we ought to find that all dancers are affected alike, since few true saltatory movements can be performed without the aid of the muscles in question, and they are probably very highly developed in dancers of all kinds. We find, however, that the cramp is limited to the executants of a particular *pas*,

and I would venture to offer the following explanation of the phenomenon.

The *pas* in question is not dancing; for dancing consists in regular and rhythmical exercise of the muscles, and the pleasure of dancing is found in the enjoyment of this sense of rhythm, a sense which seems implanted in the whole animal kingdom, and helps probably to secure healthy muscular nutrition by maintaining the balance between contraction and relaxation, in accordance with the rhythmic law of nutrition which has been ably insisted upon by Sir James Paget.

This balancing on the toes is a mere gymnastic feat, and in it the toe and ankle are maintained, often for considerable periods of time, in one position by violent and prolonged muscular exertion. In it the physiological law of healthy muscular nutrition is neglected, the long strong contraction of the muscle is out of all proportion to its period of relaxation, fatigue supervenes, and cramp, one of the symptoms of fatigue, brings the dancer to a standstill.

I have often insisted that the rhythm of the dancer's movements is his safeguard against cramp, and this penalty which the Vienna solo dancers pay for substituting an inelegant *tour de force* for the graceful movements of dancing proper, is an interesting example of a fatigue-disease, brought about, as are other diseases of the same class, by neglecting an important physiological law.

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OBSTETRIC MEMORANDA.

A CASE OF UTERINE HÆMORRHAGE SUCCESSFULLY TREATED WITH THE PERCHLORIDE OF IRON.

ON June 29th last, I was sent for to attend, in her third labour, a Mrs. H., residing at Gate Beck, a distance of six miles from my residence. The child, a very large one, had been born about an hour before my arrival. During this period, I was told by the nurse in attendance, flooding to an alarming extent had occurred: a station fully confirmed by the death-like appearance and pulseless condition of the poor woman, her bed and body-linen being in fact completely saturated with blood. Without a moment's delay or further questioning, I immediately introduced my hand into the uterus (a task easily enough accomplished in its uncontracted and fully dilated state) to bring away the after-birth. Owing to firm adhesions existing throughout its entire extent, the operation was not so easy as I anticipated. The flooding during a portion of this time was most profuse, and I quite thought that, before the operation was completed, my patient would expire. Having removed as much of the placenta as, under existing circumstances, I felt myself justified in doing, and without resorting to other means for arresting hæmorrhage, I at once (feeling the case was one of extreme danger, and a suitable one for a trial of the perchloride of iron) injected, using for the purpose a Higginson's syringe, four ounces of the strong liquid perchloride of the British Pharmacopœia mixed in a proper basin with twelve ounces of water—the proportions, I believe, recommended by Dr. Barnes. The delivery-tube being passed well up into the uterus, so as to touch the fundus before injecting the fluid, each half of it was thrown up gently, and slowly feeble uterine contractions commenced, diminishing greatly the discharge of blood, which, after the withdrawal of the tube, was completely arrested. Feeling her case to be, from previous loss, most critical, I stayed three hours in the house, administering during this period at intervals beef-tea and brandy, and then returned home, leaving strict directions not to move her until I returned. Early on the following morning, I saw her again. The womb had moderately contracted during the night, and there was no further discharge; indeed, she was as well as and even better than I expected to see her. This poor woman has since made a complete recovery, without experiencing the slightest ill-effects of the styptic. I consider this case adds another laurel to the victor's wreath, and as such is worthy a brief notice, feeling sure that (under God) this woman's life is indebted to the perchloride treatment.

OCTAVIAN N. ROYCE, M.D., Midhurst.

INJECTION OF PERCHLORIDE OF IRON IN POST PARTUM HÆMORRHAGE.

M., AGED 19, was delivered of her second child. Labour commenced on Thursday, October 20th, and continued until Saturday, the 22nd, 2.30 P.M., when it was decided to perform craniotomy, the forceps having been tried. Temperature, 101.4 deg. The operation was done under chloroform. After the child was removed and the placenta detached, and the patient was just recovering from the effects of the

chloroform, flooding commenced. Large doses of ergot were given; the hand was inserted, and clots were removed. The uterus was grasped from the outside, and cloths dipped in cold water applied suddenly to the abdomen. The hæmorrhage still continuing, and the patient becoming much exhausted, four ounces of liquor ferri perchloridi fortior were fetched from a neighbouring chemist and added to one pint of water, and injected with a small brass enema-syringe. After the whole quantity had been used, the hæmorrhage was stayed, and the patient still lives.

ARTHUR W. KEMPE, Darlington.

THE TREATMENT OF VOMITING OF PREGNANCY.

THE interesting paper in the JOURNAL of November 6th by Dr. Cope- man, on Obstinate Vomiting connected with Pregnancy, has induced me to bring into more prominent notice a remedy which, during the last four years, I have found of great service in relieving, if not in sub- duing, the ordinary nausea and sickness of early pregnancy. This remedy is dilute phosphoric acid in doses of from thirty to sixty minims in a wine- glass of water two, three, or four times a day, as may be required. It is of special value in cases where the nausea becomes extreme at the sight of food, as a dose may be easily taken before meals. Amongst all the remedies for this particular discomfort, I have found none so uniformly efficacious. It may act by powerfully stimulating the nerves of the stomach, or as a corrective (if, as is asserted, the vomitings of preg- nancy are alkaline), or in both ways. It is very pleasant to the taste, and I have always found that patients who have taken it in one preg- nancy invariably send for the acid when they find themselves in an in- teresting condition again.

THOMAS FAIRBANK, M.D., Lond., Windsor.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

ST. THOMAS'S HOSPITAL.

CASES UNDER THE CARE OF DR. MURCHISON.

Acute Ascites in a Boy: Rapid Recovery.—An anæmic boy, nine years old, of somewhat tubercular aspect, was admitted under Dr. Murchison's care on September 5th, with a very considerable amount of ascites; a few days after admission, his abdomen measured thirty-four inches in circumference at the level of the umbilicus. His friends stated that he had enjoyed fair health till July, when he had a sudden attack of sickness and diarrhœa; the latter continued to trouble him more or less for several weeks, and, when it abated, his abdomen began rapidly to enlarge. He had lost his mother from phthisis, and several of his brothers and sisters had died young. The patient stated that he had been losing flesh for some time, but no evidence of tubercular disease could be detected in his lungs. He had neither heart-disease nor albuminuria. He was ordered a diuretic mixture with iron; and, under this treatment, the dropsy gradually diminished. His liver was then found to be somewhat enlarged, and his spleen considerably so, project- ing quite four inches below the margin of the ribs. The ascites continued to decrease steadily, and, at the end of six weeks, no fluid could be detected in the abdomen; the spleen also diminished in size to some extent, but, at the time of his discharge, it still extended from two to two and a half inches beyond the ribs. He left the hospital at the end of October in his usual health. No enlarged glands could be detected anywhere in the abdomen; but, in the absence of any other probable cause, Dr. Murchison was inclined to attribute the dropsy to pressure on the portal vein by some temporarily enlarged lymphatic glands near the fissure of the liver. The enlargement appeared to have been consequent on the severe and prolonged attack of gastro- enteritis from which the boy had suffered in the summer. Acting on this supposition, the treatment had been chiefly expectant, and the satisfactory progress of the patient had rendered unnecessary the more active remedies which would generally be used in such a case.

Right Hemiplegia due to Syphilitic Tumour in the Brain. This pa- tient, a publican, aged 28, stated that about January or February, 1874, he began to be troubled with pain in the muscles of his right arm; this was soon followed by gradual loss of power. Next his right leg became affected in the same way; his mouth also was drawn to the left, and his speech became indistinct; but all this time he had no loss of consciousness or fit of any kind—indeed he had been, and was in

other respects, in good health. On being further questioned, however, he stated that for two years before the appearance of the paralysis he had suffered greatly from pains in the head; these were always much worse at night, and were so severe as to keep him awake. A few weeks after the symptoms of paralysis appeared, the headache ceased, and had not since troubled him. Seven years ago, he had a sore on the penis, which gave him no pain, and discharged but little; it took about three months to heal. At the time of his admission, the loss of power in the arm was complete; the leg was less affected. Under a course of iodide of potassium, the patient decidedly improved, but his arm was still almost useless, owing to constant trembling and clonic spasms. Dr. Murchison remarked, that the long continued headache and the very gradual invasion of the disease pointed to cerebral tumour; the patient also was young, and he had neither heart nor kidney-disease. There could be little doubt, also, that the growth was of syphi- litic origin, although the patient appeared to have remained for five years free from any manifestation of the disease; the result of the treat- ment by the iodide confirmed this view. In this case, the primary facts had been elicited with some difficulty, but it not unfrequently happened in similar cases that the result of the treatment had to be relied upon, not only to confirm the diagnosis, but also to supply an important part of the history.

Large Thoracic Aneurism in a Young Man: History of Syphilis.— A well-made, muscular young fellow, aged 25, was admitted on Aug. 17th on account of constant pain and throbbing in the chest, and of great dyspnoea on exertion. On examination, a distinct thrill and impulse could be felt to the right of the sternum between the second and third ribs, about two inches to the right of the middle line; there was also slight pulsation visible in the intercostal space at this point. In front, there was deficient resonance over the right side of the chest, amounting to absolute dullness from the apex to the fourth rib. The breath-sounds, although weaker than on the left side, were not greatly altered in character. A systolic murmur was audible over the base of the heart, and also very distinctly to the right of the sternum. The only remarkable point in the case was the rapid invasion of the symp- toms. He had been a sailor till a year and a half ago, and had worked hard as a coppersmith till nine months before admission; the dyspnoea then came on so rapidly that he thought at first he must have a bad cold on his chest. He was obliged to give up work, and had since gradually become worse. At the time of his admission, he was scarcely able to walk about at all on account of the increased pain caused by any movement. He had a hard chancre four years ago.

STAMFORD INFIRMARY.

EXTENSIVE SYMMETRICAL NECROSIS OF LOWER THIRD OF EACH FEMUR: REMOVAL OF SEQUESTRA: RECOVERY.*
(Under the care of WILLIAM NEWMAN, M.D., Lond., F.R.C.S. Eng., Surgeon to the Infirmary.)

R. M., AGED 21, was admitted on April 9th, 1872, into the Stamford In- firmary. Five years ago, he had a severe attack of rheumatic fever (so- called), and was ill for many weeks. The right thigh first became inflamed at the lower part, and was much swollen; then matter formed, and was evacuated by an incision on the inner side of the thigh. Very shortly afterwards, the left thigh became affected in the same way. From both thighs, fragments of bone at different times came away, and there was constant and abundant ill smelling discharge. He had been quite unable to work since the commencement of his illness, and had often been confined to bed from pain and weakness. He was very thin, well-grown, but had the aspect of a man long ill. There were no chest-symptoms.

At the outer side of the right thigh, about the junction of the lower and middle thirds, there was a long sinus communicating with dead bone; and about three inches lower, another similar opening existed also leading to necrosed bone. In the left thigh, there was a single opening in the very middle of the popliteal space, and one also on the inner face of the limb. A probe passed into either opening led down to dead bone.

April 13th. Chloroform was given. I made free incision on the outer side of the right limb, from one opening to the other, quite down to the femur. With difficulty, by the aid of the gouge and bone- forceps, an opening of sufficient size was made to allow the removal of several loose large pieces of necrosed bone—one a complete plate from the posterior intercondylar space of the femur.

May 23rd. There had been no trouble since the operation. There was now about half an ounce of healthy inodorous pus discharged in twenty-four hours. He would go home to-day for a month.

* Read before the South Midland Branch of the British Medical Association.

1872. June 21st. He was readmitted for operation on the left thigh.

The two openings noted above still existed. A probe passed from the opening on the inside of the limb could be passed quite across behind the femur, where it glided over the necrosed bone, so that the extremity could be felt through the soft parts on the outer side. The course of action had to be carefully thought over. It was not possible to increase the size of either of the existing openings without danger to important structures: the popliteal artery, if the posterior opening were thought of; the knee-joint, if the internal opening were to be chosen. I determined, therefore, to make a careful attempt to get at the necrosed bone from the outside of the limb, cutting down freely to the outside of the femur, and then making an opening into the popliteal space sufficient for the purpose in question.

June 24th. Chloroform was given. I made an incision fully three inches long on the outer side of the left thigh and in the middle of the lower third of the limb down to the bone; then, partly with the finger-nail and partly with a blunt chisel, I separated the periosteum until I could get my finger well behind the bone and touch the necrosed pieces. The knee was forcibly flexed, so as to relax the hamstring muscles, and then, with cutting bone-forceps, I cut away the thickened outer wall of the femur until I was able to get free access to the loose bone. Many pieces were removed, and a plate also, which was the exact parallel of the one noted as removed from the other limb. I could touch one long sequestrum lying high up in the line of the femur, but this I was unable to remove.

July 16th. The two old openings in the limb had closed. There was free discharge still from the wound of the operation. He went home to-day for a time.

October 18th. He was readmitted.

October 24th. Chloroform was given. I made an incision in the line of the scar of the last operation, taking a cut a little higher up; then I cut away rather more of the outer wall of the femur at the upper part, and could lay hold of the sequestrum, which in June I failed to remove. It was long and large, but at last I succeeded in drawing it down in the line of the femur, until the middle seemed to be opposite to the external wound; then, with a second pair of forceps and a good deal of force, the piece was broken across; and I was able to withdraw first one and then the other half. It was not possible to touch any further piece of dead bone.

November 28th. He was discharged to-day. The wounds still furnished some thin watery discharge from both limbs. He could walk firmly and well.

1873. January 24th. He walked very well. There was still a thin watery discharge from the right leg. The left leg discharged about an ounce of pus in the day; and there was a papilla of granulation at the opening.

June 13th. The local conditions still remained as above. He was in very good health. He had no pain, and could walk three or four miles easily; and had been at work corn-hoeing for the last three weeks.

1874. July 17th. He had been at work for the whole of the past year, and was very well in health. There was still some discharge from the left thigh.

There are one or two points of especial interest about this case to which attention may be directed.

The first is, the accurately symmetrical character of the disease—not only the same destruction of bone-tissue upon each side of the body, but a destruction attacking precisely the same locality. To what condition this should be traced, it was not possible to determine. The family history was imperfectly given, but I could not find any specially faulty point, and nothing could be found to lead to the idea of inherited syphilis.

The next is, the time during which continuous and even profuse suppuration had gone on—for five years, without any evil influence upon the patient's general health other than the indirect result of such an exhausting discharge. There had, too, been, from the poor circumstances of the patient, very little help given to his constitutional power to meet this undue drain on his system.

The operation for removal of the sequestra, simple enough in the right thigh, was far less so on the other side; and the portions of bone removed, and which I now exhibit, will in some degree show this. The principle of cutting through sound parts to reach, for anatomical or other good reasons, the seat of internal disease, is sufficiently recognised; and on this in the free outside incision I was glad to act; possibly, had I made that incision rather more freely and cut away more of the broken outer wall of the femur, I might have at one sitting completed the removal of the dead bone. The difficulty in the breaking through of the long sequestrum was only met by the use of very considerable force, and the expedient employed may be worth recording.

REVIEWS AND NOTICES.

MODERN NAVAL HYGIENE. By Dr. H. DE MERICOURT. Translated from the French by Staff Surgeon JOHN BUCKLEY, R.N. Pp. 69. Griffin and Co.

This is a handy little pocket *vade-mecum*; not containing much beyond the uses of our own navy; but worthy of notice as it supplies the want of such a treatise in our tongue. Ventilation is pointed out to be the one chief desideratum in modern ships of war, which are at times even more crowded than those of the olden time, and to effect this is still the unsolved problem of naval constructors. It is satisfactory to learn that after many ingenious failures, our neighbours are adopting the plan devised by the late Dr. Henry Edmonds, R.N. Steamers have a great advantage over sailing ships, in the necessity for frequent visits to harbours, to fill up the coalbunkers which are the great impediment to ventilation below. In the French expedition to China, in 1859, the mortality was one-third greater in the sailing than in the steam squadron. Monitors and torpedo vessels seem, as yet, to be beyond the range of hygienic ventilation. The heat of the stokeholes and boilers causes a quicker decomposition of the bilge-water; to obviate which great improvements have been made in the timbers and the pumps, and passage-ways have been devised along the keelson lengthways, as well as from side to side, and foul air is sucked from them into the furnaces. As a disinfectant, sulphate of iron is preferred to the chlorides, but charring the timbers is found to be more effectual than any chemicals, and dryness is thought better than any moist preparations whatever. The sick bay is located under the forecabin, with very great benefit to the sick, which cannot surprise any of our surgeons used to the treatment of tropical diseases on board the old style of brigs and corvettes, in which that was the home of the sick in all weathers. As to dress, there seems but little difference between this and all European navies, excepting the Turkish, which in its own way is well adapted. Among French and English seamen there is too much exposure of the neck and chest, which may account for the prevalence of consumption.

In point of diet, the French sailor may be somewhat better off, in accordance with national taste, than the English. Preserved meats, salt pork, dried vegetables, soft bread, wine, and condiments are issued—the food aliment daily supplied containing approximately in grammes: of nitrogen, 27; of carbon, 309; and of fat, 50; forming a scientifically adjusted scale. Stokers receive an augmentation of wine and farinaceous food while on duty. Drinking water is distilled; and, in order to prevent dry colic and other forms of lead-poisoning, which were very prevalent when pipes of lead were in use, that metal is now prohibited in the condensers, cooking apparatus, and mess utensils; and charcoal filters are used for the drinking water, with the result of putting an end to what was so common as to be classed among the tropical diseases. This has been a triumph of naval hygiene, of which Dr. de Méricourt affords a succinct and instructive history.

In the English navy, lead-poisoning always results from handling lead-paints, and especially in painting in the confined spaces between the inner and outer skins of ironclads, and very rarely indeed from gastric poisoning.

Scurvy is more prevalent in the French navy than in ours, for, strangely enough, the daily issue of lime-juice at sea, which has been the prophylactic with us since 1797, has only recently been so used by them. French surgeons became convinced of its utility in the Russian war, when cruising in combined squadrons with ourselves, who remained free while their crews were suffering from this debilitating disease. It is now used by them. Dr. de Méricourt has assigned too early a date to the supply of it in our navy, and has not stated quite correctly to whom the discovery was due. So early as 1627, Mr. John Woodhall, a barber-surgeon of London, who had made voyages to the East Indies, was engaged to examine the medicine-chests of the surgeons of the fleet destined for Rochelle. He published the first edition of his *Surgeon's Mate*, or guide to the medicine-chest, in which is found, not merely the therapeutical uses of the various drugs contained in the chest, but the modes of resuscitating the apparently drowned, and of embalming the dead. He likewise brought to notice his trephine for the trepan, which is still one of the armamenta of French military surgeons; and he detailed his knowledge from experience of the prophylactic and curative value of the juice of the "lemon family" in scurvy. Notwithstanding this, it was not employed generally, by order, in our navy until 1797, when Sir Gilbert Blane, the first naval physician thus employed, took a seat at the Sick and Hurt Board, at a time when it was no uncommon thing for a fleet to return with from 500 to 1000 men more or less afflicted with scurvy. In fact, it was thus employed only towards the end of a century which comprised

about fifty years of naval wars, that had made England mistress of the ocean by means of crews frightfully cut up by scurvy more than by the guns of the enemy; and this, too, when Captain Cook had obtained from the Royal Society, at the middle of the century, its gold medal for having secured his crews from scurvy in the circumnavigation of the globe. So great was the cost in human life that England paid, for confiding the medical trust of her seamen into the hands of civilians unused to sea-life.

With regard to the more laborious duties of ships, Dr. de Méricourt advocates the preparation of all entering the navy by a course of gymnastics, to render them ready and confident in the exercise of their physical powers in emergencies, by which many of the severe accidents seamen are liable to would be avoided; that stokers should always be worked in three, and not in two, watches, alternately, to secure to them proper rest; that natives should be engaged for boat-work and other exposure wherever practicable in hot climates; and that more of the heavy work of ships of war be done by steam machinery in the navy, as is already done in the shipping of the great oceanic companies.

We are happy in the belief that, in regard to several of these desiderata among our neighbours, we appear to be in advance of them; but still more might perhaps be done to complete and perfect these things among ourselves.

We cordially recommend this brief treatise to all naval medical officers; and think that to Mr. Buckley much credit is due for presenting it in an English dress, and in a very portable form, supplying, as it does, at the least temporarily, a notable hiatus in naval medical literature.

REPORT OF THE MEDICAL SUPERINTENDENT OF THE LEPER ASYLUM (OF TRINIDAD) FOR THE YEAR 1874. Legislative Council Paper, June 1st, 1875.

THE Leper Asylum at Trinidad is stated by Dr. Gavin Milroy, in his Report on Leprosy and Yaws in the West Indies, to be the best managed of all the West Indian hospitals; and it is satisfactory to find that it yields improving results. Dr. Espinet, the Superintendent, is able to report the mortality as diminished, and probably lower than in any previous year since the hospital was established in 1843, although a larger number of patients have been admitted. He ascribes the lower death-rate to several causes; viz., to the drainage and drying up of adjoining swampy land, the cutting down of surrounding brushwood, the addition of fresh drains, the regular system of manual labour and exercise introduced on the recommendation of Dr. Gavin Milroy, and improved nursing; together with the exceptionally healthy condition of the island during the year, and the admission of fewer patients *in extremis* to the asylum. Dr. Espinet's observations show that leprosy attacks persons of every race in the island—whites and creoles, as well as blacks; but it is confined principally to the poorer classes, who are under most unfavourable hygienic conditions. Europeans are rarely if ever attacked, however, until after their third year of residence, or about the period of acclimatisation. The disease is most prevalent amongst the Portuguese and Hindoos; but, curiously enough, amongst the latter it is confined almost exclusively to adult males—coolie women and children enjoying a singular immunity. That the greater rarity of female lepers amongst the coolies is out of all proportion to the relative numbers of the sexes, is shown by the statistics of the Immigration Office, and is confirmed by the experience of Dr. Mitchell, the Agent-General of Immigrants, and other medical men in the island. It is, moreover, in accordance with the observations of Dr. Carter in India, who found the proportion of males affected to be 81.4 per cent., as compared with 18.6 per cent. females. This great disproportion does not exist amongst the natives of Trinidad, where the numbers are about 60 and 40 per cent. respectively; and it almost disappears in Norway, where the numbers are 56 per cent. males to 44 per cent. females. The striking difference in the prevalence of leprosy between the two sexes amongst coolies in Trinidad cannot be accounted for by any difference in their surrounding conditions, the occupations and habits and mode of life of men and women appearing to be the same; and Dr. Espinet is unable to find any satisfactory explanation of the disproportion in their relative liability to disease. While the coolie children usually escape, the Portuguese children are especially liable to leprosy; and this is referred to the exceptionally unfavourable hygienic conditions under which the latter are brought up, such as poor diet, want of cleanliness, and the overcrowding of families in small ill-ventilated rooms. Children are more seriously affected than adults; and Dr. Espinet thinks that it may be laid down as a general law, that the earlier the period of life in which leprosy develops itself, the more severe and rapid will be its course; and, *vice versa*, the later the period of life at which it first appears, the less severe and more chronic will be its progress. He has never seen the disease de-

veloped at birth, or at an earlier age than four or five years, even in the children of advanced lepers.

Another point raised in the Report is the question of the influence of hereditary taint, and the limit of the period of incubation. The author expresses his belief that the majority of Indian immigrants in Trinidad who become lepers have the disease by inheritance, and do not contract it after their arrival in the island. Since the disease is endemic in Trinidad, it seems almost impossible to determine, in cases where it appears after a long interval, whether it is inherited or acquired. The fact that the disease in the coolies follows the habit of the disease in India in its preference for the male sex, and not that of Trinidad, where it attacks the natives in nearly equal proportions, is no doubt, in one light, favourable to Dr. Espinet's view. It must be remembered, however, that the comparative exemption of coolie women may be due to some peculiarity in themselves or in the conditions which surround them, and not to any special character of the Indian disease, as compared with that of Trinidad. The probability of the disease being usually inherited is supported by the observations of Professor Boeck of Norway, who examined cases of leprosy amongst Norwegian immigrants in the Western States of America, where the disease is not endemic. In every instance of leprosy developed after arrival in America, the patient proved to be of leprosy family at home; and Dr. Boeck places the limit of the period of incubation at fourteen years. This limit appears to be arbitrarily chosen; and a table appended to the Trinidad Report is given, which shows that, in twenty-two cases, the period of invasion of leprosy after the arrival of Indian immigrants in the island varied from six months to twenty-five years. There is not, however, the same certainty of the disease being inherited or imported in this series of cases as in those of Norwegians in America reported by Dr. Boeck.

Dr. Espinet believes that he can trace a connection between leprosy and phthisis, and with epilepsy and insanity; but the data upon which he rests his conclusions are too vague and imperfect for the speculation to have much value.

The distribution of the disease in the island has not been properly ascertained; but the little that is known militates against the theory of its origin in malaria, since lepers are found to come to the asylum from most parts of the island, and from places the most opposite in topographical character—from dry ground at great altitudes, from low swampy lands, from deep valleys, from high tableland, and from level alluvial plains.

For the prevention of the development of leprosy, the Superintendent suggests that a medical examination of all immigrants should be instituted, and that those found affected with the disease should either be returned to their own country or transferred to the asylum. A more effectual remedy still would, no doubt, be the segregation of the lepers and the separation of the sexes. But a compulsory system of this kind Dr. Espinet deems impracticable; and the voluntary system which he advocates would, it seems to us, necessarily work very partially and ineffectually.

The latter portion of the Report is devoted to the treatment of the disease, and this part is the least satisfactory. In the early stages, careful diet, regular exercise, and tonics, appear to exercise a generally favourable influence; but, although the writer maintains that leprosy, being a general constitutional disease, and not a local affection merely, can only be successfully combated by internal remedies, the best results which he records are those obtained by the external application of cashew-nut oil, after the method of Dr. Beauperthuy. Several cases are given in which decided improvement, and even apparent cure, followed the prolonged use of the oil; but a relapse usually followed in the course of three to six months after the suspension of treatment. In one instance, however, where the disease was of the anæsthetic form, the improvement had continued up to the date of the Report. It is in the early stage of this variety that the treatment proves most beneficial, by its blistering action removing stains, and apparently restoring sensibility by liberating the extreme nervous filaments from the pressure of the albuminoid deposits which surround them. In the tubercular form of leprosy, the tubercles may be entirely removed by cashew-nut oil, and the skin apparently restored to its normal state; but the tubercles return in three or four months after the suspension of treatment, with increased luxuriance. In twenty-two selected cases thus treated by Dr. Brissac in Guadaloupe, an apparent cure followed in five; but it is not stated from which form of the disease the patients suffered, nor whether the cures were permanent.

The Report supplies some useful data and practical suggestions as to the management and control of the disease, scattered among other matter of less value. Its chief defect is the absence of any account of *post mortem* appearances, and of any contribution to the morbid anatomy of this important affection.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, NOVEMBER 20TH, 1875.

THE PATHOLOGICAL SOCIETY OF LONDON.

WE have received a good many communications relating to our recent comments on the proceedings of the Pathological Society of London, which seem to have excited considerable interest. Our correspondents are divided in opinion, some agreeing energetically with all that was said by us, and some urging views which are calculated to modify the tenor of our criticisms; but all inviting us to pursue and develop the subject. We would, in the first instance, guard against the supposition that we are insensible in any degree to the great value of this society, or unmindful of its past services. The Pathological Society of London is one of the brightest ornaments of English medical science. It is the home of a kind of research which had long been thought peculiarly ungrateful and unattractive, but which lies at the foundation of medical and surgical progress. It is the nursery of the most distinguished eminence in professional work, and, by its historic labours, it has done more perhaps than any other society to redeem English medicine from the reproach of shallow superficiality which was gathering round it, and from which it is not yet wholly free. Those who founded it did so in the face of sneering discouragement from seniors high in the profession, which, if it were all recalled to mind, would seem now incredible, and of which we have recently been reminded of some singular instances. In its *Transactions*, pathology has, during the last twenty years, been almost rewritten and re-edited; and the meetings of the Society can rarely, we imagine, be attended by the most highly informed person without his gathering solid information, while often he must be both instructed and delighted. Nevertheless, there are, we think, many palpable defects in the nature of the proceedings during the last few years, and they are rather growing than lessening in intensity. This is partly due to the changes wrought by lapse of time and progress of knowledge, partly to a certain negligence which threatens to become stereotyped.

And, first, as to this negligence; it is, we think, a defect both of manner and of matter. The proportion of uninteresting cases brought forward is much greater than it ought to be; and of interesting cases it may frequently be said, that they are not brought forward in a manner which does justice to the specimen and to its reporter, or which is respectful to the Society. To be worthy of the Society, the report presented on any specimen brought under notice ought, we think, to give not only a brief record of the anatomical characters of the specimen, but to point out its place in medical literature and science; and ought to indicate the references to similar specimens on record, and to differentiate it where it shows difference; it ought to indicate the relation of the pathological specimen to the pathological process which it illustrates, and, where possible and desirable, as is most commonly the case, to establish its clinical relations. It may be said that not every specimen would bear such treatment, and that it would make the reports intolerably long and tedious. Such a reply would, however, involve a twofold error. Tediousness does not bear a necessary relation to knowledge, but only to a want of it; and it is a defect of manner. A very short communication is often dull, and a number of short dull communications are often intolerably tedious. A more pointed statement, satisfying the legitimate requirements of the hearers, would

be far more welcome. But a carefully considered statement is commonly more brief than improvised and hasty talk about a specimen. Experience very soon teaches that it takes time and thought to achieve brevity and condensation, while prolixity is the offspring of carelessness. As a practical illustration of our meaning, we would refer, as an example, drawn from the last meeting, of excellent condensation, and yet of the careful statement of all the points necessary to make a report acceptable and scientifically useful, to the communication of Dr. Gowers. Other examples were not wanting at the same meeting of specimens which have little interest, and which were brought forward without any regard to the elucidation of their scientific, pathological, or clinical relations.

In these respects, we have said that there is a palpable falling off in the preparation of reports by exhibitors generally, with, of course, frequent and sometimes brilliant exceptions. We do not think this by any means irremediable. Looking to the cause of it, we think it may perhaps partly be self-suggested by the difference in wording which we find on comparing the last with earlier lists of rules, for presentation of specimens. The difference may best be observed by comparing Rule 1 as it stands on the cards of 1869-70, and 1870-71. On the card of 1869-70, the first rule runs thus:—"Members intending to exhibit specimens to the Society must, excepting under the circumstances provided for in Rule 3, send the report to the medical secretary at least a week before the meeting at which the specimen is to be shown." In 1870-71, it is altered thus:—"Members intending to show specimens are requested to send notice to the medical secretary, if possible, a week before the meeting, for publication in the journals."

The requirement to furnish a report a week beforehand tended unquestionably to produce the habit of deliberately preparing with due care the statement to be submitted to the Society. Such preparation, at first insisted on was, no doubt, ultimately felt to be irksome, and was gradually relaxed, until at last it was altogether omitted and the rule was annulled. In its fresh modification, the relaxation of the rule led to the reports being prepared just in time to hand in with the preparation. Hence it has led to the frequent omission of any preliminary study of the report to be made, and many exhibitors find it more convenient to submit the specimen, to read a microscopic report on it, and to trust to the inspiration of the moment for any commentary on it, or elucidation of its relations to pathological literature or to medical science. This explains a good deal of what is objectionable and perfunctory in the manner of report. They must be reminded that final success in *impromptu* speaking is only attained, according to the experience of the most able and accomplished persons, by long years of a habit of carefully preparing in writing the matter which is to be orally delivered. The gasping insufficiency of a considerable proportion of the reports at the Pathological Society is the main blot on its proceedings.

We have not much space in which to develop that part of the subject which relates to the change in the method of treatment which is required by the progress achieved with the growing ripeness of the years. Twenty years since, pathological anatomy needed to be reconstructed. Nearly everything which the microscope showed in a morbid growth was more or less of a novelty. Good microscopic preparations and drawings of ordinary morbid specimens needed to be recorded, and even to be multiplied. That necessity does not exist now in the same degree. The histological characters, *e.g.*, of ordinary osteosarcoma, or of medullary cancer and the like, have become matters of elementary knowledge; it is hardly necessary to enter into a minute description in order to identify them. Many preparations are, as it seems to us, now shown at the Pathological Society which would be interesting enough in the lecture-room or laboratory for the instruction of students, but are stale and unprofitable enough for the members of such a society. We should be slow to discourage histological enthusiasm; for there are no subjects so valuable as a basis of pathology, and it would be presumptuous to think of setting limits to its further achievements. In itself, however, there is nothing much more notable at this date in the histological description of a specimen than in the

description of its naked-eye characters; and a tumour is not suitable for presentation to the Society merely because its exhibitor knows how to make a microscopic preparation and drawing of it, and to describe it in due technical terms. It was so once, but it is so no longer. There must be other claims, and those claims require to be recognised and made good. This is what many exhibitors are apt to forget. We are not anxious to arrest the display of individually interesting specimens; we would rather encourage it; but we are anxious to urge the necessity of defining, developing, and illustrating the points of interest.

There is yet a further step, and one which the Council, we trust, are likely to take without delay. We referred to it on a previous occasion, and since then we believe the idea has ripened towards final decision. There is now much to be gained in attempting to classify the specimens exhibited, and to arrange for the description of series of specimens illustrating particular points of pathology. By fixing beforehand on certain subjects for illustration on particular nights to be set apart at intervals during the session, very instructive and interesting evenings might be spent. We believe that, as a commencement, or by way of trial, early arrangements may probably be made for the exhibition of specimens bearing on certain points in the pathology of syphilis, and that Mr. Jonathan Hutchinson will introduce the subject. Thus a definite and no doubt very attractive and instructive debate may be arranged, and it would be easily possible to multiply similar series.

So much the Council can do; but the multiplication of individual records of separate facts is a function of the Society which must always be kept in view, and to perform this function more effectually than of late is a matter which rests with individual members much more than with the Council.

There are some other points, such as the neglect of chemical pathology and of experimental pathology, to which we hope to be able to afford space for fuller reference. It will remain then also to speak of the substitution of an annual for the biennial term of presidency: a change which we are disposed to urge as likely to be in various ways beneficial; and to combat some prejudices founded, we think, upon misconception, which at present seem to hinder members in exhibiting specimens from dealing adequately with their clinical interest.

THE LOCAL GOVERNMENT BOARD AND COMBINED SANITARY DISTRICTS.

OUR readers are aware that the Local Government Board inserted a clause in the Public Health Act of last session, which was accepted by Parliament, in virtue of which it acquired powers to compulsorily combine the sanitary authorities of any district, with certain specified exceptions, for the purpose of appointing a single medical officer of health, and also to make such regulations in connection with the duties, etc., of such officer as it might think fit. The insertion of this clause was naturally thought by those who have watched the policy of the Board in this matter, to indicate that, after two years of vacillation, it had at last arrived at a definite conviction as to the proper course to pursue in regard to these appointments; and that, after experimenting on the effects of cajoling such sanitary authorities as could be induced to combine to appoint a single medical officer of health, and of tolerating the determination of others to do nothing of the kind, the Board had resolved, on the strength of its experience of the working of these two arrangements respectively, to compel the adoption of the former of the two in all cases except those of towns of a certain degree of importance, in which there might be fairly supposed to be sufficient work to occupy more or less completely the time of a single medical man.

Under these circumstances, those who are interested in the maintenance of combined appointments, and in their being put upon a more satisfactory footing than that on which they at present rest, have been looking forward, since the passing of the Public Health Act last session, in the daily expectation of the issue by the Local Government Board of a memorandum to sanitary authorities and others concerned, explanatory of the course which the Board intends to pursue, and giving

the necessary information as to the conditions upon which combined appointments are to be in future held. Three months have now passed, and still the Government makes no sign. The disappointed expectants who are looking for its fiat can only conclude that, like the Baal of the Elisean period, it is otherwise occupied; that probably it is absorbed in the mind of its own daily routine; or possibly, if it be not heresy to hazard such a surmise, that it is asleep. At any rate, this would appear to have been the view entertained by the gentlemen holding combined appointments under the Public Health Act of 1872, who lately, we are informed, met in London to consider their position and prospects. It will be remembered that these appointments were limited to five years, apparently to give an opportunity of ascertaining how far the experiment would work successfully; and also to allow readjustment of the various districts, in case it should be found desirable to do so. As a matter of fact, the bulk of these appointments were made only for three years; many of them only for two; and some only for one. Of these latter, several have either collapsed altogether, or have undergone such an amount of disintegration, owing to the withdrawal of one or more members of the combination, as to seriously diminish the salary of the medical officer of health. In not one of these cases has the Local Government Board intervened, so far as we are aware, even to the extent of mildly inquiring, after the departmental fashion, on what grounds the seceding authorities had withdrawn from combination. Indeed, in some cases, the incidents which have occurred would seem to indicate that the Board had entirely forgotten the existence of the appointments, and had left both them and their holders to take care of themselves as they best could.

It is, therefore, scarcely surprising that the gentlemen in question, most of whom sacrificed previous connections of a more or less valuable kind, in order to take these appointments, and who did so on the faith that they would not be thrown overboard, unless good reason could be shown for so doing, should have been, as we are informed they were, very unanimous as to the unsatisfactory nature of their position, and as to the desirability of endeavouring to extract something like a declaration of policy from the President of the Local Government Board. In pursuance of this laudable intention, we believe that they waited on Mr. Sclater-Booth, and, after stating their case to him with an amount of feeling and force which may be said, judging from the profusion of sympathy which he expressed for them, metaphorically, to have almost brought tears into his eyes (if the quondam Secretary of the Poor-law Board has not altogether abjured the luxury of weeping), must have been considerably surprised, and possibly not a little chagrined, to find that, although the President had plenty of sympathy to offer them, garnished with a few platitudes about the necessity of educating the public, including boards of guardians, to appreciate the importance of sanitary measures, he had not a word to say as to the action which the Board proposed to take in carrying out the powers for enforcing combination, which it had itself obtained. Like the needy knife-grinder of the *Anti-Jacobin*, he might have epitomised his remarks in the sententious formula, "Policy, God bless you, I have none to show, sirs!" We should scarcely have blamed these gentlemen if, in the excitement of their feelings, and ignoring the majesty of the presidential presence, they had forcibly asked Mr. Sclater-Booth whether this was the outcome of the vaunted sanitary programme with which the present Government came into office; and whether a minister, whose courage appears to ooze out at his fingers' ends when the time for showing it arrives, is fit to be trusted with the administration of a great department like that of the Public Health. A more pitiable *fiasco* can, in our opinion, scarcely be imagined than for a public department like the Local Government Board, after committing itself to a definite course of action, by the course which it has taken in Parliament, to indicate, as it is doing, that it has no policy of any kind; and that it is quite satisfied, as our Yankee friends say, to let things slide. So long as the Board, or, rather, its subordinate officials, can make sanitary authorities believe that it is very active by writing fussy letters, and meddling, in an irritating way, with matters

of the most trifling importance, in which local authorities might be safely trusted to do as they like, it exhibits an alacrity which it is willing that the public should mistake for effective energy; but when it is called upon to show the courage of its opinions by the exercise of the large legal powers which it has now acquired, it exhibits a lack of intelligent policy and of courage which is gradually making it contemptible, and preparing it for a fate similar to that of its predecessor, the General Board of Health. The public, and especially rural sanitary authorities, are beginning to find out that King Log is not such a terrible personage as they fancied.

If evidence be needed in support of this opinion, and of the utter confusion which reigns at Gwydir House in regard to sanitary administration generally, it may be found in contrasting the results of the interview referred to above, between the medical officers of health to combined districts and the President of the Local Government Board, with the proceedings of one of the inspectors of the Board in North Wales, as reported in the *Liverpool Mercury* of the 12th instant. We are informed that "the proposal to combine all the sanitary authorities in Denbighshire and Flintshire for the appointment of one medical officer of health, at a salary of £800 a year, has met with a very unfavourable reception in the Wrexham Union. Mr. A. Doyle, the Government Inspector, waited on the Town Council on Wednesday; but they decided to wait for an official communication from the Local Government Board before coming to any resolution. Yesterday, Mr. Doyle had an interview with the Wrexham rural sanitary authority; and he intimated, as he had done to the Town Council, that, notwithstanding any adverse motion that might be carried, the Local Government Board would shortly issue a provisional order compelling them to join the combined district. Mr. Baugh, vice-chairman of the board of guardians, condemned the action of the inspector and the Local Government Board; and said that this was in reality a proposal to create patronage for the government. He moved a resolution to the effect that the scheme would be impracticable; that it would be a costly experiment that was neither wise nor beneficial; and that the authority would offer it their determined opposition. Mr. Bradley seconded the motion, which was carried unanimously." What are we to think of all this? Is it merely a case of mere *brutum fulmen*—an inspector brandishing his bottled thunder over the heads of an obstinate Welsh board? or is the Local Government Board really waking up to its responsibilities? Mr. Doyle's efforts in the way of sanitary organisation, however well meant, have not hitherto been very successful; and it remains to be seen whether his threats have more effect than his blandishments. Anyhow, whatever be the issue, it is evident that, if it should turn out that the Local Government Board has at last adopted a policy in this matter, and has resolved vigorously to enforce it, it has only done so at the eleventh hour; but we strongly suspect that it will be found that Mr. Doyle has exceeded his authority in threatening the North Welsh authorities with compulsory combination; and that, when his proceedings come to be reported at head-quarters, he will be greatly snubbed; and the stubborn Welshmen will be allowed to follow their own sweet will, in open rebellion against "all the queen's horses and all the queen's men".

THE Stockport magistrates on Saturday imposed the full penalty of £5 on a woman who had sold some of the clothing of a son who was suffering from small-pox. The result of the defendant's offence was, that several other persons were attacked by the disease.

THE Apothecaries' Company have sent in a claim to the Metropolitan Board of Works for compensation amounting to £14,000, for an alleged depreciation, by the continuation of the embankment, in the value of the land which they hold on trust at Chelsea for the purpose of growing herbs. Eventually, it is stated, this land reverts to Lord Cadogan. The Board have discussed and rejected a proposal to promote an Act for the purchase of the land with the view of extinguishing such claim. The claim, therefore, remains for settlement.

WE regret to hear that scarlatina is prevalent in some parts of the camp at Aldershot.

IN accordance with the text of a resolution passed at the last annual meeting of the British Medical Association, a circular has been this week posted to every member of the Association, "requesting an opinion—yes or no—as to the admission of female practitioners (of medicine) to membership" (of the Association). To the members in the country, 5,220 copies of such circular have been issued, and 1,010 to the members of the Association resident in the metropolitan district; those being the numbers of town and country members actually on the books of the Association, exclusive of members residing in the colonies and abroad.

IN the foregoing list, of course members of the Association only are included. It shows a remarkable numerical strength, and the metropolitan circulation appears to indicate that a majority of the members of the profession in the district are also members of the Association. It may be hoped that what is true of the metropolis and of some other great centres may gradually become equally true of every district in the country. An union so extensive and possessing so many autonomous local centres must always be an organisation productive of the most healthy influences, and capable of exercising great power on behalf of the profession which forms it, and of the great public objects which that profession has at heart.

INCIDENTALLY, we may mention also that the circulation of the BRITISH MEDICAL JOURNAL is maintained at 7,500 copies weekly—a circulation far beyond that which has ever been attained by any medical journal; and that there are continued evidences of the steady growth of these numbers, and the promise of further and considerable early accessions.

AT a quarterly meeting of the Trustees of the Hunterian Collection at the Royal College of Surgeons on Saturday last, the Right Hon. W. E. Gladstone, M.P., was unanimously elected a trustee, in the vacancy occasioned by the decease of Sir Charles Lyell, Bart.

THE *Indian Statesman* of September 24th, of which a copy has been forwarded to us, states that Misses Mitchell, White, and Beale, three young ladies at present studying for the lady-doctor's grade, will enter the Medical College for the ensuing winter sessions, and attend lectures with the other students on all subjects except anatomy and midwifery.

THE choice of a successor to the deanship of the Paris Faculty of Medicine seems to be a matter of some difficulty. The professors met on October 28th to decide whether M. Gavarret or M. Vulpian should be nominated to the Minister of Public Instruction in the place of M. Wurtz. In the meantime, they received a communication from the minister to request that they would appoint still another commission to consider a plan by which the School of Medicine should be governed by a dean and two vice-deans. It is proposed that one of the vice-deans should have the direction of the studies, and the other the general administration of business. M. Vulpian will probably be Dean, with two assessors.

LONDON FEVER HOSPITAL.

WE recently called attention to the accommodation provided in the London Fever Hospital for persons above the pauper class suffering from contagious fever. This institution received during last month sixty-three cases of scarlet fever, and, at the present time, all the private rooms are occupied. A few patients have been admitted into the general wards until private rooms become vacant, and there is no doubt these rooms will be constantly used as soon as their existence is more generally known. It is well to remind medical men of the fact that they need not lose sight of their patients on sending them into the private rooms, but can continue to treat them in consultation with the medical officers of the hospital.

CAPTAIN MONTAGU.

THERE is, we learn, every probability that the injury sustained by Captain Montagu, in whose accident much sympathy is felt, is happily not likely to be followed by loss of vision. Gun-shot wounds of the eye of this kind are commonly very serious; but there has been a combination of fortunate circumstances which promise an unusually favourable result. The shot appears to have passed through the upper eyelid on the outer side, and horizontally through the upper part of the eyeball without traversing the transparent cornea, and behind the iris. There is good reason to believe that it has not lodged in the eyeball. The pupil is regular; the eyesight good—wonderfully preserved, considering the nature of the accident. There is no pain nor sign of inflammation, and repair is going on most satisfactorily.

THE CONJOINT SCHEME.

DR. PHILIPSON and Dr. G. Y. Heath have been appointed by the University of Durham to represent that body at the conference of examining bodies to take again into consideration the formation of a conjoint board of examination for England.

THE SCHOOL BOARD AND INFECTIOUS DISEASE.

THE Leeds School Board now regularly issue a list of children absent from school who are suspected of suffering from disease. The list is very useful to the medical officer of health, to the School Board, and to the town at large; and the medical officer has great faith that, when he gets the necessary machinery at work, he will be able to produce good results by cutting down one fruitful source of scarlatinal epidemics. The same, of course, applies to other children's diseases of a preventable nature.

THE DISPOSAL OF THE DEAD BODIES OF INFANTS AT SOUTHAMPTON.

THE inquiry before the magistrates, after lasting three days, has resulted in the committal for trial of the undertaker Blundell, his wife, and an assistant named Petty, on a charge of larceny. On this part of the case, it would be alike improper to comment and uninteresting to medical readers; but we may note certain parts of the evidence which show a very unsatisfactory state of things in Southampton, and confirm much of what we remarked in the JOURNAL of the 30th ult. It is quite clear that several of these infants were in all probability still-born, while others had lived for periods varying from one day to thirty-one days; and yet it appears that the fee of three shillings for burial was demanded in all cases alike, which is quite contrary to the cemetery regulations. The expense of half-a-crown for a coffin and three shillings for cemetery-fees seems reasonable enough; but even this seems to have been considered a great tax, and one witness asked if it was necessary "to open the ground for a child so young" as thirty-one days. In what other way she proposed that the child should be buried, does not appear. From the medical evidence, it seems clear that some of the infants had been dead a long time, being reduced to mere skeletons; and, in at least one instance, portions of two bodies were found in one coffin; and the description of the cellar under the shop makes it too probable that some of the coffins had been concealed there for a long time. One of the magistrates expressed his astonishment (as he well might) that people could part with the bodies of infants nineteen and thirty-one days old, and never inquire afterwards whether they had been buried or not. One reason, doubtless, was to save the expense of conveyance to the cemetery; and we have already shown how this may be obviated. There appears to be a mortuary at Southampton, whither all these bodies were removed from Blundell's house; and nothing would be easier than to make it a resting-place for infants' bodies till an opportunity was afforded for removing them to the cemetery. Thus a great convenience would be ready to hand, without any sacrifice of decency or prejudice to health. Again, these witnesses all knew perfectly well that there was a pecuniary difference between still-births and children who had lived only one day. They considered it a hardship, and while it exists there will

always be unscrupulous persons ready to assist to remove these objectionable distinctions. We trust that the revelations made in this case will induce the Home Secretary to inquire into the whole subject of infant burial, which, as we have seen, is liable to a special abuse which does not obtain in the case of adults. We observe, from a statement made at the close of the case by the prosecuting solicitor, that "Blundell was liable to be charged with a common-law misdemeanour in having received certain bodies of children who had been baptised for Christian burial, and having undertaken, for a valuable consideration, to cause them to be buried in the ordinary way, and, instead of doing so, kept them concealed in his house, thereby enabling him to misappropriate the burial fees". We were not aware of this, and are glad that it is so.

EDINBURGH UNIVERSITY CLUB.

THE quarterly dinner of this club was held on Wednesday, the 10th instant, at St. James's Hall. Sir William Fergusson, Bart., LL.D., presided, and there was a large attendance of members and guests. Several new members were elected at the Council meeting held previously, and some new names were proposed for membership. The Honorary Treasurer, the Rev. Dr. Cozens Gordon, announced that the affairs of the club continued to be highly prosperous; but it was intimated, notwithstanding, that a considerable number of Edinburgh graduates, both in London and in the home counties, had not yet joined the club, probably from ignorance of its existence and of the advantages to be derived from membership.

THE COMPULSORY VACCINATION ACT.

MR. WILLIAM ABEL RYDER, a grocer in an extensive business at Bicester, was some days ago, at the Bicester Sessions, sentenced to seven days' imprisonment in Oxford Gaol, for refusing to have a child vaccinated, and declining to pay 20s. and 10s. costs. The defendant is known as a public speaker against vaccination. The magistrate sentenced him, instead of issuing a distress warrant for the amount.

THE ROYAL SOCIETY.

A ROYAL Medal has been awarded this year to Mr. William Crookes, F.R.S., for his various chemical and physical researches, more especially for his discovery of thallium, his investigation of its compounds, and determination of its atomic weight, and for his discovery of the repulsion referable to radiation. The other awards are: the Copley Medal to Professor A. W. Hofmann, F.R.S., for his numerous contributions to the science of chemistry, and especially for his researches on the derivatives of ammonia; a Royal Medal to Dr. Thomas Oldham, F.R.S., for his long and important services in the science of geology. It is hoped that Dr. Hofmann may be spared from Berlin for a few days, so as to receive the medal in person. The medals will be presented at the anniversary meeting of the Society on the 30th instant.

POISONING BY PATENT MEDICINES.

THE *Sheffield Daily Telegraph* records and comments intelligently on the most recent of these frequent cases. A child of a person named Scholey being troubled with a bad cough, the father went to one Mrs. Bancroft, who seems to have dealt in drugs, for a remedy. Mrs. Bancroft sold him what was called an "anodyne cordial", made up, it would appear, not by herself, but by some manufacturer of quack medicines. She could neither read nor write, and knew nothing of the composition of the cordial; while neither she nor the person who originally mixed the stuff gave or attached to the bottle any directions as to the quantity to be given. The father, not appreciating the deadly meaning of the word "anodyne", and supposing, it would seem, that he had purchased an ordinary "cordial"—that is, something rather of a stimulant than poisonous nature—gave the child a large dose: two tablespoonfuls. The result was fatal; and, on inquiry, it proved that the anodyne cordial contained a quantity of opium so considerable as to render it dangerous even if given to adults and in

smaller doses. "We cannot see," says the Sheffield paper, "that the father was seriously to blame. There is no reason to think that he had any idea of the peculiar meaning of a word which would convey a warning to educated men, but which the great majority of the lower and lower middle classes would regard as a mere titular prefix to the 'cordial'; nor was the dose, if the child seemed to be suffering much and the medicine was supposed to contain nothing of a poisonous nature, altogether and obviously excessive. But how came a woman like Mrs. Bancroft to be dealing in drugs? Who made up the cordial? If Mrs. Bancroft, why was she not committed for manslaughter? If not she, why was not the person who sold such a drug otherwise than in bottles labelled 'Poison' in red letters, and marked with the quantity to be taken, sought out and brought before the coroner's court? Is it possible to hold that poison may be sold in such fashion, and no one be answerable if death occur? We can hardly think so. At any rate, it is the duty of the Home Office to have the case fully investigated, to ascertain whether the utterly unsatisfactory result of the inquest be due to the perversity of the jury, the carelessness of the coroner, or the defect of the law; and, if the last be not the cause, to bring the vendor or vendors of the drug to justice."

MORTUARIES IN THE METROPOLIS.

THE motion of Dr. Rogers for the appointment of a deputation to wait upon the President of the Local Government Board, regarding the establishment of mortuaries in the metropolis, was carried at the Strand Board of Works on Wednesday last.

ARSENIC IN LADIES' DRESSES.

AT the meeting of the Marylebone Vestry last week, a report was presented from Dr. Whitmore, medical officer of health and analyst to the parish, which stated that he had recently analysed the colouring matter contained in four pieces of tarlatan. Two of the pieces were of a bright green colour, the other two of a pale or apple green. Those of the bright green colour contained arsenic in considerable quantities; one of the pale green colour contained a minute trace of it; but in the other, none could be detected. He had been induced to make these analyses from its having been reported to him that two young ladies had suffered from symptoms of arsenical poisoning in consequence of having worn dresses of this description at an evening party; and he proposed to make further analyses of a similar kind, the results of which he would give from time to time. Dr. Whitmore said that, perhaps, he had gone a little beyond his functions in this matter, but hoped his action would be approved. He had applied what was known as Marsh's test to the pieces of tarlatan; and he thought the result was of sufficient importance to put in the report. The report was approved.

HASTINGS AND ST. LEONARD'S INFIRMARY.

AN important meeting of the governors of this institution was held recently to consider the question whether it was advisable to enlarge the Infirmary upon its present site, or to build a new and larger hospital elsewhere. From the report of the medical officers, it seems evident that more accommodation is needed; and that it would be impossible adequately to provide this by any enlargement of the existing institution, the space at command being very limited. After a good deal of discussion, it was agreed that the proposal to enlarge the present building was unsatisfactory, and must be abandoned. The difficulty that is now felt is to secure an appropriate site. We trust that this difficulty may speedily be overcome. There can be no doubt that, in a flourishing borough such as Hastings and St. Leonard's, which has trebled its population in the last thirty years, the hospital accommodation which was considered necessary in 1840 cannot now be sufficient. There is, therefore, need of an increased number of beds. But besides this, the general arrangements of the present hospital are very deficient; and there is a want of better accommodation in various departments. This reconstruction is demanded, not, as was urged at the meeting, in order to make the Infirmary a place of medical education, which is out of the question in a town of only 32,000 inhabitants, but in order that the

medical officers may be able to carry on their work in a thoroughly scientific manner, and that the nursing of the hospital and its sanitary appliances may be altogether satisfactory.

PROVINCIAL MEDICAL SCHOOLS.

DR. ARTHUR GAMGEE and another correspondent call our attention to a misconception which the return of the Government Inspector of Anatomy, quoted at page 596 of our issue of November 6th, is likely to create as to the actual number of gentlemen pursuing their professional studies at the recognised provincial hospitals. It appears that Dr. J. W. Ogle, inspector of the anatomical schools in connection with those hospitals, receives the names of those students only who are occupied in the study of practical anatomy and dissections during the session to which his return refers, to the exclusion of a considerable number of students who, although not dissecting, are in actual attendance upon lectures and other departments of medical study at those schools; for example, the number of students in actual attendance on lectures at the Liverpool Infirmary during the present session is 105, whereas Dr. Ogle's return gives only 63; and at Manchester, the actual number of students is 152, while, according to Dr. Ogle's return, it is only 119. It is probable that a similar discrepancy would be found between Dr. Ogle's returns and the registers in the six other schools; and therefore this official return, however correct it may be, and no doubt is, so far as the anatomical department is concerned, cannot be accepted as an accurate estimate of the number of gentlemen actually pursuing their professional studies at the eight recognised provincial hospitals. Efforts so great and so highly successful have been made at the Owens College and other provincial schools to provide a highly efficient apparatus of teaching and means of study, that it is particularly satisfactory to learn that their material progress is greater than the official report would lead one to suppose.

ALLEGED EXTRAORDINARY TREATMENT AT KING'S COLLEGE HOSPITAL.

SUNDRY reports of an inquest opened last week by Dr. Hardwicke, and which contained statements reflecting upon the medical authorities of King's College Hospital, having appeared in some of the daily papers, we have been at some pains to collect the following accurate account of the evidence given before Dr. Hardwicke at the adjourned inquest on Wednesday last. A single woman, Mary Jane Bull, aged 31, had been living at Leighton Buzzard, where she had been ailing since April last. Acting on medical advice, she entered King's College Hospital as an in-patient under Sir William Fergusson on October 27th, and was then suffering from incontinence of urine, but had not apparently a serious disease. The patient, according to the mother's statement, complained that she did not once see Sir W. Fergusson, and that the treatment to which she had been subjected was killing her. Sir W. Fergusson did, however, see the patient on the day following admission; and said that he had received a letter from Mr. Wagstaff of Leighton Buzzard, and that the patient was a highly nervous woman. She was sounded for stone in the bladder, but none was discovered. The urine was also drawn off by a catheter, examined, and found not to contain albumen. Her temperature was normal; and she had no physical signs of disease of the heart or lungs. Cold douches once a day were then prescribed for her, and were carried out in the following manner. The patient was seated before the fire in a bath, and water was poured down her back through a colander, to the extent of four small cansful on the first morning, and of two cansful only on subsequent mornings. She was then dried with a warm towel and put to bed, where hot bottles were applied to her feet. The whole process occupied only a minute or two. She only complained once to the house-surgeons (Mr. James K. Fowler and Mr. J. B. Footner) of the treatment; and on November 4th, contrary to the latter gentleman's advice, she was removed to her mother's home near the Regent's Park. She was able to walk out of the hospital at about 5 P.M.; and died eight hours afterwards. It was not known in the hospital that she had

kidney-disease. Mr. Willoughby Davis was called to the patient shortly after her arrival at her mother's, and found her suffering from dyspnoea, and sinking. He discovered no physical sign of disease of the chest during life. She died a few hours afterwards. After death, he found the brain natural, the upper half of the upper lobe of each lung consolidated with tubercular deposit, and congestion of the other parts of the lungs, with old pleuritic adhesions. The heart was thin, otherwise healthy. He had not examined the pulmonary artery for a clot. The stomach was empty. The liver was natural. The kidneys were large and diseased; in the left one was a large abscess; in the right kidney were ten small abscesses, of the size of Spanish nuts. The uterus was in a state of scirrhus. The cause of death, in his opinion, was exhaustion whilst suffering from tubercular disease of the lungs and kidneys. Dr. Davis is further reported in the *Times* to have said that "under proper treatment the deceased might have lived for months. He should say that cold water applied as stated could not be proper treatment, but whether it accelerated death he would not say." The verdict was "that the deceased died from tubercular disease of the lungs and disease of the kidneys, and that the death of the deceased was accelerated by her removal from King's College Hospital by her friends".

PHYSIOLOGICAL DEMONSTRATORSHIP AT UNIVERSITY COLLEGE.

MR. WILLIAM MURRELL has been appointed Demonstrator of Physiology ("Sharpey Physiological Scholar"). The value of the appointment is about £90 a year; and the conditions under which it is held may be of interest to other schools where such appointments are contemplated. There are many, we think, in which they would be useful.

"5. During his tenure of office, the 'Sharpey Physiological Scholar' shall have duties assigned to him in the physiological laboratory of University College. He shall, subject to leave of absence in the vacations to be granted by the Faculty of Medicine, render services in the physiological laboratory, under the guidance and control of the Professor of Practical Physiology; he shall assist during both the winter and the summer sessions in the teaching of the students in the class of Practical Physiology; he shall then, or at other times, if required, aid the Professors of Systematic and Practical Physiology in the conduct of physiological inquiries; and, lastly, he shall be encouraged and have facilities afforded him in carrying on original investigations in anatomy, histology, or physiology, on his own account; but the undertaking of such researches need not form an essential condition of his holding the scholarship.

"6. The usual appointment to the scholarship shall be for three years; but within three months of the termination of a given scholar's tenure of office, the Council, upon a report from the Faculty of Medicine that they have reason to believe that such a course would conduce to the interests of the School, may continue the existing holder of the scholarship in office for a second period, not exceeding three years, instead of proceeding to a new election.

"7. The payments to the Sharpey Scholar shall be half-yearly; and, in the event of a vacancy occurring by resignation, removal, or death, the stipend shall be apportioned up to the date of such vacancy.

"8. The Sharpey Scholar shall be considered a teacher within the meaning of the bye-laws of the College, and may be removed in the manner prescribed by those bye-laws."

MANSLAUGHTER BY NEGLIGENCE.

THE case of the man Downes, a member of the Peculiar People, who was convicted some time ago of manslaughter for not providing medical assistance for his infant child, who died from inflammation of the lungs, but might, it was asserted, have recovered had such assistance been rendered, came on for decision in the Court for the Consideration of Crown Cases Reserved on Saturday, to which it had been remitted by Mr. Justice Blackburn in consequence of a conflict of judicial opinion in similar cases. In the course of the argument on Saturday, it was stated that a recent statute has been passed (31 and 32 Vict., cap. 122, s. 37) by which it is made a punishable offence if any parent shall "wilfully neglect to provide adequate food, clothing, medical aid, or lodging, for his child, being in his custody under the age of fourteen years, whereby the health of such child shall have been, or

shall be likely to be, seriously injured". This statute was passed after the case referred to was tried before Mr. Justice Willes, and appeared not to have been brought to the notice of Baron Pigott or Mr. Justice Blackburn. On the strength of it, the Court now affirmed the conviction. Lord Coleridge, in giving judgment, said it was clear that where the death of a person resulted from another person's neglect or breach of duty, that person was guilty of manslaughter. Here was a duty imposed by Act of Parliament deliberately and intentionally not fulfilled, and the death of another thereby caused. Such a state of facts brought the case within the true definition of manslaughter, and the conviction must be affirmed. Baron Bramwell, Mr. Justice Mellor, Mr. Justice Grove, and Baron Pollock, the other judges, concurred; Baron Bramwell observing that the jury had found that the man thought that to fulfil the duty imposed by statute was wrong. The law, however, did not excuse a man on that account. It was well that this should be known.

UNIVERSAL STANDARD OF MEASUREMENT.

DR. BURNETT writes from Utrecht to the *Philadelphia Reporter* :—

"The scientific world has long felt the need of an universal standard of measurement. In ophthalmology, the employment of the inches of the different countries to designate the focal distance of glasses, and to mark the degree of ametropia, has always been confusing. A number of efforts have been made to adopt the metrical system, and to so number the glasses as to make the series more regular in graduation than the one now in use, but they have all failed until now. At the last congress, it was decided that at this present meeting the matter should be settled; and, after the 12th of September, all measurements are to be taken after the metrical system, and the glasses are to be numbered according to a scale, a copy of which Dr. Snellen kindly gave me. The unit of measurement is the metre, and the glass of one metre focal distance (negative or positive) is to be numbered 1. This corresponds to 37 Paris inches. The lowest number is 0.25, corresponding to 4 metres and 148 Paris inches. The next is 0.5 = 2 metres and 74 Paris inches; then 0.75 = 1.333 metres and 49 Paris inches; then number 1 = 1 metre. The highest number is 20 = 0.050 metres and 11.25 Paris inches. These trial-glasses are not yet obtainable, but will be after the meeting of the congress. Dr. Snellen also showed me the proofs of the new edition of his book of test-types, which he is now getting out to correspond to this new standard of measurement. The large test-types known as his, for testing distant vision, he has also modified. The size of some of the numbers, notably the old 100, which has been considerably increased in magnitude, has been changed, and made more gradually diminishing in size from the largest. The largest, formerly called 200, is now numbered 60, and should be seen distinctly, by a normal eye, at 60 metres. The smallest, the old 20, is now numbered 6, and should be clearly distinguished at a distance of 6 metres. The great importance of the adoption of this universal standard of measurement is apparent; and as ophthalmology, I think, is the first branch of science, at least of medical science, to adopt such a standard, it has an additional claim to be considered the most progressive department of medicine."



VENESECTIONS AS A HABIT.

AN extraordinary case of habitual venesection is reported by Dr. E. Warren Sawyer in the *Chicago Medical Journal* for September 1875. The subject of the narrative is a retired clergyman, aged 80. His firm step and keen intellect show an unusual degree of preservation for his advanced years. He is a farmer's son; and, during his entire life, has been unusually free from sickness. When seventeen years old, according to the custom of the period, and not for ill-health, he was bled for the first time. This habit of spring bleeding was followed for the next six years. He then became a student; and the change from active farm work to a sedentary life caused a constant feeling of heaviness, to relieve which he resorted oftener to the lancet; and, during the next ten years, he was bled from four to six times a year, always losing from ten to fifteen ounces of blood. The frequency of the venesections increased; and, for the past forty years, the patient has suffered the loss of eight or ten ounces of blood regularly every three weeks. He declares that he is always made better by bleeding; that letting a half-bowl of blood acts as a stimulant, and has never been detrimental to his health. Until he retired from the pulpit, ten yea

ago, he was a hard-working minister, and he is still capable of work. For the past nine months, this man has been under Dr. Sawyer's care, who has every three weeks bled him to the extent of from eight to ten ounces. The demand for blood-letting is shown by a dyspnoea, which obliges the patient to spend the night in his chair, just before his bleeding day. His lips and finger-nails become purple. Bleeding at once relieves the dyspnoea, and the natural colour is restored to the lips and fingers; the man's spirits become lighter, he grows talkative, his voice is no longer husky, and he seems in every respect better. Repeated auscultatory examinations of the heart and lungs have failed to discover any organic disease of the former, and but slight evidence of vesicular dilatation of the latter. The blood-making function of the body has always been active, and there has never been a demand for a peculiar diet; and the frequent and large losses of blood have never seemed to be hurtful or debilitating. The history shows that, for a time, the bleedings were not actually demanded; but for many years past, in the opinion of Dr. Sawyer, it would have been detrimental, and perhaps attended with a fatal result, to attempt a reformation of the habit.

THE WILL AS A THERAPEUTIC MEANS.

M. JOLLY has lately read a paper to the Paris Académie des Sciences, which has attracted a considerable amount of attention in the medical world of Paris. The subject of the paper is, "The Will considered as a Moral Power and a Therapeutic Means". The passages more specially relating to the latter branch of the subject are reproduced below. Speaking of the power of the will in preventing attacks of cough, M. Jolly said: It is possible to struggle more or less successfully against fits of coughing; a fact not only to be noted as a result of the power of the will, but as a remedy which, in many cases, cannot be without importance. Cough may, indeed, be only a vicious habit, without any need of expectoration or specific lesion; becoming of itself and by itself an incessant cause of coughing, to which, for that reason, it is important to put a stop. "Coughing", says Montaigne, "creates coughing; a man who coughs, makes me cough"; and the will alone, and especially the will helped by sensations which distract the attention, or muscular actions capable of diverting it, is the most certain means of curing the cough. It is often seen that, when children suffering from whooping-cough are thoroughly preoccupied with their play, they remain for hours together without feeling the necessity of coughing, whilst they have constant paroxysms when in a state of repose, or are incessantly awakened out of their sleep by the same cause; and M. Jolly states that he has not been surprised to learn that English medical men have been able to cure whooping-cough by distracting the attention, and in some cases by placing the patients near the noise of manufactories. Asthma, properly so called, has likewise undergone the salutary influence of a wisely applied will; whether in surmounting, by forced respiration, the spasm of the bronchial tubes which have become inaccessible to the air, or by diverting by preoccupation, the morbid exercise of the innervation appropriated to their exercise. It is to attain this double end that Laennec recommended certain invalids to read aloud, so as to prolong expiration, and to make inspiration more complete. As a means of distraction, he also recommended the exercise of the senses, even in the course of the night, when the fits seemed, as is frequently observed, to follow the nyctohemeral revolution. On this subject, M. Jolly relates a curious history of a patient who arrested his paroxysms at will by lighting a candle and distracting his mind by inspecting the furniture of his bedroom. It is more difficult to conceive that the will can master attacks of epilepsy; and yet the fact is not unexampled. M. Jolly relates that he saw, in 1827, in the St. Louis Hospital, a man who had suffered for years from this disease, and who could at will throw off his attacks. It was enough for him, to the great astonishment of the pupils who witnessed the fact, to make the muscular apparatus of mastication and deglutition undergo voluntary exercise, by introducing solid food into his mouth as soon as he had a premonition of the return of the paroxysms. A fact well worthy of remark, and of the careful attention of the physician, is that the

will, of which the power is, so to say, incalculable over movements of contraction, remains powerless with regard to movements tending to muscular relaxation. Every one who draws himself up under the dread of pain, remains under the influence of the instinctive power of contraction, notwithstanding the efforts of will which he exercises to overcome it. People inadvertently swallow a fruit-stone, or some smaller or larger body; and yet sometimes the deglutition of a very small dose—nay, of a simple granule of medicine—can scarcely be accomplished by the firmest will; and there is reason to believe that the hydrophobia exhibited by certain nervous women, is frequently occasioned by nothing else than the struggle which goes on between fear and the will to swallow. Other examples show that it is vainly sought to obtain relaxation of the muscles of the abdomen from a patient when it is desired to examine that region; all his efforts of will only increase the contraction he endeavours to master, when the slightest distraction of the will suffices to put a stop to it. The same thing occurs with the patient, when it is desired to reduce a fracture. The more we endeavour to obtain muscular relaxation, the more the state of contraction which forms an obstacle to the reduction of the fracture increases; if then, by any physical or moral cause, any distraction of the will come on, all the muscles become relaxed, and the reduction is performed as though by magic. We also know that sleep, which consists in the relaxation of the muscular powers, must be freed from the influence of the will. If we strive to obtain the boon of sleep, we infallibly drive it away, and voluntarily deliver ourselves up to insomnia.

SCOTLAND.

MR. W. E. FORSTER has been elected Lord Rector of the University of Aberdeen. The votes were:—For Mr. Forster, 378; for Lord Lindsay, 145.

ROYAL MEDICAL SOCIETY OF EDINBURGH.

THE session of the Royal Medical Society of Edinburgh was opened on the 12th ult., when an interesting address was delivered by Mr. Annandale. The subject was reminiscences of the Edinburgh Medical School for the last eighteen years; and the speaker dwelt on the changes that had taken place since he first became a medical student, not only in the methods and extent of medical and surgical teaching, but in the *personnel* of the teachers and professors. He described the appearance and character of some of those who have been lost to us in the interval, and estimated the causes which led to their success. The address was enlivened by many interesting and amusing anecdotes. There was a large attendance of students, and we are glad to learn that more new members were proposed on the first night than has been the case for many years past. The Royal Medical Society is one of the most important auxiliaries to medical study in Edinburgh, and is taken advantage of by all those who wish to make the most of their opportunities as students of this school.

THE EDINBURGH MEDICAL SOCIETIES.

THE Medical Societies of Edinburgh have again begun work. The Medico-Chirurgical met on Wednesday, the 10th ult., at which an able paper on the Natural History and Treatment of Nævus was read by Dr. John Duncan; and two papers, on Jaborandi, and Chloral, its External Uses, by Dr. Craig. The Obstetrical held its first meeting on the 17th, when Dr. Keiller and Professor Simpson read papers; the former, on Congenital Malformation; the latter, on Sarcoma Uteri.

EPIDEMIC ON BOARD THE "MARS".

SOME time ago, two cases of scarlet fever broke out on board the *Mars* training-ship, now in the Tay; and, notwithstanding the precautions taken, the disease spread rapidly among the boys, and, by the 9th current, twenty-two boys were ill and two had died. Under these circumstances, the rest of the boys, nearly three hundred in number, were removed, some to the care of their own friends, and others on

board the tender *Lightning*. The committee of the *Mars* applied for the use of the Dundee Fever Hospital, which was then empty, to accommodate one hundred of the boys; and this application the directors at once acceded to. It is suspected that the water used on board the *Mars* was unwholesome, and the subject is undergoing strict investigation. There have been no more cases up to Monday last; that is to say, for nearly a week. One hundred and thirty boys still left on the *Mars*, are quite well; nineteen at the Dundee Infirmary are convalescent.

THE COCA LEAF.

IN an introductory address to the Edinburgh Botanical Society, Sir Robert Christison, its President, related some experiments he had been making with a view to test the "coca leaf", which, he explained, was not to be confounded with the well known cocoa. In Peru, where it grows, coca is reported to have remarkable nourishing properties; and, in order to ascertain the precise nature of these, he chewed the leaf by way of stimulant on the occasion of two ascents of Ben Voirlich. On reaching the top, he felt greatly fatigued, and began to chew his coca; with the result, that he was able to make the descent, not only with firmness but with almost juvenile elasticity. He further stated, that by its use he had found himself able to walk sixteen miles with ease, although when he attempted this feat without such nourishment he felt greatly fatigued.

WATER-SUPPLY OF ELGIN.

AT a special meeting of the Elgin Water Company, held on November 12th, it was agreed that an additional supply of water should be brought into the town, and that the company should be incorporated by Act of Parliament. The Secretary stated, that he had accepted an offer of lease of Foths Wardend and Bardonsburn Wells, Birnie. He also read reports showing the daily supply which each of them would yield, and an analysis by Dr. Macadam of Edinburgh.

IRELAND.

THE first meeting for the present Session of the Medical Society of the College of Physicians was held on the 10th instant, the inaugural address being given by Dr. Gordon, President.

THE first meeting of the Dublin Pathological Society will be held on Saturday, November 27th, when the council and officers for the ensuing year will be elected.

It is now generally understood that Dr. Kidd will be elected to the office of Vice-President of the Irish College of Surgeons, vacant by the death of Mr. John Hamilton. The election will take place on Monday next, the 21st instant.

THE Surgeoncy to St. Patrick's (Swift's) Hospital for the Insane, which is of the nature of a consultant surgeoncy, is sought for by Mr. William Ellis and Mr. Thornley Stoker. Other candidates are in the field. We understand that Mr. Ellis will probably succeed to the office.

THE annual meeting of the Dublin Obstetrical Society will be held this evening (Saturday) at the College of Physicians, at which the officers for the ensuing year will be elected, and the President, Dr. Athill, will deliver the annual address.

DUBLIN HOSPITAL SUNDAY FUND.

THE second annual collection took place last Sunday, and we are afraid that the tempestuous and rainy weather on that day prevented many people from attending any place of worship, so that most probably the sum received from the various congregations will not equal that of last year. The returns from all the churches have not yet been

published, and, therefore, we cannot state at present the general result. In St. Patrick's Cathedral, the sermon was preached by Archdeacon Reichel, who very properly remarked that the whole of Ireland was interested in the maintenance of the Dublin hospitals, which should be regarded as great teaching institutions, where students of medicine, who were afterwards to practise throughout the country, received the education and training necessary for the discharge of their arduous and responsible duties.

THE SURGEON TO THE QUEEN IN IRELAND.

MR. WILLIAM COLLES, Regius Professor of Surgery in the University of Dublin, and Surgeon to Dr. Steevens's Hospital, has been appointed Surgeon in Ordinary to Her Majesty in Ireland. The appointment has caused universal satisfaction in Dublin.

CORK OPHTHALMIC AND AURAL HOSPITAL.

THE report of the institution, read at the late annual meeting, shows that 200 in-patients and 1,740 out-patients have received the benefit of ophthalmic treatment during the past year. Nearly 200 operations have been performed, and 197 cases discharged cured. The economy with which the hospital is conducted is proved by the fact that the total expenditure of the year is set down as £212. The speakers at the meeting awarded a just meed of praise to the medical officers of the hospital, especially to Dr. Macnaughton Jones, for their disinterested efforts in bringing it up to its present state of efficiency and usefulness.

DUTIES OF REGISTRARS.

THE following case, which came before the Court of Exchequer in Dublin, on November 8th, has raised an interesting question with regard to the duties of registrars of births and deaths in Ireland. If the decision be against the defendant, we think many of our brethren who are dispensary medical officers, and therefore registrars, may look out for more dangers in their perilous and unprofitable occupations.

"Byrne v. Halpin.—Mr. John Gibson applied in this case for leave to plead several defences. The plaintiff brings the action against the defendant, who is a registrar of births, deaths, and marriages, to recover damages for alleged libel—namely, for having entered him in the register-book as the putative father of an illegitimate child, and subsequently supplied a certified copy of the entry to a third party. The defendant sought to plead a traverse of the writing and publishing; a traverse of the innuendos; and a plea of no libel. His defence substantially was that, as registrar of births, deaths, and marriages, he was bound by Act of Parliament to make inquiries into the birth of the child in question, and to enter the particulars according to the form of his book, which should contain the name of the father and mother; that he received the particulars from the mother of the girl, who lived in the house with her. As to having supplied the certified copies, he pleaded that under the Act of Parliament he was bound to grant a copy of the entry in the registrar's book on the payment of a fee, and he claimed the matter to be privileged if he believed it true. Baron Dowse said he thought it was a very fair case to raise the point, but he believed they would hear a great deal more about it. Mr. Gibson said, from the fact that the plaintiff was signed by one of the most eminent counsel at the bar, he believed the learned gentleman must have been inclined to think that a good action would lie. The motion was granted."

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The second meeting of the session was held at the Royal Kent Dispensary, Greenwich Road, on Friday, November 5th; Dr. J. N. Miller, President, in the chair. Dr. J. Braxton Hicks brought forward some cases illustrating the efficacy of large doses of quinine in some cases of puerperal fever. The next meeting will be held on Friday, December 3rd, at 8 P.M. precisely, when Dr. Tilbury Fox will read a paper.

CIVIC GIFTS TO HOSPITALS.—An annual subscription of £5 5s. has been voted by the Worshipful Company of Clothworkers, two donations of £21 by the Worshipful Company of Fishmongers and the Worshipful Company of Drapers, and a donation of £15 15s. by the Worshipful Company of Girdlers, to the City Orthopædic Hospital. The Drapers' Company have voted an additional donation of £21, and the Clothworkers' Company an annual subscription of £10 10s., in aid of the Royal National Hospital for Consumption at Ventnor.

CHOLERA IN THE ROUTE OF THE PRINCE OF WALES.

WE have received letters and telegrams of considerable interest from India relative to the medical conduct of the Prince's tour in India, which has been so unfortunately affected by the prevalence of cholera in certain districts which formed part of the contemplated route. It may be well to premise that Dr. Fayer, the medical attendant of the Prince during his tour, stipulated, on accepting that honourable but highly responsible charge, that he was to be left absolutely free as to the ultimate decision of the route which should be adopted. Intimately acquainted with the country and its medical history, he foresaw the probability of what has now occurred.

It will be in the recollection of our readers that it was intended the Prince of Wales should disembark at Beypore for his tour in Southern India. From thence the route was to the base of the Annamally Hills, abounding in large game, and where arrangements were made to give His Royal Highness some days of sport as yet new to him and his party. Leaving the Annamally Hills, the next points were Coonore and Ootacamund, the well known hill sanitaria stations on the Neilgherry, or "blue mountain" range, where His Royal Highness would find a climate equal to the best in the south of Europe. Some days were to have been spent there; and thence the royal progress was to Mysore, and to Bangalore, the head-quarter station of the troops of that quasi-independent state, and, as regards climate, the most coveted station in all India. One night by rail would bring His Royal Highness to Madras, whence the tour in Southern India would end. Unfortunately, cholera prevails along the whole line indicated above, some cases having even been reported from Coonoor, probably imported from the plains.

For two years, Southern India had enjoyed an almost complete immunity from the disease, not a case having been brought to the General Hospital at Madras in that time; although in 1818, and on several subsequent epidemics, Coimbatour has been gravely affected by cholera from the end of November to January. For the first time in living memory, cholera has invaded the South of India from Ceylon; its usual course being along the great epidemic highway, from its "endemic area" in lower Bengal—that is, from east to west, and then from north to south, until the extremity of the continent is reached; from thence it has almost invariably invaded Ceylon. On this occasion, the disease appeared in Ceylon, the recrudescence of some former epidemic; and was carried by some coolies to Tutticorin, from whence it has spread all over Southern India, in no place showing itself in anything worthy the name of an epidemic; rather, at the various places named, in the shape of a number of "dropping cases", but quite enough to make it inexpedient to expose the life of the heir apparent to the risk of so dangerous a disease.

Dr. Fayer has had to take into consideration the fact, which a wide Indian experience has shown, that new comers into a locality that has been or is under the influence of the disease, are peculiarly liable to an attack of cholera. Again, wherever the Prince is, there will necessarily be a large camp; and the denser the mass of people collected together, the greater the danger of an outburst of cholera during a period of epidemic predisposition. The Madras Government having been unable to give positive information that the proposed route was free from the disease—but, on the contrary, being compelled to furnish advices of the contrary character—Dr. Fayer's duty has been clear. Much disappointment must be felt by persons expecting to see the Prince, that he do not visit them; but considerations of this kind will, of course, not be allowed to stand in the way of duty, which requires clearly that the Prince should be kept from unnecessary exposure to the influences of this dire disease. There is reason to be thankful that the Prince is in the hands of a physician highly experienced in India and in Indian diseases: a man of calm clear judgment, able to form his own opinion as to the correct course to be followed, and of unalterable firmness in carrying out what he has ascertained to be right and proper.—Our latest written despatches are dated from the *Serapis*, October 30th; and from Aden, October 31st. Writing, first, from the hottest part of the Red Sea, thermometer 80 degs. in the cabins, 120 to 126 degs. in the sun, they report "all well"; they add: "The medical world will be glad to know that His Royal Highness the Prince of Wales is in excellent health; he is thoroughly enjoying the voyage, and is in high spirits. It is certainly rather warm and stuffy, and the air is laden with moisture; but we feel very slight inconvenience from the heat, the ship is so well ventilated, and all means of insuring comfort attended to. It is very satisfactory to know that His Royal Highness has borne the

test of the Red Sea so well. He will have no greater heat to encounter; and there is every reason to hope that he will derive benefit as well as pleasure from the voyage. All the suite and servants are well. It is the same with the officers and crew of the *Serapis*; so that, on the whole, our voyage so far has been most propitious."

COMMUNICABILITY OF FOOT-AND-MOUTH DISEASE TO THE HUMAN SUBJECT.

AN able correspondent in Scotland sends us the following.

During the autumn months, while residing in Morayshire, business and pleasure combined brought me a good deal into contact with the foot-and-mouth disease. The dry statistics hitherto associated in my mind with the disease gradually gave place to a more lively interest as my knowledge of facts increased. The contagion was so subtle that a constant excitement was kept up as to where it would break out next; and, unlike other eruptive fevers, one attack brought no immunity for the future. Hares, rabbits, and all such freeholders of the soil, could deposit the germs of the disease in their midnight depredations; and the wind was supposed to carry it for "two miles".

Each day brought news of fresh outbreaks; until I found my little farm standing alone, like a citadel closely invested by the enemy foot-and-mouth disease. Such being the condition of affairs, I began to remark the prevalence among my neighbours of tied-up heads; and, upon inquiry, was told they were suffering from "an epidemic of festered mouths". Again, in a more distant farm, I found a similar state of things existing simultaneously with the disease among the cattle.

I now began to pursue my investigations in this direction; and found that the country people were so accustomed to the fact that human beings could be more or less affected by the foot-and-mouth disease, that the suggestion never raised a smile. They all seemed to know a laddie or a lassie who had suffered from bringing a cut finger into contact with the sore teats, or with dung; or a bairn who had drunk the milk, and got a festered mouth. Not only had the matter come under their own observation, but they had read in the local papers accounts of people being affected by the disease. I was amused myself one day to read an account of the outbreak of the foot-and-mouth disease among the human animals of an infected farm in England, the writer indignantly refusing to believe that two opinions on the subject could exist.

My next step was to inquire of the leading medical practitioner of the place if he had seen any cases; and, while he expressed much scepticism, he nevertheless admitted that he was then attending a farmer's child whose illness he could account for in no other way. The child, hitherto perfectly healthy, had been drinking the fevered milk; and had also been carried about in the arms of its father, whose attentions were divided between his cattle and his child. The doctor described his patient's mouth as blistered and very sore. A personal friend, whose child, eighteen months old, was chiefly subsisting on a milk-diet, writes to me that the doctor whom she consulted had no hesitation in attributing the cause of her child's illness to the foot-and-mouth disease then prevailing in the farm whence she got the milk. "The toes and fingers were covered with blisters, and also her mouth, which was dreadfully sore. It was most obstinate, and many weeks elapsed before she was cured." Up to that period, the child had been, like my former case, perfectly healthy, and has been so ever since her recovery.

A lady of my acquaintance who suffered, two years ago, from drinking the typhoid milk in the celebrated Marylebone epidemic, gave me an account of a visit she paid lately to the sick bed of a farmer's wife, when she was prevailed upon to drink a tumbler of milk to escape from the more potent and customary beverage of the country. Shortly after this, she began to suffer from a most painful fester in the mouth, between the lower lip and gum, accompanied by a severe spasm, which loosened her teeth by seeming to extract them downwards. On visiting the same farm a fortnight later, she was told that all the cows were suffering from foot-and-mouth disease; but were for the most part recovered, only two being now ill. She asked leave to inspect the mouth of one of those at present suffering; and was not a little astonished to recognise, although in an aggravated degree, an affection of the mouth similar to her own. She added to her statement her private conviction that she alone was capable of interpreting the real sufferings of the animals in that unsuspected spasm. It is natural to suppose that the deleterious effects of the milk would correspond more or less with the intensity of the disease in the cow at the time of fever.

A farmer living near Carron, lost his whole litter of pigs by giving

them the diseased milk to drink. A test of the dangerous periods being over, I am told, is to boil the milk; and, when it no longer curdles, it is considered safe.

A great difficulty with which the farmers have to deal is the rearing of the young calf during the fever of the mother. It is generally removed into safer quarters, and kept alive upon linseed meal and beaten-up eggs; while the cow, like Rachel, is left to weep for her young. The milk does not forsake her, but first assumes a yellowish appearance, then becomes poor and thin as convalescence sets in. If the disease attack the cow at a certain stage of her pregnancy, she either miscarries, or goes on to maturity and brings forth a dead calf. At such seasons, the farmer is in great anxiety for the safety of the animal; and is very thankful when three or four days elapse without the appearance of the fatal "red water", indicating septicaemia. Under these circumstances, recovery is very slow, the emaciation is pitiful, and she does not bear a calf the succeeding year.

Considering the enormous losses that ensue from the orders of the Privy Council to destroy the entire herd of imported cattle if one alone shows symptoms of the disease on landing, and the losses arising within the area of the home farm, it is surprising that more enlightened measures are not adopted for the preservation of life and limiting the spread of infection. Quarantine on the one hand, and the enforcement of sanitary rules on the other, would do much towards attaining both ends. Beyond orders to report the outbreak of the disease, and a few magisterial penalties for various omissions, the farmer is practically left to himself, which is the worst thing, with all his contending interests, to which he could be left. His first instinct is to keep the fact of the outbreak quiet so far as his neighbours are concerned; he allows his diseased animals to graze in their accustomed field, rubbing noses with their friends in the adjoining meadow, and leaving a legacy of infection for the next renters of the park. His clothes become saturated with the slime from the mouths and nostrils of the suffering beasts in his endeavours to press soft food down their throats; and from this fever-lair he will proceed straightway to the neighbouring market, to spread the disease far and wide. A man was pointed out to me as the one virtuous exception to this rule, as he was known always to change his clothes on leaving his farm. I inquired at several farms what was done with the emanations and fevered milk of the infected animals; and found, as a rule, that it was cast into the dung-heaps, to come out as manure the ensuing spring. Another mode of disposal was to throw it into the river passing the door, to be carried to the unconscious animals drinking at the stream lower down. No wonder that repeated outbreaks take place when so many farms create their own vicious circle, and are their own hotbed of disease.

On the other hand, it was interesting to observe that, among the more "advanced" farmers, the disease could be held in check, and sound and unsound animals lodged with impunity within a few yards of each other. Attention to the daily use of disinfectants, ventilation, and cleanliness, is all important, along with a certain amount of discipline among the farm servants. The disease seldom lasts more than three weeks or a month, the season of incubation being from seven to ten days. With proper care, it is not of a fatal character. An innocent idea prevails among the country people that it is a wholesome disease, inasmuch as the beasts are "heart hale a' the time". If they could only swallow the food, they would be all right, and their digestion proved as good as ever. The pigs come in for small commiseration. Being greedy and unable to eat, "they will set up sich a skirling, that naebody on the farm can get a wink o' sleep whativer". It is not an accepted view that their "skirling" may be due to their sufferings; their greediness and inability are the only things allowed.

Having given my autumnal experiences, I am curious to know if others have made similar observations with regard to the effect of the foot-and-mouth disease upon human beings. The disease is well known in Ceylon among cattle; and whether the two things may be associated or not, a painful mouth-disease is also known to attack Europeans there, for which the only cure is to leave the island.

PROMOTION, ETC., IN THE ARMY MEDICAL DEPARTMENT.—Surgeon-Major J. Leitch, M.D., from half-pay, to be Surgeon-Major, *vice* A. A. Stoney, retired on half-pay.—Surgeon R. C. Lever, M.B., to be Surgeon-Major, *vice* J. F. Loughed, retired on temporary half-pay, September 16th, 1875.—Surgeon B. J. Jazdowski, M.B., to be Surgeon-Major, *vice* W. A. White, M.D., retired on temporary half-pay, September 16th, 1875.—Surgeon-Major E. Drew retires on temporary half-pay, October 6th, 1875.—Surgeon-Major O. B. Miller retires on temporary half-pay, October 17th, 1875.—Surgeon J. E. Barker, M.B., resigns commission.—Surgeon C. Spurway, on the half-pay list, resigns commission.

ASSOCIATION INTELLIGENCE.

WEST SOMERSET BRANCH.

MEMBERS of this Branch are requested to take notice that Henry Alfred, Esq., Taunton, will perform the duties of Honorary Secretary and Treasurer during the temporary absence of Dr. Kelly, who has gone to Mentone for the winter.

SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT MEETINGS.

THE next meeting of the members of the above District will be held on Wednesday, November 24th, at 3.30 P.M., at the Royal Pavilion, Brighton; Dr. HENRY MOON in the Chair.

Dinner at Markwell's Royal Hotel at 5.45 P.M. Charge, 5s., exclusive of wine.

The Aquarium, Sussex County Hospital Museum, and the Museum and Picture Gallery of the Town, will be open to members. The first named on presenting their cards.

Sir Cordy Burrows will relate a case of Hip-joint Disease.

Notice of intended communications is requested by the Secretary by Tuesday, the 16th instant.

THOMAS TROLLOPE, M.D. Cantab., *Hon. District Secretary*.
35, Marina, St. Leonards-on-Sea, November 9th, 1875.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

THE next meeting, to be held in the Music Hall Buildings, Aberdeen, on Saturday, December 4th, at 3 o'clock in the afternoon, will be devoted to a debate on the proper place of Alcohol in Therapeutics. The debate will be opened by Dr. Urquhart, Aberdeen.

J. URQUHART.

November 11th, 1875.

ALEX. OGSTON.

SOUTH EASTERN BRANCH: WEST SUSSEX DISTRICT.

THE next meeting will be held at Worthing, on Friday, December 10th; A. H. COLLET, Esq., in the Chair.

Any member desirous of reading a paper, or communicating any case of interest, is requested to give notice to the Honorary Secretary forthwith.

WM. J. HARRIS, *Honorary Secretary*.

13, Marine Parade, Worthing, November 15th, 1875.

SOUTHERN BRANCH: SOUTH-EAST HANTS DISTRICT.

A MEETING of the above District was held at the India Arms, Gosport, on Wednesday, October 13th. Thirty gentlemen were present, and the President (W. H. GARRINGTON, Esq., J.P.) occupied the Chair.

Pyæmia.—Surgeon-General J. MOUAT, V.C., C.B., read a paper on *Pyæmia*. A discussion followed, in which Dr. Manly, Mr. Brook, Dr. Cotton, R.N., Mr. H. Burford Norman, Mr. G. Turner, Inspector-General Smart, Mr. F. Morley, Dr. Nicolson, Dr. L. Owen, and Dr. Ward Cousins, took part.

Cystic Tumour of the Lower Jaw.—Dr. WARD COUSINS exhibited a case of large cystic tumour of the lower jaw, which had been completely cured by sloughing, induced by aspiration.

Dinner.—In the evening, twenty members dined together, under the presidency of Dr. Kealy of Gosport.

SOUTH WALES AND MONMOUTHSHIRE BRANCH: AUTUMNAL MEETING.

THE autumnal ordinary meeting of the South Wales and Monmouthshire Branch was held at the Assembly Rooms, Tenby, on September 30th. In the absence of the President (S. H. STEEL, M.B.), the meeting was presided over by JAMES PROBERT, Esq., of Merthyr Tydfil.

Papers.—Two papers, with illustrative cases, were read by J. H. WATHEN, Esq.: 1. On the use of Ergotine hypodermically as a Hemostatic; 2. On a case of Torticollis treated successfully by *Succus Conii* in doses commencing with two drachms three times daily, increased gradually to ounce doses, with similar frequency. Valerianate of zinc, iron, nux vomica, and faradisation, had been previously unsuccessfully employed.

New Members.—Seven gentlemen were elected by the Branch Council.

cil members of the Association, and eight by the meeting members of the Branch.

Luncheon and Dinner.—Mr. Chater provided most hospitably for the members on their arrival; and, after the meeting, they dined together at the Gate House Hotel.

Remarks.—The meeting was a small but very pleasant one, and it was a matter of general regret that so few availed themselves of the opportunity of a visit under such circumstances to so charming a locality. Some explanation is to be found in the great distance of Tenby from the populous centres of the district comprehended within the limits of the Branch.

SHROPSHIRE ETHICAL BRANCH: ANNUAL MEETING.

THE annual general meeting of the Ethical Branch was held at the Lion Hotel, Shrewsbury, on Wednesday, October 27th, at 1 P.M.; the President, RICHARD WILDING, Esq., of Church Stretton, in the chair.

Notwithstanding the inclemency of the weather and a continuous heavy downpour of rain, the meeting was attended by an unusually large number of country practitioners from distant parts of Shropshire and Montgomeryshire; and, after an animated discussion in reference to the treatment of Dr. Inglis by the Executive Committee of the Worcester Infirmary, the following resolutions were passed unanimously.

Minutes of General Meetings.—"That the minutes of the last general meeting be affirmed."

Vote of Thanks.—"That the cordial thanks of the meeting be given to the late President, Vice-Presidents, Council, Honorary Secretary, and Treasurer for their valuable services during the past year."

Election of Officers.—"That John Rider, Esq., be elected President; J. Sides Davies, Esq., and W. Thursfield, M.D., Vice-Presidents; and the following gentlemen Members of the Council, for the ensuing year, in the place of those who retire by rotation or otherwise, in accordance with the 7th General Law of the Branch:—James Bratton, Esq.; Henry Fenton, Esq.; Thomas Groom, Esq.; S. Betton Gwynn, Esq.; and J. R. Humphreys, Esq."

Representatives of Branch in General Council and on Parliamentary Committee.—"That, in accordance with the 8th General Law of the British Medical Association, Richard Wilding, Esq., John Rider, Esq., J. R. Humphreys, Esq., and Dr. Jukes Styrup be the representatives of the Branch in the General Council for the ensuing year; and that the President, Richard Wilding, Esq., be the Branch representative on the Parliamentary Committee."

Medical Advertising.—"That, in the opinion of the meeting, the system of advertising 'medical works' in non-medical papers is highly objectionable, and incompatible with the honour and dignity of the profession; alike reprehensible, also, is the practice of giving written testimony in favour of 'articles of commerce', and tacitly or otherwise sanctioning its publication."

Hospital Charity Abuse and Gratuitous Operations for well-to-do Patients.—"That the members of this Branch, while fully approving the efforts now being made in London to check the gross abuse of 'hospital charity', regret that patients well able to pay a fair surgical fee to their ordinary professional attendants are so often encouraged by hospital surgeons to enter their respective hospitals for gratuitous operation."

Dr. Inglis and the Executive Committee of the Worcester Infirmary.—"That, in the opinion of this meeting, the action of the Executive Committee of the Worcester Infirmary in passing a vote of censure on Dr. Inglis 'for neglect' (so-called) 'of duty by absenting himself from the out-patients of the infirmary, on February 13th, without providing a substitute (other than the House-Surgeon) according to the rules, to the disappointment of two patients in a humble class of life—such absence having been necessitated by a sudden and urgent professional call elsewhere—was harsh and unjust to Dr. Inglis and an insult to the profession, and that such vote ought to be rescinded; meanwhile, the members of the Shropshire Ethical Branch beg to tender to Dr. Inglis their cordial sympathy and support; and further, that the professional loyalty and *esprit de corps* of Dr. Hunt in withdrawing his application for the vacant post of honorary physician, caused by the resignation of Dr. Inglis, is deserving of commendation and public recognition."

Quack Advertisements.—"That the President, Dr. Styrup, and J. R. Humphreys, Esq., be deputed to communicate with the proprietors of county newspapers, and point out to them the immoral tendency of and contaminating effect produced upon the youth and purity of the country by the disgusting 'quack' pamphlets which are advertised and disseminated far and wide through the medium of the press—an effect

which the meeting (representing a large number of medical practitioners in this and the adjoining county of Montgomery, etc.) venture to hope that the local and other papers will, for the future, assist in counteracting by the exclusion of such advertisements from their pages."

Thanks to the President.—"That the cordial thanks of the meeting be given to the President—R. Wilding, Esq.—for the courtesy and ability with which he has conducted the business of the meeting."

Communications, etc.—Edwyn Andrew, M.D., related a Case of Large Abscess treated by the Aspirator and Lister's Plan; and J. G. Wilson, L.R.C.P.Ed., communicated a Case of Poisoning by Hydrate of Chloral treated by Injections of Solution of Strychnine with Brandy and Extract of Meat; also a Case of Tetanus treated by Chloral Hydrate, Bromide of Potassium, and Tincture of Belladonna. The reading of a paper on the Early Detection and Treatment of Stone in the Bladder, by W. F. Teevan, Esq., was unavoidably deferred.

Several new members joined the Branch.

Dinner.—A hearty vote of thanks having been accorded to Dr. Styrup for his valued services to the Branch, the meeting was closed, and an adjournment made to the Ball Room, in which the dinner was served punctually at 3.30 P.M. (for the convenience of the country members, several of whom had to leave by inconveniently early but last trains), under the presidency of R. Wilding, Esq.; the vice-chair being filled by John Rider, Esq., President-elect; and a most sociable evening was spent.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

THE first ordinary meeting of the session, 1875-76, was held on Oct. 14th, at the Midland Institute, Birmingham; present, Dr. W. F. WADE, President, in the Chair, and fifty-six members and visitors.

New Members.—Mr. H. D. Best (Bilston), Mr. W. Horton (Chase-town), Mr. J. J. Hues (Handsworth), Mr. James May (Nechells), Mr. A. Parkes (West Bromwich Hospital), Mr. Hecket Skipworth (Birmingham), Rev. W. J. J. Welch, M.D. (Stourbridge), and Dr. C. C. Wimberley (Coventry), were elected members of the Branch.

Communications.—The following specimens were presented.

1. *Dilated Stomach.*—Dr. PHILIP BINDLEY showed an enormously dilated stomach, which had been removed from a man, aged 53, a patient of Dr. Foster's, in the General Hospital. On admission, he was greatly emaciated, and complained of epigastric pain and dysphagia. A few days afterwards, the dysphagia having greatly increased, he said he felt "something give way inside him", and immediately experienced much relief, both of the pain and of the difficulty of swallowing, but subsequently they recurred, and were further complicated by repeated profuse hemorrhages from the bowels. Inquiry into the previous history furnished distinct evidence of chronic gastric ulcer. He gradually sank after having been in hospital about two months. At the *post mortem* examination, the stomach was found to be greatly dilated, and its walls thickened throughout, but especially at the pyloric end. There were numerous firm old adhesions between the pylorus and the neighbouring organs—liver, pancreas, and colon. An examination of the interior of the stomach revealed on its anterior wall, about an inch from the pylorus, a small puckered cicatrix, at the lower border of which was a hole one inch in diameter, with edges partly clean cut, partly ragged. On introducing the finger through this opening, it passed into a cavity about the size of a hen's egg, lying under the pylorus, amongst the organs which had become securely bound together by the adhesions above referred to. It would appear, therefore, that the primary lesion was a chronic gastric ulcer, which caused irritation of the surrounding parts and consequent adhesion. Though the ulcer was partly healed, a solution of continuity probably at some time occurred, through all the coats of the stomach, which permitted some of the contents to escape into the tissues, thus being the cause of increased irritation and further adhesions, and ultimately leading to an abscess which discharged itself into the stomach at the time when the patient said he felt something burst internally. The eroded state of the margin of the opening sufficiently accounted for the hæmorrhage from the bowels, though no ruptured vessel could be demonstrated; but there had been no hæmorrhage for the three weeks preceding death.

2. *Recurrent Tumour of the Eyeball.*—Mr. H. EALES showed a man, aged 49, from whom Mr. J. Vose Solomon had recently removed the whole of the contents of the left orbit, and the greater part of both eyelids, in the treatment of a large recurrent tumour of the left eyeball, which had so involved the surrounding structures, as to nearly fill the orbit and destroy the eyeball (in which till recently the sight had been good). This growth had been removed four times previously, at intervals varying from three to nine months. The patient, who

before the operation was almost in a moribund state, seemed in good health and spirits, and had no enlargement of neighbouring lymphatic glands. The actual cautery was freely applied to the walls of the orbit at the operation, the inner wall being perforated. Subsequent unhealthy looking granulations were treated by the application of chloride of zinc paste. The tumour, which grew from the sclerotic outside, consisted microscopically of large, round, nucleated cells, with some spindle-shaped cells and a scanty stroma.

3. *Exophthalmia*.—Mr. H. EALES also showed a female, aged 41, under the care of Mr. Arthur Bracey, with very marked exophthalmia on both sides, the eyes being protruded beyond the level of the eyebrows. A hard substance could be felt in each orbit to reach forwards to the margin (between it and the globe), and a large semisolid tumour was to be seen on the hard palate. The sight of the left eye, which was most protruded, was very good; but the vision of the right eye was quite gone. This was found on ophthalmoscopic examination to be due to marked atrophy of the optic nerve. There was a clear history of primary syphilis two years ago, with the usual subsequent skin-affection, sore throat, and falling off of the hair, etc.; which was followed by loss of sight in the right eye six months before any exophthalmia appeared, and was no doubt due to syphilitic neuro-retinitis, which ended in atrophy of the nerve. This patient seemed never to have undergone a thorough course of medical treatment. She did not suffer from any enlargement of the thyroid body.

President's Address.—Dr. WADE delivered his Presidential address, which has appeared in the JOURNAL, October 16th.

At the conclusion of the address, Mr. W. C. Garman, Ex-President of the Branch, having taken the Chair, a vote of thanks to Dr. Wade for his excellent address was moved by Dr. BELL FLETCHER and seconded by Dr. HESLOP, and carried by acclamation. Dr. WADE replied, and the meeting separated.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

A MEETING of this Section was held October 29th, 1875; VINCENT JACKSON, Esq., President, in the Chair. Thirty members were present.

Lupus Vulgaris.—Dr. MACKEY showed three cases of lupus vulgaris, illustrating treatment. 1. A strumous girl, aged 20, had been affected seven years with a tuberculated growth on the nose. It was uncurd by excision and by many caustics, and was now removed by zinc nitrate in paste and emplastrum hydrargyri. Reference was made to Professor Corradi's use of metallic zinc after silver nitrate in ulcerations. 2. A strumous girl, aged 12, had been affected seven years with superficial serpiginous ulceration of the face and neck. She was apparently cured after three months' treatment with carbolic acid and emplastrum hydrargyri, but relapsed two months after the omission of treatment. Carbolic acid was found to be very painful, and its action too superficial for permanent good. 3. A strumous boy, aged 12, had been affected since infancy with "impetiginous lupus" of the right cheek. Cure was progressing under silver nitrate and mercurial ointments, with cod-liver oil and tonics.

Lamellar Cataract and Defective Teeth.—Mr. PRIESTLEY SMITH exhibited a boy aged 15, the subject of lamellar cataract in both eyes, associated with imperfections in the teeth. The case was brought forward as an illustration of Mr. Hutchinson's theory concerning this association; namely, that the dental imperfections are due to mercurial treatment during infancy, directed against the convulsions which usually precede the formation of lamellar cataract (BRITISH MEDICAL JOURNAL, March 6th, 1875, p. 307). No history of fits had been obtained in this case; but the patient had had no power in the legs until he was two years old. Grey powders had been taken rather freely during infancy. The impairment of sight was first discovered in the fifth or sixth year. The incisor and canine teeth were eroded and dirty-looking, from loss of enamel on their anterior surfaces. The first molars had no enamel on their opposing surfaces. Iridectomy had been performed downwards and inwards in each eye, with great improvement to vision.

Amputation of the Foot.—Mr. GEORGE EVANS showed a patient whose foot he had removed after Jules Roux's method, and pointed out the advantages of this method over Syme's or Mackenzie's in such cases.

Retro-uterine Hematocoele.—Dr. MALINS showed a specimen of the uterus and appendages from a case of retro-uterine hæmatocoele of large size. The top of the cavity, which contained fully a pint of purulent matter, was arched over by bands of lymph uniting the posterior part of the fundus uteri with the peritoneum behind. This new tissue had

given way, allowing the contained matter to escape into the peritoneal cavity, followed by the death of the patient.—Dr. WADE, after some comments on the case, remarked that he thought that, if the clinical element of the Section were more fully developed, the meeting would become more popular and useful; and he asked Dr. Malins through the Chairman, to give further details of the case.—Dr. Malins complied with the request.

Femoral Aneurism.—Mr. H. L. BROWNE exhibited a specimen of femoral aneurism, and read notes of the case.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE first meeting of the Session was held at the York House, Bath, on Thursday evening, October 28th; W. MICHELL CLARKE, Esq., President, in the Chair. There were also present twenty-eight members and two visitors.

New Members.—Dr. Logan was elected a member of the Association and Branch; and Mr. J. J. Mitchell of Bath, and Dr. Eager of Northwoods, members of the Branch. Several new members were proposed, and will be balloted for at the next meeting.

Discussions at Meetings.—The PRESIDENT reported that the Council of the Branch had decided, "That it would be desirable to try as an experiment this Session, Dr. Brabazon's proposal to set apart two meetings for discussion of some special subject, and that the January meeting at Bath, and the May meeting at Bristol, should be set apart for this purpose. The subject for the January meeting to be settled this evening, and that for the May meeting at the meeting in January." Dr. FALCONER proposed, and Mr. LAWRENCE seconded, and it was carried *nem. con.*, "That Dr. Brabazon be requested to be the propounder of the subject of discussion at the January meeting, and that he should select his own subject."

Advertising Medical Books in Public Newspapers.—Dr. FALCONER proposed, Mr. MASON seconded, and it was carried unanimously, "That, in the opinion of this meeting, the practice of advertising medical books in the public newspapers is derogatory to the interests and dignity of the profession, and likely to occasion social inconvenience and annoyance, and should, therefore, be discontinued."

Papers.—1. Mr. F. P. LANSDOWN read a paper on a Fibrocellular Tumour of the Pharynx, which he exhibited.

2. Mr. N. C. DOBSON read a case of Tumour of the Left Palate, successfully removed by Operation, and exhibited it.

3. Mr. CLARKE showed a large Sessile Fibrous Tumour which was expelled from the Uterus.

4. Dr. COLE read a paper on Cerebro-Spinal Meningitis, which excited much interest, and Dr. Brabazon requested Dr. Cole to allow it to be the subject of the special discussion at the January meeting.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT MEETING.

A MEETING of this District was held on Wednesday, September 22nd, at 3 P.M., at the Burlington Hotel, Eastbourne; T. F. SANGER, Esq., of Alfriston, in the Chair. Seventeen members were present, and four visitors.

Pathology of Chorea.—Dr. WITHERS MOORE of Brighton read a paper on the Pathology of Chorea. After a brief *résumé* of the literature of chorea, the disease was defined to be a "motor neurosis or derangement of the motor apparatus of a convulsive character, with occasional psychical phenomena". The non-febrile and non-inflammatory character of the disease, its tendency to recovery even in acute and threatening cases, and the absence of any marked and uniform *post mortem* appearances, were duly noticed. The soundness of the view of the embolic origin of the disease, as propounded by the late Dr. Kirkes, and since endorsed by Sir Thomas Watson, Dr. Hughlings Jackson, and other authorities, was questioned, and held not to be sustained by the *post mortem* appearances; especial reference being made to the monograph of Dr. Ogle and to the writings of Drs. Wilks and Moxon, Dr. Peacock, Dr. Murchison, and others, as showing that "the absolute connection between chorea and embolism has not yet been raised to the standard of an acknowledged fact". The frequent co-existence of valvular disease and chorea was fully acknowledged; but it was maintained that rheumatism is a very common disease in childhood, and that the younger the patient the more likely is cardiac mischief to be set up; that rheumatism also depresses the powers of life, and favours much the advent of chlorosis, anæmia, and a state of the circulation below the average in activity and vigour; and that it is exactly under such conditions, according to Dr. Radcliffe, that chorea

usually arises. On the other hand, it was remarked that chorea becomes unfrequent as childhood passes into maturity; and that, although adults may have rheumatic fever and coincident and persistent valvular mischief, chorea is a rare sequel. Dr. Romberg was quoted as saying that "the rheumatic predisposition noticed by English medical men was rarely traceable in the cases which have presented themselves to my notice". Dr. Guy's four cases of chorea with mitral murmur, which disappeared before they left the hospital, were instanced; as also the fact that, out of thirty-six cases treated during last year in St. Bartholomew's Hospital, seven only had heart-disease. Some particulars with respect to the physiology of the brain and spinal cord, which have been ascertained during the last four years, were then briefly narrated, especial allusion being made to the researches of Prochaska and Legallois, as proving not only that the spinal cord, as a whole, is a centre of reflex action quite independent of the brain, but that separate segments may act independently of each other, in confirmation of which Volkmann's investigations as to the rhythmical movements of the anterior and posterior lymphatic hearts in the frog were cited. Further, the existence of separate centres in man was held to be proved by the action of the chorda tympani on the submaxillary gland, through the medium of the submaxillary ganglia, and by the action of the nervi erigentes of the penis. Jaccoud's views on "spinal irradiation" were then detailed; viz., "that the spinal cord has the power of transmitting complex movements which have been previously co-ordinated; the motor cells of the cord are grouped into distinct regions, which are connected with the encephalon by fibres conveying the volitional stimulus, and with the muscles of one group by the motor roots of the nerves; this motor influence is propagated involuntarily to other nervous elements which have not directly received it from the brain, and is effected by the cells of the grey matter of the cord, and the prolongations which connect them with each other and with the motor roots of the spinal nerves". The spinal motor apparatus was taken to be an instrument both of transmission and of co-ordination, and as liable to be brought automatically into action by external bodily or mental stimuli, wholly independent of the will. The parallel between the secondary automatism which man acquires by habit and the original or primary automatism of the lower animals, as worked out by Hartley, was then duly set forth. Returning to the subject of chorea, the author contended that it is a functional disease dependent upon defective nutrition, which may manifest itself, first, in the cerebrum, and be complicated with other symptoms of defective brain-power, such as shortcomings in intellect, memory, speech, etc. The occurrence of the disease from fright, and its occasional cure by a strong mental impression, seem to favour the view of the disease having at times a distinctly cerebral impression as an exciting cause, the remote one being the general state of the system. Secondly, the local derangement may be seated in that part of the cord where muscular co-ordination is brought about; and, lastly, the disease may be eccentric, being due to reflex irritation, such as that of pregnancy, worms, etc., acting on a cord unduly irritable and suffering from the general cachectic condition. Jaccoud defines chorea to be a hyperkinesia of the apparatus of motor transmission and irradiation. This limiting of the disease to the automatic portion of the spinal cord receives some confirmation from Chauveau's statement that, in choreic dogs, he found the abnormal movements continued after the spinal cord had been divided above the atlas, as long as the heart continued to beat, and from the important fact that, in true paralysis, the affected muscles are the seat of movements which, by common consent, are placed in the category of chorea. Although the treatment of chorea was foreign to the scope of Dr. Moore's paper, he referred to it for two reasons: first, to comment on the numerous, and sometimes conflicting, remedies which have, from time to time, been extolled as successful in its cure, and which would seem to indicate its varied origin and the uncertainty as to its true pathology; secondly, to remark that, on looking over the long list of remedies vouched for by undeniable authorities, we cannot but be struck with the coincidence that, with one exception, six or eight weeks are required wherein to bring about a cure—the very time named for the natural duration of the disease. The one exception referred to is the periodical application of intense cold to the spine by means of the ether-spray, as suggested by Dr. Lubelski. This mode of treatment is said to cure in little more than a fortnight, and would seem to confirm the pathological view given in this paper. The mode of application consists in allowing a jet of ether-spray to play over the whole length of the vertebral column for three or five minutes. One sitting a day is sufficient in slight cases; it may be used twice a day in bad cases; and in a few days the cure is complete. It is not unusual to find the first application followed by considerable improvement. Jaccoud says that he has tried the plan four times in choreic children, and has been astonished each time at the rapidity of the cure, the maximum num-

ber of applications being ten. Dr. Moore related two successful cases that occurred in his practice at the Sussex County Hospital, and which were treated simply with the ether-spray. In the first case, that of a child $4\frac{1}{2}$ years of age, the spray had to be intermitted for several days, owing to erythema of the back coming on. This retarded the cure, which, however, was completed on the resumption of the use of the spray every other day, in about a week. Care was taken, in the other case (a married woman), to avoid a similar hitch in the mode of cure. Dr. Moore seemed to be of opinion that the cold acted much as static electricity does when applied in similar cases; viz., by producing a more tonic and vigorous circulation in the cord by contracting the small arterioles which supply that nerve-centre.—A discussion followed, in which Sir Cordy Burrows and others took part.

The Next Meeting will be held in November, at Brighton. Dr. H. Moon will be invited to take the chair.

Medical Advertising.—The following resolution, proposed by Dr. PARSONS of Dover (Branch Secretary), and seconded by Sir J. CORDY BURROWS, was carried unanimously.

"That, in the opinion of this meeting, the practice of advertising medical books in the public papers is derogatory to the interest and dignity of the profession, and likely to occasion social inconvenience and annoyance, and should, therefore, be abandoned."

Dinner was attended by sixteen members and six visitors, Mr. T. F. Sanger presiding.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, NOVEMBER 12TH, 1875.

GEORGE W. CALLENDER, F.R.C.S., F.R.S., Vice-President,
in the Chair.

Ligature of Femoral Artery with Carbolised Catgut for Popliteal Aneurism.—Mr. HOLMES read notes of the case. The patient was a footman, aged 34, who, three weeks before admission into St. George's Hospital, began to experience pain and stiffness in the left ham, followed, five days before admission, by swelling and œdema of the foot and ankle. There was no history of any distinct strain, and he had always enjoyed good health. Upon his admission into the hospital, there was found to be a swelling, about the size of a walnut, in the left popliteal space, pulsating strongly, and with well marked lateral dilatation. There was neither thrill nor *bruit* in the tumour, and very slight pressure on the femoral artery caused the pulsation to cease and the swelling to collapse. At first, digital pressure was tried for twenty-two hours. This was attended by a very considerable diminution in the pulsation; the tumour no longer entirely collapsed when the artery was compressed, and the sac appeared to contain a considerable amount of soft coagulium, especially at its outer part. After an interval of twenty-four hours, during which an air-pad was applied to the tumour, digital pressure was resumed and continued for six hours daily for three days. All pressure was then relaxed, and the following morning the pulsation was as distinct as ever. Various forms of instrumental pressure were next tried; namely, by means of a weight in the groin and Carte's tourniquet, and a final effort by digital pressure, which was kept up continuously for thirty-one hours. As, however, all these means failed, ligature of the femoral artery was determined upon. Accordingly, on August 12th, a stout ligature of carbolised catgut was applied to the artery at the apex of Scarpa's triangle. In the course of the operation, a small vein, lying to the inner side of the sheath, was wounded and subsequently secured by a ligature. The wound was dressed according to Lister's antiseptic method, and the limb enveloped in cotton-wool. On the following day, the patient was found to be going on favourably, except that there was a little tenderness along the course of the saphena vein. On the 14th, two days after the operation, no pulsation could be felt in the tumour or the arteries of the limb. The foot was warm, with the exception of the extremity of the great toe, which was cold and of a slightly dusky hue. The dressings were changed; the wound looked healthy; there was no redness nor appearance of suppuration. There were swelling and tenderness along the course of the saphena vein, but no redness. The man went on well until the evening of the 16th, when the house-surgeon was called to him, and found him suffering from undoubted intoxication; he was talking rapidly and incoherently, at intervals shouting out loudly for drink, and endeavouring to strike those who came near him. It appeared that his friends had smuggled in a quantity of gin, which he had drunk. On the following day, he was in a peculiar condition, half-

stupid, with a frightened expression of countenance, answering questions very hurriedly and not to the purpose, and tossing about in bed in a restless manner. He continued much in the same state till the 19th, gradually sinking, with muscular twitching of the limb, incoherence of speech, picking at the bed-clothes, a brown furred tongue, and sordes on the teeth. He died quietly at about 1 P.M. Mr. Holmes stated that he had brought forward this case with a view to comparing the relative advantages of the silk and the catgut ligature for tying the larger arteries in their continuity. His own experience had not been enough to justify him in expressing a dogmatic opinion, as he had only applied the catgut ligature to four of the large arteries in their continuity; viz., to the subclavian and carotid, which were tied simultaneously for thoracic aneurism—in which case the man died eight weeks afterwards from the result of galvano-puncture; thirdly, to the femoral artery, as above narrated; and, fourthly, to the left carotid, in a case upon which he had operated twenty-two days ago. In the first instance, the vessels were found to be closed by a kind of diaphragm of no great extent, and neither of the vessels had been cut through. In the second case, that of the ligature of the femoral, of which the notes had been read *in extenso*, the artery was shown to the members present. The knot of the ligature was visible; but there was nothing to be seen of the rest of the string. The artery was perfectly continuous. In the fourth case, there had been free suppuration from the wound; but now, on the twenty-second day, there was no irritation about it, and no part of the ligature had come away. Such, Mr. Holmes stated, was his experience with the carbolic catgut ligature, and the results, though far from conclusive, were quite consistent with the opinion which he entertained that the antiseptic ligature was a most efficient agent in combating the tendency to secondary hæmorrhage, and that it rendered possible that union by first intention which was John Hunter's object in his first operation on the femoral artery. He further explained that in neither case was Lister's antiseptic treatment entirely adopted.

Mr. CALLENDER thought the Society greatly indebted to Mr. Holmes for his paper, which involved the whole question of the treatment of aneurismal tumours in the extremities. But he thought that surgeons would especially discuss the question of the use of the carbolic catgut ligature for the tying of arteries in their continuity.—Mr. MAUNDER thought the subject most important. He had tied twenty-seven arteries in their continuity at various times, and had applied the antiseptic ligature in nine of those cases, and the carbolic catgut ligature in five of the nine. In two of these cases, the brachial artery was tied for hæmorrhage from the hand. Both cases suppurated. The first patient lay ill for a long time with suppuration; the second died of pyæmia on the tenth day. The inner coats of the artery were then found to have been divided, but the outer coat was not cut through. No trace of the ligature could be detected; there was a clot in the artery on the distal side of the point of operation. In two of the five cases, the femoral artery was ligatured for popliteal aneurism. The first case was that of a spare man, in whom the operation was done at the angle of Scarpa's triangle. The wound healed in forty-eight hours without a trace of secretion appearing. The man went out of hospital, but shortly returned, and died in six months of an aneurism of the aorta. The second patient in whom the femoral artery had been tied was a fat man; carbolic water was liberally poured into the wound, and used upon all the instruments, yet suppuration occurred. That man left the hospital and was now well. Why was there this difference in the two men? The one whose arteries seemed to be almost universally diseased had no suppuration; whilst the other man, with tolerably healthy vessels and with carbolic treatment, had extensive suppuration. The fifth case in which Mr. Maunder had used the catgut ligature, was for axillary aneurism. The carbolic spray was not used during the operation, but Mr. Couper, who had largely employed Lister's plan of treatment at the London Hospital, completed the operation after the tying of the vessel by Mr. Maunder. Carbolic water was most freely poured into all parts of the wound, and the wound was done up in the most approved antiseptic method. Yet suppuration into the chest occurred, of which the patient on the sixth day died. But Mr. Maunder had generally had good success with the carbolic acid treatment, and should continue it. Mr. Holmes's cases, he thought, were unsatisfactory. He (Mr. Maunder) mentioned especially the case of a young man with carotid aneurism whose artery was tied with silk. The wound had done well with the carbolic acid treatment. In answer to Mr. Callender, who inquired if the femoral artery had been examined in the case of the man who died six months after ligature of the vessel, Mr. Maunder replied that it had been inspected, that no ligature was found, and that the vessel was obliterated down to the popliteal space. In reply to Mr. Holmes, Mr. Maunder said that the ligature was found upon the artery in the case of

the patient who died on the sixth day after operation; but was not found on the brachial artery where ten days had elapsed before death occurred. He also observed (replying to Mr. Callender) that in the former case the ligature was not sufficiently softened to allow blood to pass along the artery.—Mr. BARWELL thought nothing had been mentioned by Mr. Maunder derogatory to the catgut ligature. He himself had often used it, and never saw it come away, except on one occasion; it was always absorbed. It was a point of very great value, not to have a foreign body in the wound after an operation; and, as the catgut was absorbed, it could not be considered to be a foreign body. He had tied in this manner the brachial, radial, and both facial arteries (the latter in a case reported in the BRITISH MEDICAL JOURNAL for March 20th, 1875). In this last instance, each artery was tied with two ligatures, and then divided between them, so that there were four ligatures. And yet, in spite of the supervention of erysipelas at the wounds, there was scarcely any suppuration, and no ligature came away. In the case in which the brachial artery was tied, there was slight suppuration, but no ligature came away. The wound produced in tying the radial artery healed by the first intention. If, as he believed, the danger of secondary hæmorrhage and suppuration could be greatly avoided by the carbolic catgut, there was a great advantage in using it. But care must be exercised in having the catgut perfect for use. Assistants and dressers were apt to take it out of the oil, and handle it some time before it was wanted in an operation; it should not be allowed to become dry or hard, but should be used fresh from the bottle.—Mr. MYERS remarked that, whilst Mr. Holmes had mentioned four cases and Mr. Maunder five, he had only used it in one instance, viz., upon the external iliac artery for aneurism, partly of the external iliac, partly of the femoral arteries. Other methods of relief had been first tried, but unsuccessfully; and pressure had pushed the artery almost into the pelvic cavity. Two ligatures were applied to make the operation doubly certain, and the wound was closed. He was not able to show the specimen, for the man was well, and was now doing duty in his regiment. Suppuration had occurred after the operation, but apparently there was no irritation from the ligature. The man had previously had syphilis badly, for which he had been treated in hospital, and was in a cachectic condition. The ligature, although searched for, was not seen to come away.—Mr. GASCOYEN had tied one femoral and one brachial artery, which did well. In another case of ligature of the femoral artery, some inflammation arose, and severe secondary hæmorrhage followed, to which the man succumbed. He had seen and assisted other surgeons in similar operations. He was present at Mr. Myers' case, which was successful; and had assisted Mr. James Lane at the Lock Hospital, when the iliac vessel was tied for sloughing in the groin. That patient died after ten days, the sloughing having continued after the operation; at the inspection, no trace of the ligature was found. In another case of ligature of the carotid, the man did well. In none of the cases was the artery ligatured under the carbolic spray, nor was the antiseptic method of dressing subsequently used. Two cases were peculiar. In one instance, where the femoral artery was ligatured with carbolic catgut for popliteal aneurism, the wound would not close for six weeks; and the man had repeated attacks of inflammation during that time. After the six weeks, something, which was not kept for Mr. Gascoyen's inspection, came away, and then the wound healed. In another case at Hounslow, in which also the femoral artery had been tied, the wound healed by the first intention, with the exception of a small opening, from which, at the end of six weeks, something came away, and then the wound healed. What was that something in each case? If it were not the ligature, perhaps it was the external coat of the artery, which might have been bruised in the operation, and which, after sloughing, came away. Such an explanation had occurred to himself; but he would be pleased to know what light other surgeons could throw on the occurrence.—Mr. BECK remarked that these wounds had healed sooner than if the ordinary treatment had been adopted, and yet all Mr. Lister's precautions had been neglected. Mr. Lister had said that after a few hours all the carbolic acid he might pour into a wound was absorbed; if that were the case, would not all the carbolic acid contained in the catgut ligature be likewise absorbed, and the ligature itself form a foreign body, and in four or five days constitute (in some instances) a ring of putrid material around the artery? Mr. Beck had never seen a catgut ligature come away. Mr. Lister never had the trouble other surgeons had; and, if surgeons proposed to tie according to Mr. Lister's plan, they should carry out that method in all its details.—Dr. MURCHISON remarked that Mr. Holmes's cases were not brought forward as specimens of the antiseptic treatment; and that Mr. Syme had tied the femoral artery twenty-five times without the carbolic catgut and without antiseptics, and that all the cases had recovered.—Mr. PAGE had seen the carbolic catgut applied by a surgeon at the Carlisle Hospital to a femoral artery

at the commencement of Hunter's canal. No attempt had been made to use the antiseptic method; free suppuration ensued, and there was no sign of the ligature coming away. The result was successful. He had used the ligature in many cases of amputation, etc., *i.e.*, to the cut ends of vessels, and had never seen secondary hæmorrhage occur, nor the ligature come away. He thought secondary hæmorrhage, when it did happen, was not due to the nature of the ligature, but to the manner of its tying (as was taught by Professor Humphry at Cambridge). He doubted if a mass of decomposing catgut in a wound was so bad as Mr. Beck had attempted to make out. It was soon absorbed; and was safer than silk, as it did not cause so much damage to the vessel.—Mr. HEATH remarked that one of the causes of the different results was that the vessels were tied by different surgeons. At his first case, he had found it a little difficult to know what degree of strength should be put forth in order to occlude the artery, and yet not hurt unnecessarily the coats of the vessel. His first case was one of tying the subclavian artery for aneurism. The wound was dressed antiseptically; and was found to be healed when, after a week, it was disturbed for the first time. In a second case, the femoral artery was tied in Hunter's canal for secondary hæmorrhage. The wound inflamed, and the patient died seven days afterwards. A clot was found on each side of the ligature. The physical condition of that patient seemed to cause the result. Mr. Heath narrated two other cases; one in which the carotid was tied, and the case of a medical man (who was present and in good health at the meeting), whose femoral artery he had tied for femoral aneurism. In this case, the wound almost healed at the first, with the exception of a small track, from which, on the eighty-second day, something came away; that Mr. Heath thought to be the ligature unabsorbed.—Mr. MAUNDER said that all his nine cases had been done antiseptically, but without the spray. Why, if in 1868 the antiseptic dressing without the spray was sufficient, was it not so in 1875?—Mr. BECK rejoined that Mr. Lister's cases now were much more successful than they were in 1868. At that time, suppuration commonly occurred; now it was often prevented altogether.—Mr. MACNAMARA had tied four arteries with carbolised catgut at Calcutta. The first case was ligature of the brachial artery at the bend of the elbow; there was no suppuration, and the case did quite well. In the second case, the subclavian and carotid arteries were tied for aneurism. The antiseptic method, including the spray, etc., were used, and the patient did well up to the fifteenth day, when sudden hæmorrhage from the carotid ensued, and the patient died. The third case was ligature of the femoral artery for punctured wound of the thigh. The wound there did admirably; in fact, it healed by the first intention. In the fourth case, he had assisted his friend Mr. Cutcliffe in ligaturing the external iliac artery; and the patient made a good recovery. He thought the catgut ligature varied a good deal. If fresh, and not soaked sufficiently long in oil, it was brittle and apt to split. It should be kept in a fish oil; and not soaked too long in the carbolic acid.—Mr. HOLMES had not brought forward his cases with the slightest desire to mention Mr. Lister's treatment in connection therewith; in fact, it was not carried out in any of the cases. Without being an advocate of one method of dressing or of another, he had simply detailed his cases as examples in which the carbolised catgut had been used, and in order to elicit the opinions of other surgeons who might have employed it. The success of a case did not depend upon a little suppuration at the external surface of a wound, but whether the catgut formed an efficient ligature for the artery; whether it compressed the vessel sufficiently long to obliterate its passage before it was itself dissolved. That did not seem to be always the case. He had seen the external iliac tied at Deal for a femoral aneurism. The pulsation returned after the operation, when the surgeon again cut down upon the artery and tied it with a hempen ligature. That patient recovered and returned to his employment. Mr. Holmes thought, that with catgut one could tie the artery effectually without causing subsequent division of the vessel.—Mr. CALLENDER need not say anything respecting the dressing, of which he adopted his own particular method, but he would speak of carbolised catgut applied in the continuity of a vessel. In three instances at St. Bartholomew's Hospital, secondary hæmorrhage had occurred. One of the cases was his own. A young man, docile, had slight atheromatous disease of his arteries; but, with this exception, seemed to be an excellent patient for treatment. His femoral artery was tied in the lower part of Scarpa's triangle. The wound was drained by a piece of carbolised catgut. On the sixth day, at the 130th hour, slight pulsation returned in the aneurism, and in the artery itself below the point of operation. At the 165th hour, the loose piece of carbolised catgut in the wound had melted and divided at its deepest part, and came away in two parts. That is, the catgut round the artery, being subject to tension, divided at the 130th hour; whilst that in the wound, not

submitted to any strain, did not melt and divide until the 165th hour. On the tenth day, secondary hæmorrhage occurred, of which the patient died. At the inspection, the ligature was not to be found; but behind the vessel was a small aperture, the tenth of an inch in diameter, at the point where pressure had been made. The coats of the artery had been injured in the operation and had sloughed.—Mr. HART said there was one point in Mr. Holmes's paper to which he desired to direct attention—*viz.*, as to the various modes of treatment adopted before the operation. Instrumental pressure had been applied. Was it employed whilst the patient was under chloroform or not? Mr. Holmes knew well there were many cases recorded in which pressure under chloroform had cured the aneurism in a few hours; and he believed it never had failed where chloroform had been used. Was the pressure sufficient to arrest completely the pulsation of the aneurism?—Mr. HOLMES stated that the pressure was complete, and was tried for twenty-four and thirty-one hours continuously upon different occasions, but without any effect upon the aneurism. Chloroform was not used, the man being sufficiently tolerant of pressure. Always when the pressure was relaxed the pulsation returned in the aneurism. He thought the aneurism might perhaps be described as a form of aneurismal dilatation.—Mr. HART believed, that without chloroform no pressure was sufficiently complete thoroughly to prevent the passage of blood through an aneurism.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

INFANTILE SUMMER DIARRHŒA.

THE Registrar-General discusses at some length the distribution of infantile diarrhœa in England and Wales. He remarks that beyond an impression that the disease is of excrementitious origin, and the certainty of the powerful influence exercised by high temperature upon its fatality, very little is really known about epidemic diarrhœa. It appears most probable that there was a comparatively small mortality from diarrhœa during the summers of the early part of the present century; but that in recent years the deaths referred to diarrhœa have proportionately showed a marked increase. During the five years, 1838-42, the annual death-rate from diarrhœa averaged 0.22 per 1,000 persons living. In the succeeding decennials, it rose to 0.85 in 1850-9, and to 0.87 in 1860-9. In the year 1860, which was remarkable for its wet cold summer, the rate was only 0.49, whereas it was 0.94 both in 1859 and in 1861. In 1865, the summer was hot, and the diarrhœa rate was 1.13 per 1,000; while in 1868, when the summer was still hotter, it reached 1.39. Since the marked increase in 1865, the death-rate from diarrhœa has not again fallen to the average rates of previous years. The explanation of this increase is not clear. If we accept the excrementitious origin of the disease, how are we to explain the increase of diarrhœa during a period when the filth-nuisances of our town populations had undoubtedly been reduced, and the fatality of typhus and typhoid fevers had unquestionably declined? In seeking for an explanation of this apparent anomaly, the fact that in the past seventy years we have abated the cesspool nuisance at the expense of the purity of our rivers, the source of much of our water-supply, must, of course, be estimated at its proper value. Dr. Buchanan has recently urged upon health-officers the importance of earnest co-operation in the collection of observation and information on this important subject, and the scientific study of such materials as will assist in the formation of accurate conclusions as to the course of this infantile fatality, its varying death results in different towns, and the best means for controlling it.

In England and Wales, 14,006 deaths during the three months ending the 30th of September last were referred to diarrhœa, of which it may be estimated, from the experience of previous years, that 9,224 were of infants under one year of age, 2,948 of children between one and five years, and only 1,834 of persons aged upwards of five years. Fatal diarrhœa is, therefore, essentially an infantile disease. In town populations, the deaths of infants from diarrhœa bear a larger proportion to the total deaths referred to this disease than they do in rural populations. In London, the increase of infant mortality during the past summer quarter was almost entirely the result of diarrhœa. In England and Wales, the proportion of deaths from diarrhœa under one year to the deaths from this disease at all ages has increased steadily in recent years from 44 per cent. in 1847 to 64 per cent. in 1873. It appears that the greater the fatality of epidemic diarrhœa, the larger is the proportion of infants that succumbs to it.

Among those features of the fatality of epidemic diarrhoea which stand most in need of solution, and the solution of which would assist in throwing light upon the true pathology of the disease, one of the most important is the remarkable variation in its fatality in different towns, having similar characteristics as to situation and occupations of their inhabitants. Among the eighteen largest towns, the diarrhoea rate last quarter ranged from 1.6 and 2.5 in Bristol and London, to 7.0 and 9.2 in Birmingham and Leicester; and in other smaller towns the variations in the rate were equally marked. Evidence appears strongly to point to the intimate relation between sanitary condition and the death-rate from diarrhoea, without attempting to decide the true cause of these variations. Such being the case, it rests with the health-officers of the diarrhoea-plagued manufacturing towns to discover the nature of the sanitary shortcomings which lead to this waste of infant life, and the responsibility will then rest with their sanitary authorities to carry out such measures as will secure its decline.

What is the treatment and food of infants in the diarrhoea-stricken towns? Is the fatal disease traceable to any zymotic poison in the dwellings or in the waters? Such are the questions with which the Registrar-General closes his remarks; and we think that medical men might assist materially in their elucidation by the simple plan of always stating on the death-certificate the nature of the food supplied to the child, at any rate, by noticing whether the infant was brought up by hand or suckled.

PUBLIC VERSUS PRIVATE VACCINATION.

SIR,—In the report for 1874 of the medical officer of the Privy Council and Local Government Board, Dr. Seaton, speaking of the imperfect way in which private vaccination is frequently performed, says:—"In certain districts, there are practitioners who bribe, as it were, parents by the offer to vaccinate the children imperfectly, *i.e.*, in one or two places only."

As a public vaccinator, I can affirm that, in a great many instances, parents have remonstrated with me for "making so many places" on the arm, saying that "Dr. A. only does them in one place, and Dr. B. never puts more than two, and sometimes only one". Consequently, when it is known among parents that I never make fewer than three or four good-sized marks, numbers of them prefer to pay a small fee to a private practitioner for imperfect vaccination to having "so many places made for nothing". My brother vaccinators will see another point in this fact: the lessened value of our appointments, and, in the case of those who, complying with the terms of their contract, punctually attend distant vaccination stations, absolute loss of money and time. I am, etc.,
A RECIPIENT OF A VACCINATION GRANT.

November 4th, 1875.

MILITARY AND NAVAL MEDICAL SERVICES.

DEPUTY SURGEON-GENERAL SMALL, who has been for some years at Mauritius, to take charge of a district in Great Britain on promotion.

SURGEON-MAJOR JOHN SMITH CHARTRES, M.D., medical officer to the 43rd Brigade Depot at Chichester, and formerly of the 8th Hussars, died on the 31st ult. at Clifton House, Hampstead, aged forty-seven. Dr. Chartres joined the Army Medical Department as an assistant-surgeon, June 11th, 1852; became surgeon, September 11th, 1860; and surgeon-major, May 9th, 1872; serving as a staff surgeon throughout the Abyssinian campaign, and in medical charge of one of the hospital ships (medal).

In the deep gloom which enshrouds the Army Medical Service, it is gratifying (says the *Broad Arrow*) to note one scintillation of light and hope. We are able to congratulate our army doctors upon the fact that promotion, after fifteen years' service in the rank of surgeon, is, though not accorded by Warrant, a positive reality. The annual promotions of 1st April have at last disposed of those officers whose lengthened detention in the junior rank had become a scandal, and the congestion being thus removed, the period of service prior to promotion is reaching an average of fourteen and a-half years. This is a decided improvement, which we are glad to admit.

THE ASSISTANT PROFESSORS AT NETLEY.

WE are informed that the assertion in a military contemporary as to the assistant professorships at Netley being beneficial and lucrative appointments, is made under a misapprehension of facts. The assistants

to the professors have extra work, but have no extra pay, unless they are retained for a longer period than five years; after five years there is a treasury grant of £100 a year. The mistake into which the military journal has fallen is probably due to the fact that, without exception, all combatant officers who are engaged in teaching in military educational establishments, such as Sandhurst, Woolwich, Chatham, etc., do receive extra pay or extra allowances from the first day of their appointment.

HALF-PAY WITHOUT HALF-PAY.

Two or three instances have occurred recently of medical officers finding themselves gazetted to *half-pay without half-pay*. The simple meaning of this announcement appears to be, that the officers concerned are removed from the active to the half-pay list of the department, but that they are not to receive any pay or allowances so long as they remain on the latter of the two lists. This, which is a totally new proceeding on the part of the War Office authorities, is producing profound distrust and alarm among the medical officers of the army. No one knows whose name may next appear in the same category, or what may be the next exercise of authority of an equally startling nature. The names have appeared in the *Gazette* without any explanation of the treatment associated with them. We are assured that in each case there has been no neglect of duty, no offence given, by the individuals concerned. They have been meritorious officers, who have contracted illness while on foreign service, who have been invalided home to England in consequence of this illness, but who, unfortunately for themselves, have not recovered sufficiently speedily in the eyes of the authorities to warrant their retention on the active list. We have no information respecting the length of time these medical officers have been on the sick or convalescent lists, and we can well understand that limits to these periods of absence from duty should be fixed; but what no one seems to be able to understand is the anomalous and contradictory proceeding of placing them on half-pay without half-pay. Where is the rule or regulation on which this mode of dealing with an officer rests? The Warrant regulating the Pay, Promotion, and Retirement of Army Medical Officers provides certain rates of half-pay, according to the length of service, for "every medical officer who is incapacitated by reason of ill-health brought on by the discharge of his duties". Surely, if a medical officer is sent to a climate in which he contracts illness which he would not be likely to contract if he were engaged in his ordinary avocations in the climate of England, such illness is strictly brought on by the discharge of his duties, even though it cannot be directly traced as the result of any particular duty. But, even if the illness be not distinctly traceable to the discharge of duty, the medical officer is still entitled to some consideration in the shape of half-pay. The fourteenth clause of the warrant lays down the rule that, "if a medical officer is placed on half-pay from any other cause than those herein before named, he shall only be allowed a temporary rate of half-pay for such period and at such rate as shall be assigned to him by our Secretary of State for War," etc. It is well known that this clause was introduced to meet cases in which medical officers might be incapacitated by their own misconduct, such as by intemperance. But even in such instances, attended as they would be with disgraceful conduct, some half-pay is to be given, the amount being determined by the War Office authorities, "on a consideration of the length and character of the services previously rendered by the medical officers concerned". *Half-pay without half-pay* is something quite new. It is foolish as a verbal expression; it is an injustice to the medical officers concerned, especially to medical officers who have committed no fault to deserve such treatment; and, from an administrative point of view, it is a blunder which on no account should have ever been perpetrated, considering the exasperating effect it was certain to have on a body of officers who are already in a deplorable state of discontent.

HOSPITAL ARRANGEMENTS AT ALDERSHOT.

IN the comments which we felt it our duty to make on the inquest lately held on a lunatic soldier at Aldershot, we re-echoed the surprise expressed by the coroner at the frequent changes in the actual medical supervision of patients in the hospitals at that great military centre. But the explanation is simple enough, when we observe how very short-handed the medical staff there is at the present time, and that whereas, before recent arrangements, fifty-one medical officers were detailed for duty, thirty-six are now held to be sufficient for the entire charge of an equal number of men. It constantly happens that purely military exigencies have to be provided for out of this number; that a battery of artillery must have its surgeon present in the field; that ball-firing has

to be superintended, and a due provision of medical men furnished for those extensive strategical operations for which Aldershot is famous. Considering also that only one surgeon is now allowed per regiment, and that all the varied work connected with its internal economy, in addition to the treatment of its sick, now devolves upon him, we can readily imagine the many circumstances which must often render it necessary for him to depute his purely professional duties to others. Whilst he is toiling after his regiment in the dusty ravines of the Long Valley, his patients fall into the hands of those who have no knowledge of their peculiarities, and who have probably never seen them before; and we have no doubt that the Aldershot case-books could furnish many more instances of that divided responsibility which was so disastrous to poor Orr.

HEARDS IN THE ARMY.

SIR,—Permit me to ask, through the medium of the JOURNAL, whether army medical officers are furnished on the regulations with the best swords? I believe that combatant officers are empowered to shave their beards; but even this regulation is not strictly enforced, as His Royal Highness the Prince of Wales wears a beard, and he holds a high position in the army as Colonel and Field Marshal. Your obedient servant,

November 4th, 1875.

A MEMBER OF THE ASSOCIATION.

NAVAL MEDICAL APPOINTMENTS.

DUDLEY, Surgeon John, to the *Seafower*.
 ISAAC, Surgeon W. D., to the *Pembroke*.
 LUCAS, Staff-Surgeon Lemond, to the *Pembroke*.
 MACLEAN, Surgeon John C. E., to the *Seafower*.
 TERRY, Staff-Surgeon Septimus, to the *Seafower*, for temporary service with the *Maries* at Wexford.
 WHITLEY, Surgeon Alfred W., to the *Seafower*.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on November 16th.

Allen, R. G., L.S.A., Douches (Birmingham School).
 Angose, W. F., L.S.A., Bedford (St. Bartholomew's Hospital).
 Archer, R. K., L.S.A., Highgate (Westminster Hospital).
 Bacon, A. P., L.R.C.P.E., Leeds (University College).
 Bigger, S. F., Belfast (Liverpool School).
 Bowler, E. D., Jersey (Leeds School).
 Chant, Thomas, L.S.A., Lowestoft (London Hospital).
 Dennis, Augustine, L.R.C.P.E., London (Westgate, N. of St. Mark's).
 Harvey, T. P., L.R.C.P. Lond. & L.S.A., Pyling Road, W. (London Hosp.).
 Hick, Henry, L.R.C.P.E., Wexford (Leeds School).
 Hutchinson, Joseph, L.R.C.S. Edin., London, Beds (Manchester School).
 Iles, A. R., Farnham (St. Thomas's Hospital).
 Jacobs, H. R., Alford (St. Mary's Hospital).
 Jenkins, Amos, L.R.C.P.E., Leicester, Gloucestershire (Dublin School).
 Kiplard, J. T. W. S., L.S.A., Stoke, Devon (Guy's).
 Leigh, R. H., L.S.A., Alcester, Staffs (Guy's).
 Livy, F. Y., Leighton, Lancashire (Manchester School).
 Manders, Horace, L.S.A., Marlborough (St. Mary's Hospital).
 Mason, J. W., M.B. and Ch., Marston, Gloucestershire, Lancashire (Guy's).
 Morgan, E. A., L.K.Q.C.P.I., Liverpool (Liverpool School).
 Phipps, R. F., L.R.C.S. Ed., Boundary Road, N.W. (King's College).
 Randle, J. M., L.R.C.P. Ed., Lizard, Cornwall (University College).
 Simon, R. M., B.A. Cantab., Nottingham (Guy's).
 Steil, G. R., L.R.C.S. Edin., Shepherd's Bush (Liverpool School).
 Thain, W. F., Liverpool (Liverpool School).
 Watkins, G. H., L.S.A., Brixton (St. Thomas's Hospital).
 Whitley, E. E., Birmingham (Birmingham School).

Admitted members on November 17th.

Amphlett, Edward, M.A. Cantab., Leamington (Guy's).
 Aplin, Alfred, Exeter (University College).
 Blake, Henry, L.S.A., Bedford (St. George's).
 Bowling, C. J. L., Kamsgate St. Bartholomew's).
 Breck, C. de L., Garsney (St. Thomas's).
 Carrington, R. E., Brixton (Guy's).
 Edwards, F. S., St. Peter's Park, W. (St. Bartholomew's).
 Evans, Thomas, L.S.A., Pwllheli, North Wales (King's College).
 Godfrey, C. W., Remsey, (University College).
 Harvey, H. F., L.S.A., Gower Street (University College).
 Heard, C. G., L.S.A., Tisbury, St. Bartholomew's).
 Johnson, W. E., L.S.A., York Road, S.E. (London).
 Kidd, W. A., Blackheath (Guy's).
 Morshead, E. G. A., Sidmouth (University College).
 Musgrave, R. F., L.S.A., Farnley Road, (St. Mary's).
 Patmore, T. D., Hastings (University College).
 Pilkington, Henry, L.K. & Q.C.P. Ed., Liverpool (Liverpool School).
 Truman, C. E., Old Burlington Street (St. Thomas's).
 Woodward, F. E., Coventry (St. Bartholomew's).

At these two meetings of the Court, eleven candidates were rejected. Mr. Erichsen, the recently elected member, took his seat on this occasion.

MEDICAL VACANCIES.

The following vacancies are announced:—
 ARDWICK and ANCOATS DISPENSARY, Manchester—Resident House-Surgeon.
 BIRMINGHAM AND MIDLAND EYE HOSPITAL—Dispenser. Salary, £70 per annum. Applications on or before the 23rd December.
 CARMARTHEN UNION—Medical Officer.
 CHARING CROSS HOSPITAL—Assistant Physician, and Physician or Surgeon. Applications on or before the 23rd instant.
 CHORLTON ON MEDLOCK, RUSHOLME and MOSS SIDE DISPENSARY, Manchester—House-Surgeon.
 DORSETSHIRE INFIRMARY—House-Surgeon. Salary, £5 per annum, with £40 l. washing, and £10 l. gratuity.
 DOVER HOSPITAL and DISPENSARY—Resident Medical Officer. Applications on or before the 23rd instant.
 EAST STAFFORD and BISHOP HOSPITAL—House-Surgeon. Applications on or before the 23rd instant.
 GLOUCESTER INFIRMARY—Resident Medical Officer. Salary, £200 per annum, with board, £100 l., and washing. Applications on or before the 23rd instant.
 HOSPITAL FOR THE INSANE, Barrow, J., near Gloucester—Assistant Medical Officer. Salary, £200 per annum, increasing £20 annually to £240, with £100 l. washing, and £100 l. gratuity.
 HULFERSHED INFIRMARY—Physician.
 LIVERPOOL INFIRMARY FOR CHILDREN—House-Surgeon.
 NORTH WITCHEFORD UNION, Cambridgeshire—Medical Officer. Salary, £200 per annum, and £100 l. gratuity. Applications on or before the 23rd instant.
 PARISH OF LISMORE AND APPIN, Letterkenny, Monaghan, Armagh, &c.—Physician. Applications on or before the 23rd instant.
 QUEEN CHARLOTTE'S LYING-IN HOSPITAL, 112, Marylebone Place, W.—Physician to the Patients. Attention at a meeting of the Committee of Management on the 22nd instant, at two o'clock.
 QUEEN'S COLLEGE, Birmingham—Demonstrator of Anatomy. Applications on or before the 23rd instant. Resident Physician. Salary, £200 per annum, with board, £100 l., and washing. Applications on or before the 23rd instant.
 RAICHLIFF INFIRMARY, Oxford—House-Physician. Salary, £200 per annum, with board and washing. Applications on or before the 23rd instant.
 ROSS UNION—District Medical Officer and Public Vaccinator. Salary, £100 per annum. Applications on or before the 23rd instant.
 THARSK MILNS, Preston, Lancashire—Medical Practitioner. Salary, £200 per annum. Applications to the Secretary, 102, West George Street, Glasgow.
 TONGUE and PARR, District of County of Sutherland—Medical Officer. Salary, £200 per annum, and £100 l. gratuity.
 TRINITY COLLEGE, Dublin—Professor of Botany. Applications on or before January 1st, 1876.
 WESTMINSTER GENERAL DISPENSARY—Honorary Physician. Applications on or before the 23rd instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BONY, John, L.R.C.P.E.D., appointed Assistant Medical Officer to the Haslemere Lunatic Asylum, North Surrey, Woking.
 CROWDACE, James H., L.S.A., appointed Assistant Medical Officer to the East Riding of Yorkshire Lunatic Asylum, Beverley.
 FISHER, Thomas, M.B., F.R.C.S., appointed House-Surgeon and Assistant to the Essex and Gloucester Hospital, R.M. F. S., M.R.C.S. Edin., &c.
 *HAYWARD, J. W., M.D., appointed Resident Surgeon to the West London Dispensary and the Cottage Hospital, at RA SLOAN, M.R.C.S. Edin., &c.
 *MURPHY, F. R., L.K.Q.C.P.I., appointed House-Surgeon to the St. George's Infirmary.
 *NETTLESHIP, Edward, F.R.C.S. Eng., appointed Assistant-Surgeon to the Hospital for Diseases of the Skin, Finsbury, and F. M. S. Eng., resigned.
 RAVENHILL, Thomas Holmes, M.R.C.S. Eng., appointed Honorary Medical Officer to the Birmingham Lying-in Charity, vice C. Warden, M.D., resigned.
 RIDGEN, Walter, M.R.C.S. Eng., elected Surgeon to the Chelsea, Brompton, and Belgrave Dispensary.
 WATSON, Douglas, M.B., appointed Junior House-Surgeon to the Finshead Borough Hospital, vice F. R. Murray, L.K.Q.C.P.I.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting advertisements of Births, Marriages, and Deaths is 3s. 6d., which should be remitted in stamps with the communication.

DEATH.

WILSON, George, M.R.C.S. Eng., late a member of the medical staff of the Middlesex Convalescent Asylum, Harewood, at 7, Warwick Gardens, Kensington, aged 55, on November 6th.

IN the new Council of the Royal Society, the Medical Sciences are represented by Dr. Hooker, the President, Mr. Huxley, Dr. Gunther, Mr. Wharton Jones, and Dr. Parkes.

It has been decided to erect in Dulwich a trough and drinking-fountain, suitably inscribed, in recognition of the public services of Dr. George Webster, J.P., an old and valued member of this Association.

TESTIMONIAL.—At a meeting of the Court Duke of Clarence, No. 4,433, of the Ancient Order of Foresters, Kentish Town, an elaborately carved instand was presented to Dr. R. T. Warn of 37, Highgate Road, on behalf of the members, as a token of the high esteem in which he is held, and in appreciation of his services as medical officer of the Court.

OPERATION DAYS AT THE HOSPITALS.

MONDAY Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

TUESDAY Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

WEDNESDAY .. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.

THURSDAY St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.

FRIDAY Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

SATURDAY ... St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. De Havilland Hall will exhibit a Pathological Specimen of Tumour of the Liver; Dr. Thorowgood, a Specimen of Cirrhosis of the Liver in a Child, and a New Inhaler and Respirator by Mr. Carrick of Glasgow. Dr. Brunton, "On the Rational Treatment of Tapeworm".

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Pavy will exhibit a specimen of Sugar obtained from healthy Human Urine, and prove its existence by the appropriate tests; Mr. F. H. Welch, "On Aortic Aneurism in the Army, and the conditions associated with it".

WEDNESDAY.—Hunterian Society, 8 P.M. Clinical Evening.

FRIDAY.—Clinical Society of London, 8.30 P.M. Dr. Murchison, "Case of Acute Cancer of the Liver, with Pyæmia, in a man aged 24"; Dr. Murchison, "Two Fatal Cases of Acute Pyelitis and Nephritis, apparently consequent on Gonorrhœa"; Mr. Berkeley Hill, "Case of Amputation at Hip-joint for Fibro-plastic Tumour"; Mr. George Lawson, "Case of Melanotic Tumour of Orbit".—Quekett Microscopical Club, 8 P.M. Mr. T. Charters White, M.R.C.S., "On the Histology of the Hard Dental Tissues".

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with Duplicate Copies.

AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor: those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

THE COMPOUND STETHOSCOPE.

We have received an interesting communication from Messrs. Ferris and Co. of Bristol, relating to the compound stethoscope made by them from designs by Dr. Spencer of Clifton. It antedates that of Dr. Hilliard, last week described in the JOURNAL, and is an instrument so efficient and noteworthy, that we shall hope next week to be able to devote some space to the description of it, and the discussion of its merits.

ALLOPATHY (Canterbury) must put his question more clearly, and in detail. As he puts it, we do not understand it. The rule that legitimate practitioners do not meet homeopaths in consultation is, we believe, absolute and universal.

QUERIES.

SIR.—Will you kindly inform me—1. Where Dr. Burdon Sanderson's Contribution to the History of Contagion and Morbid Processes of Diphtheria, etc., is to be met with? 2. Where the Registrar-General's Returns may be seen? 3. Whether there is much difference between the actions of the silicated carbon and magnetic carbide filters?

I enclose P.O.O. for medical charities at your discretion. Do not acknowledge by post.—Yours faithfully,
W. L.

* * * 1. In the recent volumes of the *Transactions of the Pathological Society*, and the Medical Officers' Reports to the Privy Council; also in the last volume of the *BRITISH MEDICAL JOURNAL*. 2. The Registrar-General's Reports may be ordered of Hansard, Great Queen Street, W.C., for a very trifling cost. 3. The performances of the two filters are both very good, and are very nearly equal. 4. With our correspondent's permission, we will forward his donation to the Medical Benevolent Fund.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

SPENCER'S COMPOUND STETHOSCOPE.

SIR.—In last week's *BRITISH MEDICAL JOURNAL*, Dr. Hilliard describes a new form of double stethoscope, which has been registered as his invention under the name "head-spring stethoscope". Dr. Hilliard says, with reference to flexible double stethoscopes, "the objections, however, have been, that instruments of this class are too bulky for ordinary practice, and that the acoustic results have been less perfect than the simple wooden stethoscope (*sic*) in almost universal use. These objections, I believe, I have overcome by the instrument I now present to the profession". Dr. Hilliard goes on to describe what we suppose are the means by which he has overcome the acoustic difficulty—viz., by constructing his stethoscope of two simple tubes of finest India-rubber, very smooth and equal in calibre from their attachment to the chest-pieces to the ear-nipples.

Will you kindly allow us to state that the acoustic difficulty had been recognised and overcome by the same means by us prior to Dr. Hilliard's invention? At the meeting of the British Medical Association, held in London in August 1873, we exhibited a new form of flexible double stethoscope, designed by Dr. Spencer of Clifton, and manufactured for him by us. Two essential features in this, our "compound stethoscope", were, "smoothness of interior and uniformity of calibre throughout the tubes". These features expressed principles of construction which, we believe, then for the first time, were asserted and applied as necessary to the production of accurate acoustic results in any tubular stethoscope. The following extract from our prospectus explains our position. "Principles of Construction. 1. It provides accurate acoustic communication between the ears and any area it may be desired to auscultate, so that sounds are conducted without loss of intensity, and without modification of their characters. The acoustic medium is air; it is enclosed in two long tubes, having a smooth interior, and throughout of the same calibre as that of the auditory canals. The interior of the tubes is smooth, in order that reflection may be regular, and transmission of sound rapid and perfect. Uniformity of diameter prevents unpleasant humming from reinforcement of sound by resonance. . . . From the chest-wall to the external opening of the auditory canals, and thence to the tympanic membrane, extends, for each ear, a perfectly conducting column of air of uniform diameter." This was taken from Dr. Spencer's paper, read before the Bath and Bristol Branch of the British Medical Association in November 1873 (of which a first instalment was afterwards published in the JOURNAL), in which the acoustic principles were fully discussed. Soon after the introduction of Dr. Spencer's stethoscope, a specimen of Dr. Hilliard's "head-spring stethoscope" came into our hands. This, by a letter from Dr. Hilliard in last week's *Lancet*, would appear to have been "one of my earliest and very imperfect attempts at the production of a binaural stethoscope with head-spring", brought out, he says, about two years ago. In that earlier form there is no trace of the recognition of the principles laid down by Dr. Spencer, which Dr. Hilliard has adopted in his later form recently registered.

Dr. Hilliard may have arrived at the principles of construction of his stethoscope quite independently. We have no wish whatever to insinuate that he has not; but we think it is due to the inventor of the compound stethoscope (who has refrained from protecting his invention by registration or patent) and to ourselves, to point out that the two features of Dr. Hilliard's stethoscope referred to have been anticipated.—We are, your obedient servants,
FERRIS AND CO.
Union Street, Bristol, November 15th, 1875.

MANCHESTER PROVIDENT DISPENSARIES' ASSOCIATION.

SIR.—Mr. O'Hanlon's expected reply to my remarks of October 16th, appears in your issue of November 6th. I hasten with pleasure to place the truth of the whole matter before your readers, especially as your paragraph elsewhere in the same issue gives credit for great frankness and moderation to Mr. O'Hanlon, and throws doubt on the views to which you kindly gave insertion in my first communication.

I may state at the outset that I, and all who joined the Provident Dispensaries' Association, did so with the firm conviction that the principle involved was a good one, and that if it could be worked successfully, should be fairly tried; and our co-operation with the General Council was evidence of desire and willingness to assist in the attempt. As I hope to submit complete details of the working of the scheme on a future occasion, I shall in this letter limit myself, as far as possible, to general statements, and answer Mr. O'Hanlon's assertions *seriatim*.

Mr. O'Hanlon says, "a number of these friendly societies applied for admission" to the Association. Of all the clubs in Manchester, only two of any importance made such an offer; and these had been sounded, and *indirect* pressure brought to bear on them previously. Their desire to join was not entirely spontaneous, nor is there any special wish on the part of Manchester clubs to join in the scheme; they are not less satisfied with their medical attendants here than elsewhere. Many of the practitioners holding clubs in this city can give evidence of having had their societies actively canvassed to join the scheme, by the collectors and other officials employed by the Association. Is this fair to those joining the provident scheme, or to those outside it, when the terms of the Association do not allude to the admission of friendly societies? do not even contain a saving clause by which they might be introduced hereafter? and finally, in the face of a distinct statement made to several practitioners who asked before joining the scheme, whether the Council had any intention of admitting clubs, and received a reply in the negative? Is not this a violation of the spirit of the agreement upon which we were invited to join the Association? Mr. O'Hanlon acknowledges that the wage limit of club-members infringes "the limit fixed by the rules of the scheme" for ordinary members. The Council, therefore, introduce two classes of provident patients in receipt of two distinct wage amounts, practically violating the terms of the original scheme.

Mr. O'Hanlon next describes how a general meeting was summoned to consider this subject. I can assure him that only a portion of the medical staff received any written invitation. Of those invited, four were present. The resolution was passed and published after a *single* meeting, although medical men present protested strongly against it, and stated their reasons; that it was likely to be injurious to those holding clubs, to those outside more than to those inside the provident scheme; that it was contrary to the original intentions of the Association, and that it forced medical men outside to join the Association unless they wished to lose their clubs *in toto*. This was the only general meeting at which the medical staff had any opportunity of considering so important (to them) a subject; and then they were completely ignored, and hardly listened to, for the simple

reason that the Council had made up its mind to pass the resolution *volens volens*. The medical men expected this treatment from previous experience, and many considered it useless to attend, especially as they had frequently, in private conversation with Mr. O'Hanlon and several members of the Council, strongly expressed their objections to the resolution, and urged its withdrawal, in order that the general scheme might not be jeopardised. This opposition to the resolution was embodied in the form of a protest, drawn up and signed by twenty-one out of twenty-three medical officers, at a public meeting held for the purpose.

After these facts, how can Mr. O'Hanlon say, "The Council would have yielded at once in the present dispute, had there appeared any reasons for supposing that it was acting in opposition to the just interests of the profession"? Mr. O'Hanlon next says, "that the subject was again discussed by the Council, and on the recommendation of two of our leading medical men, managers of the two largest hospitals", it could not be rescinded. None of the medical staff were invited to this meeting; and the two medical men referred to—one the superintendent of the Infirmary, the other senior physician to a Children's Hospital—have no clubs, probably never had any; are not in general practice; know little or nothing of the difficulties and worries of general dispensing practice; and of whose sympathy with the feelings of the profession the less said the better. Would it be believed, from the "moderate" tone of Mr. O'Hanlon's letter, that not a single representative of the class whose interests are seriously affected had been placed on the original Council? Since our resignation, it has been acknowledged that this was a mistake on the Council's part, and *in future* they intend to elect one from each dispensary staff. This is a specimen of the "greatest consideration for the interests of the profession", "the Council's conduct has always been guided by the opinion of its medical men", which Mr. O'Hanlon so courageously announces in his letter. In fact, we are called in to see the body medical, bruised, battered, and butchered, and to sign a death-certificate. After all has been settled, we are asked to express an opinion *pro* or *con*.

Mr. O'Hanlon is quite at sea when he says "pressure was brought to bear" on the staff by some of its members, and by some club-doctors. Nothing of the kind occurred. The question at issue was the obnoxious resolution, and its consideration was limited to the medical officers of the Association. Mr. O'Hanlon's remark about "trades-unionism" in the movement we can well afford to overlook.

The Council, not satisfied with the overwhelming evidence from their medical staff, that they urgently requested the withdrawal of the ill-advised resolution, again invited them to listen to the Council's foregone determination. Need I say the medical officers declined in a body to assist in such a farce, and informed the Council by letter that they had expressed their objections to the resolution, that their protests were systematically ignored, and that they must adhere to their resignations.

What Mr. O'Hanlon means by his remark, "that it would now be more difficult to carry on the dispensaries, unless radical alterations were made in the conditions on which medical men *may* become connected", etc., I do not know: it looks very like a threat to future freedom of action.

With regard to Mr. O'Hanlon's fiscal view of the admission of clubs, I find that most of the club-doctors here consider 6d. to 8d. out of 3s. per head sufficient to cover the cost of medicines, etc., taking into consideration the small number seriously ill; and that from distance and other causes, many never require the club-doctor. Therefore, 2s. 6d. or 2s. 4d. reach the pockets of the medical man in private practice, under the Provident Association only 2s. 2d., with the additional disadvantage of the club being divided amongst the entire staff; and though portions of several friendly societies be given to the doctor, it is highly improbable that it will pay as well as in private practice, and there it is at a sufficiently low scale already. The Council, however, nullify their own arrangements, by stating in one clause of their terms for admitting clubs, "that an *entire* club must join", and in another, refer to "such members of a club as may *choose* to join".

Mr. O'Hanlon mentions the remuneration made, and to be made, out of the Association. I will give a few examples. One medical man received £4 os. 10d. for three months' work, consisting of a hundred and three home visits and one hour a day at the dispensary, and extra consultations at his house. Another, with two hundred and fourteen families on his list, paid an average of fifteen visits a day, two to three hours' consultation, and for six months received £10. Other examples will be given in a future article. The doctor referred to by Mr. O'Hanlon, as receiving £250, is worried to death with a list of two thousand patients, and can have but little time for private practice, or anything else.

Mr. O'Hanlon concludes his letter with an *advertisement* for surgeons to fill the places of those who have almost unanimously sacrificed their interests in the general scheme to carry out a movement for the common good. This is at least most undignified, and will not be overlooked by the profession in Manchester, which, he states, is overworked, but certainly not overpaid, as far as it has any connection with the Provident Dispensaries' Association. The number of persons now being admitted, the amount of whose incomes should exclude them from the Association, is rapidly becoming serious to private practitioners, and I am furnished with lists from medical men of cases coming to their knowledge; nor is this to be wondered at, when the collectors are paid by commission on the amounts they collect, and the new members they enrol. It is to their interest to obtain adherents, and they canvass entire streets at a time, urging people to join who are private patients of neighbouring practitioners, and in receipt of large incomes, adding that "they must make up their commission to such and such sums". It is very difficult for the provident medical officers to correct this grievance, as, by remonstrating with the patients, or informing the local committee, they lose their clients altogether.

There are many serious grievances, which I shall leave others to lay before you; but in correcting Mr. O'Hanlon's misleading letter, I have mainly dealt with the cause of dispute, apart from the general principle of provident dispensaries. I trust that the Council will see fit to detach their resolution concerning friendly societies from the body of the scheme, though it is hardly to be expected from a Council a member of which expressed to me his "regret at the spirit of opposition to the profession which it exhibited".—I am, sir, yours, etc.,

CORRESPONDENT.

MEDICAL ETIQUETTE.

MRS. X., of her own accord, requests Dr. A. to visit Dr. B.'s patient. Dr. A. calls on Dr. B., who is from home, and leaves a note, informing him that he has done so, and prescribing a course of treatment. Mrs. X., through the medium of a third party, asks Dr. B. if he has complied with Dr. A.'s suggestions. Give an opinion of Dr. A.'s and Mrs. X.'s conduct, both unknown to Dr. B., and inform Dr. B. how to act towards both.

* * * 1. Dr. A. ought not to have seen Dr. B.'s patient except in consultation with Dr. B. 2. Dr. B. may properly decline to act upon Dr. A.'s advice until after consultation.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than *Thursday*, twelve o'clock.

ROYAL COLLEGE OF SURGEONS.

THE first primary or anatomical and physiological examination for the diploma of membership of the Royal College of Surgeons for the present session was commenced on Saturday last, when forty-one candidates offered themselves, to whom the following questions were submitted: 1. Describe the changes which the blood undergoes in passing through the capillaries of the skin and of the lungs. 2. What is the minute structure of adipose tissue? and what purpose does fat serve in the animal economy? 3. Describe the portions of the bones which form the elbow-joint, and the ligaments which connect them. 4. How would you proceed to display the muscles of the tongue? Give their respective attachments and nervous supply. 5. Describe the structure of the scalp, including its arteries and nerves. 6. In what region is the cæcum situated? Describe its connections with the adjoining parts of the alimentary canal, and its structure.—Candidates were required to answer four (including one of the first two) out of the six questions.

MR. WOOD (Shrewsbury). We agree in considering that the "popular treatise" circulated by "Dr. Eldridge Spratt" is a most unprofessional production; and it is greatly to be regretted that the "Earl of Glasgow" should allow his name to be used in such a connection.

SURREY-SHIRE SUPERSTITION.

ONE of the witnesses in a recent disputed will case, who was present at the testator's death, deposed that as the deceased, who was upwards of seventy years of age, was "dying fast uphill", as she termed it, his feet were put into hot water, it being a belief in Shropshire that such an application expedites a dying man's end.

ERRATUM.—In the account of Introductory Addresses at the Dublin Schools (page 62 of last week's JOURNAL), Mr. Thornley Stoker was by accident misprinted Thornby Stotar.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Hastings and St. Leonard's News; The Belfast News-Letter; The Sheffield Daily Telegraph; The Chester Guardian and Record; The Hereford Times; The Bristol Daily Post; The Evening News; The Sheffield Post; The Metropolitan; The Blyth Weekly News; The Edinburgh Daily Review; The Glasgow Herald; The Western Daily Press; The Merthyr Telegraph; The Leighton Buzzard Observer; The Bristol Daily Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Sunderland Daily Echo; The Co-operative and Financial Review; The South Wales Daily News; The Macclesfield Courier; The Melbourne Argus; The Southampton Times and Hampshire Express; The Jarrow Express; The Birmingham Daily Post; The League Journal; The Sheffield and Rotherham Independent; The Derbyshire High Peak News; The Liverpool Daily Courier; The National Food and Fuel Reporter; The Worcester Herald; The Norfolk News; The Worcester Chronicle; The North British Daily Mail; The Social Science Review; The Carlisle Express; The Sussex Daily News; The Royal Leamington Spa Courier; The Bethnal Green Times; The South London Press; The Hampshire Advertiser; The Worcestershire Advertiser; The Newcastle Weekly Chronicle; The Worcester Journal; The Hobart Town Mercury; The Weekly Times; The Mid-Weekly Hampshire Independent; The North British Mail; The Western Mail; The Redruth Times; The Indian Statesman; The Birmingham Morning News; The Cork Constitution; The Sunday Times; The Naval and Military Gazette; The Broad Arrow; The Thane Advertiser; etc.

* * * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, &c., have been received from:—

Dr. J. Matthews Duncan, Edinburgh; Mr. Sydney Henson, Manchester; Dr. F. Gordon Brown, London; Dr. F. J. Brown, Rochester; Dr. Stirling, Edinburgh; Mr. George Rigden, London; Mr. F. Lowndes, Liverpool; Dr. David Young, Florence; Dr. Thomas Cole, Bath; Dr. Edis, London; J. H. J.; Mr. Eastes, London; Mr. J. W. Groves, London; Mr. W. Fairlie Clarke, London; Dr. J. Crichton Browne, Wakefield; Mr. T. M. Stone, London; The Secretary of the Clinical Society; The Registrar-General of England; The Secretary of Apothecaries' Hall; Dr. Alfred Carpenter, Croydon; The Registrar-General of Ireland; Mr. Jonathan Hutchinson, London; Dr. J. Milner Fothergill, London; M.R.C.S. Eng.; The Secretary of the Hunterian Society; Mr. T. Vincent Jackson, Wolverhampton; Dr. Macnaughton Jones, Cork; Fair Play; Dr. Farquharson, London; Mr. Christopher Heath, London; Dr. R. J. Lee, London; Mr. Joseph Bell, Edinburgh; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. Weir, Nottingham; Dr. Sidney Ringer, London; Dr. G. V. Poore, London; Dr. Broadbent, London; Dr. Macleod, Glasgow; Mr. George Cowell, London; Dr. Joseph Rogers, London; Mr. Ralph Goodall, Wolverhampton; Our Dublin Correspondent; Dr. Russell, Birmingham; Mr. R. M. Craven, Hull; Mr. W. K. Curtis, Canterbury; Dr. Birkbeck Nevins, Liverpool; Dr. Mackey, Birmingham; Dr. Wade, Birmingham; Mr. Macnamara, London; Mr. Walter Lattey, Southam; Dr. Arthur Gamgee, Manchester; Dr. Spencer, Bristol; Dr. C. Theodore Williams, London; Mr. Spencer Watson, London; Mr. A. B. R. Myers, London; Dr. F. M. Pierce, Manchester; Dr. H. O. Stephens, Bristol; Dr. Aitken, Rome; Dr. Alexander, Bradford; Dr. A. B. Steele, Liverpool; Our Glasgow Correspondent; Mr. Steet, Hampstead; Mr. W. J. Harris, Worthing; Mr. W. Murrell, London; M. W. C., Clifton; Mr. Walter Rigden, London; Dr. Hamill, London; Dr. E. J. Tilt, London; Mr. J. C. Inghen, London; Dr. Stewart Lockie, Carlisle; Mr. T. L. Gentles, Derby; Mr. Richard Davy, London; Dr. Styrup, Shrewsbury; Mr. Parkin, London; Mr. Charles Mercier, London; Dr. Ramskill, London; Dr. Byrom Bramwell, Newcastle-upon-Tyne; Dr. Broadbent, London; Mr. Shorley F. Murphy, London; Mr. R. Eaton Power, Dartmoor; Mr. W. E. Rowlatt, Paris; Dr. Mac Cormack, Clapham; etc.

CLINICAL LECTURE

ON

VARICELLA-PRURIGO.

By JONATHAN HUTCHINSON, F.R.C.S.,

Senior Surgeon to the London Hospital, and to the Blackfriars Hospital for Skin-Diseases.*

I MUST not weary you by the citation of individual cases; but I have yet one or two others to which I wish to call your attention.

Three children in one family had chicken-pox at Christmas 1869. The two elder were well in a week; but the youngest, then six months old, had his eruption pass into "strophulus pruriginosus". He was brought to me in the following April, still covered with rash. It was of the characteristic form, beginning in some places as papules, and in others as bullæ. Many of the papules still looked like scratched lichen; but, in many, ulcers or excoriations of considerable size had formed. The largest bullæ had, as usual, occurred on the feet and legs; some of the most characteristic on the soles. He had lichen eczema on the face and ears, and porrigo on the occiput. In spite of it all, he had thriven pretty well. His nights had often been much disturbed. He was still at the breast, but was fed also on a variety of food. He had never been vaccinated, having in early life had "much tightness of chest". He had cut six teeth, four before the eruption. He had no kind of eruption before he had the chicken-pox. The vesicles of the latter were very abundant. His mother's expression was, "The chicken-pox never really died away, and every spot festered and went into one of those that he now has". It should be stated that the eruption was specially copious across his loins.

You will observe that the fact as to the eruption having really begun in chicken-pox is very strong in the above case, for three children had it at the same time. It is equally so in the following; the father of the patient being a medical man, and having watched the eruption from the first.

A well known physician, whom I chanced to meet one evening a few weeks ago at a medical assembly, asked me: "Have you ever known chicken-pox last for a year?" "Yes," I replied: "I have just been preparing a lecture on the very subject." "Well," he said, "one of my own children had, a year ago, a most undoubted chicken-pox eruption; and she continues still liable to the appearance of spots." This patient, a girl of about eight, was brought to me a few days afterwards; and I found that she presented a mild example of the disease under consideration. Scattered over the surface were a number of spots which had begun as papules or abortive vesicles, and were now abraded by scratching. They had been very troublesome from itching. The spots were not nearly so numerous as in many other of my cases, but they were quite characteristic.

I might add many more cases to the above list if it seemed advisable; for the eruption is by no means a very rare one. I think, however, I have adduced enough evidence to prove my point, and to illustrate most of the peculiarities of the eruption in question. In order to facilitate the comparison of cases, and to show more clearly what the facts are respecting the age of the patient, the antecedents of the eruption, and its duration, Mr. Nettleship has kindly arranged for me, in tabular form, the cases already given, together with a number of others of which I have the notes. We have compiled two tabular statements; one containing cases in which the original eruption was diagnosed as varicella; and the other, those in which it followed vaccination.

The first list, comprising cases in which the eruption followed varicella, or varioloid, contains sixteen cases, ten of which were in boys, and six in girls. The youngest was six weeks old, and the oldest seven years, at the time of the original attack. In five, the eruption had lasted

for a year or more when the patient first came under observation; and in all it proved very intractable. I can, indeed, only in a minority, assert that anything approaching to a cure was effected. In almost all, however, much benefit resulted; and there appeared reason to think that, in the end, the disease would be conquered. Several of them attended under treatment, however, through many months. In all, the eruption was much alike: a mixed papular and vesicular rash, symmetrically arranged, avoiding the flexures, very pruriginous; and prone to affect the soles and palms. This last point easily distinguishes the eruption from the other forms of prurigo, and also proves that the eruption is not a lichen. Lichen being a chronic inflammation of the hair-follicles and their adjuncts, cannot, of course, occur in parts where no such structures exist.

TABLE I.—Cases of Prurigo following Vaccination.

Name.	Age at admission	Duration at admission	Remarks.
1. Alfred Vernon (Case viii.)	2 years	15 mos.	Began suddenly, and the mother was told it was chicken-pox. Attended 12 months. (In the report of the case given last week the age at which the eruption began is stated to have been 2 months; it should have been 2 months.)
2. James Quinlan ...	7 months	5½ mos.	Began as undoubted chicken-pox under care 8 or 9 months.
3. Anne Gridland ... (Case xi.)	3¼ yrs.	15 mos.	Liable to the eruption since varicella at the age of 2 years.
4. Frederick Manger .. (Case ix.)	1¼ yrs.	9 months	Mother thought it was chicken-pox at first, but the doctor said it was not that disease. Attended 4 months.
5. Rosina Childs (Case i.)	16 mos.	4 months	Began over the belly at once, and the doctor considered it to be small-pox. Attended 5 months.
6. Sarah Tosland (Case iv.)	19 mos.	14 mos.	Began gradually in the winter. The mother thought it was chicken-pox. Attended 2 months.
7. Walter F. Seymour... (Case vi.)	12 mos.	No note	Was taken in the first instance for chicken-pox. Attended 1 month.
8. David Forster (Case vii.)	3 years	2¼ yrs.	The medical attendant called it "glass-pox" when it began at the age of 8 mos. Attended 11 mos.
9. Georgiana Langton..	2¼ years	3 to 4 ms.	Began as large blisters, like vaccination marks, or "chicken-pox". Attended 1 month.
10. Frederick Tothem ..	3 years	4 months	Some considered it "small-pox", others "chicken-pox", in the first instance. Attended 2 months.
11. Sidney Lee	3 years	3 months	Two doctors at the time had a case of chicken-pox at first.
12. Charles Bell	14 mos.	2 weeks	Began 2 weeks ago as "chicken-pox".
13. Richard Bathurst ..	2 years	6 months	Began like mad-pox. Attended 3 months.
14. George Thornton... (Case detailed above)	3 months	6 weeks	Supposed at first to be small-pox, but was probably varicella. Had not been vaccinated.
15. Private Case (M)....	6 months	4 months	Began as undoubted varicella.
16. Dr. G.'s case.....	8 years	1 year	Undoubtedly varicella at first.

It is with very great regret that I bring forward any facts which tend to show that ill consequences do occasionally ensue from vaccination. But in this, as in all other matters, it is far better to know and to make known the real truth. I feel no doubt that varicella does not unfrequently leave a most troublesome prurigo; and I feel equally little that vaccination does, in some of the rare instances in which it is attended by a varicella-like rash, leave a similar ill consequence. The eruption under the two conditions seems to me exactly alike. During the last six months, a number of cases have been sent to me at the Blackfriars Hospital by a committee of philanthropic ladies who are engaged in visiting the poor, with especial reference to the prevention of disease. Having been informed by them that they met with much prejudice to vaccination, and frequent assertions that skin disease were caused by it, I offered to receive and investigate (and, if possible, cure) all cases of the kind which they would send to me. I was already well aware of the relations existing between vaccination and this form of prurigo; but I quite expected that the majority of the cases I should get would be eczema and porrigo. Such has not been the case, however; and all the cases as yet sent (only, I think, about six or seven) have been examples of the form of prurigo to which this lecture is devoted. Some of them have been very marked cases, and of long persistence.

The following table exhibits the chief facts as to age of patient and duration of eruption in twelve cases which seemed to be more or less closely connected with vaccination. The rash was of the same character as I have described in connection with varicella. It may be

* Concluded from page 632 of last number

observed that, in several of the cases, the interval alleged to have occurred between the vaccination and the rash was so long as to throw some doubt upon the connection between the two. It is only in those instances in which the rash follows promptly that I would with confidence infer a connection.

TABLE II.—Cases of Prurigo following Vaccination.

Name.	Age at admission.	Duration at admission.	Remarks.
1. Samuel Bristowe... (Case i.)	15 mos.	8 months	Came directly after vaccination; but the medical man said it was chicken-pox. Attended 18 months.
2. Sarah Ellis.....	2 years	18 mos.	Vaccinated at the age of 6 months. Eruption began immediately afterwards. Attended 12 months.
3. George Humphrey.	14 mos.	11 mos.	Began after vaccination at 3 mos. Attended 3 months.
4. Edward Barfoot... (Case ii.)	16 mos.	13 mos.	Began after vaccination at 3 mos.; was called "glass-pock" by the medical man. Attended 2 months.
5. Sarah Richardson.. (Case iii.)	11 mos.	5 months	Vaccinated at 6 months. Eruption began soon after. Vaccination did not "take". The Mother thought the eruption chicken-pox. Attended 2 weeks.
6. Martin Lewis.....	2½ years	abt. 2 yrs.	Said to have been present since vaccination.
7. Isabella Brown... (Case v.)	12 mos.	5 months	Came out soon after vaccination. Attended 2 months.
8. Walter Thompson.. (Case vi.)	19 mos.	3 months	Vaccinated at 15 months. Eruption began 3 weeks afterwards.
9. William Welch.....	6 months	2½ mos.	Began 2 weeks after vaccination. Attended 7 weeks.
10. S. Lucy Woolford..	15 mos.	9 months	Vaccinated at 5 months. Eruption began a month later. Attended 4 months.
11. Caroline Duffell..	10 mos.	2 months	Vaccinated at 7 months. Eruption began a month later. Attended 3 months.
12. Dr. Fleck's patient (Detailed above.)	..	..	Vaccination at 3 months, followed in about 2 weeks by eruption, which Dr. F. considered to be chicken-pox. The child died from the eruption after it had lasted 5 months.

It is difficult to speak with any degree of confidence as to the precise nature of the links which connect this eruption with varicella. In attempting to investigate them, I must ask you to remember that varicella presents certain curious tendencies which it does not fully share with the other exanthems; chief amongst these we must note that its stages vary in duration very greatly in different cases. Thus, its stage of incubation, which most count as eight or nine days, may, according to Trousseau, extend even to twenty-seven, and is rarely less than fifteen. Its stage of invasion, rarely more than twenty-four hours, may sometimes be three times as long, and its exanthem or eruption stage may, instead of observing the average duration of three or four days, be protracted over ten or twelve. I have myself seen a rash exactly like fading chicken-pox, which was said to have been out a month. The belief that in this instance the rash really was chicken-pox was supported by the fact of its spontaneous disappearance almost immediately afterwards. I have already alluded to Professor Trousseau's mention of the Necker Hospital epidemic, during which some cases were followed by pemphigoid rashes, which lasted a month or six weeks. It becomes a question whether, in these protracted cases, the eruption is throughout the same as at first. In some, as in Trousseau's, it probably differs; but in others, as in my own case of one month's duration, there are no features by which it can be distinguished. Now, if the true varicella eruption which has usually a four days' duration, may be protracted to four weeks, there is, perhaps, no definite limit to what is possible as to its stay. These cases may, then, be simply abnormally protracted and extremely pruriginous varicella rashes. There is, however, I believe, no reason for believing that such cases continue to be infectious after the first stage. The febrile stage ceases when the pruriginous one begins, and the hypothesis seems more probable that they ought to be regarded as sequelæ of the exanthem, and not as in any strict sense continuations of it. Another hypothesis is that the outbreak of varicella in some way so affects the nerve-structures of the skin as to induce a state of pruriginous irritability; to aggravate, indeed, what is often a personal peculiarity, a tendency to itch on the slightest provocation. But the eruption which I have been describing is something more than can be so explained. Its single spots often closely resemble those of varicella, and they differ in their vesicular tendencies from those of all other forms of prurigo. I cannot help believing that they result from the same process in the skin-tissues as that which causes the vari-

cella eruption, and that they probably originate in precisely the same parts. Otherwise, it would be most difficult to explain their peculiarities of appearance. We come thus to the question, what are the peculiarities of the varicella spot? That they differ much from all other eruptions will be readily admitted, and that their differences are more than merely those of size and shape is rendered certain by the very curious fact that their contents do not contain the germ material from which the disease is reproduced. It is generally believed that you cannot inoculate chicken-pox. In external appearance, a varicella vesicle remarkably resembles one of herpes. This similarity has not escaped Trousseau. They are further not unlike herpes in their duration, rapid decline, and mode of healing. Just as in herpes, we occasionally have long protracted pain in the part, so in varicella we have occasionally long protracted itching. The parallel fails in this, that we have no such thing as protracted vesicular eruptions in herpes; it is the pain alone which lasts. We know that herpetic eruptions are produced through the agency of sensory nerve-filaments; it is even possible that they may arise over or in nerve-papillæ. It is just possible then, following this line of suggestion, that the varicella vesicle originates in irritation of a nerve-papilla. I admit that this is a mere conjecture, but it seems to me not unpalatable, and we need some theory by which to explain our facts.

It is necessary, however, to keep in mind a few other general facts in reference to prurigo, if we would master the whole of the bearings of these curious cases. Even if we grant the suggestion that, as herpes may leave its well known after-pain, so may varicella and allied eruptions leave their after-prurigo, we have scarcely explained the whole matter. The next fact which we must acknowledge is, that prurigo, from whatever cause it may have begun, tends to perpetuate or even to aggravate itself. It causes itching, and the itching causes scratching, and the scratching extends the prurigo, and thus the patient goes on from bad to worse. This is true of all forms of prurigo, whether beginning from lice, from fleas, from woollen clothing, half-cured scabies, or from some internal cause. If we could entirely prevent scratching, very few prurigos would assume a severe type. This being so, we can easily explain the alterations which these cases undergo when they persist long. At first, it is probable the rash is really a protracted varicella attended with prurigo; its vesicular character proves it to be such; and it may even be the case that the prurigo element is but small. The longer the case persists, however, the less does it preserve the aspect of varicella. Vesicles cease to appear, and pruriginous papules take their places; the palms and soles no longer show the eruption, which is almost confined to the parts on which the prurigo of infants (strophulus pruriginosus of authors) is common. It is in these later stages that the diagnosis from strophulus, which was easy at first, becomes difficult, and is, indeed, to be based chiefly on the history of the initial period.

You will notice that these cases all occur at an age at which pruriginous affections are common, and at which restraint as to scratching is almost impossible. They have, indeed, hitherto been counted by dermatologists amongst the considerable group of infantile skin-affections known as lichen infantum, lichen pruriginosus, lichen urticatus, and strophulus pruriginosus. These maladies, or this malady, for they are closely similar diseases, have, as yet, been only named and described; little or nothing has been done as to the suggestion of causes. I am convinced that the facts which I have stated to you to-day give us the clue to the real cause of a large number of them, and I shall not be surprised if, in the future, we are able to extend it to a much larger number than we at present feel justified in allotting to it. The age at which infantile prurigo is met with is the age of children's exanthems; and, although varicella appears to stand pre-eminent amongst those which are capable of throwing the skin into a pruriginous condition, it is probably not the only one. I have several times, indeed, known measles assigned as the parent of a long persistent prurigo; and the other exanthemata (perhaps even abortive exanthemata) may sometimes stand in the same relation. It is for the present the general principle only for which I contend; the details of its extent of application we must determine hereafter. That principle is, if you will excuse the repetition, simply this, that varicella, varioloid, the rash which sometimes attends vaccination,* and possibly other exanthems, possess the power in exceptional cases of making the skin irritable, and thus laying the foundation for long continued and most troublesome conditions of prurigo; to which I must add, that this consequence is especially apt to ensue when, as is not unfrequent in varicella, the eruption is long protracted, and occurs in successive crops.

* It was to my friend Mr. Coely of Aylesbury that I was indebted, some years ago, for a knowledge of the fact that an exanthem rash does occasionally show itself after vaccination. I find the fact mentioned both by Ballard and Hebra, and it appears to be well established. It is probably not very common, for I have been assured by experienced vaccinators that they never witnessed it.

ON THE PREVENTION AND MANAGEMENT OF MISCARRIAGES.*

By ARTHUR W. EDIS, M.D.,

Assistant-Obstetric Physician to the Middlesex Hospital; Physician to the British Lying-in Hospital, etc.

IN the following remarks, the term miscarriage is used synonymously with abortion, and is intended to apply to all cases where the ovum is expelled from the uterus before the seventh month; before, in fact, the fœtus has acquired sufficient development to maintain a separate existence.

The subject demands more careful consideration than is usually accorded to it; for miscarriages are far more frequent than is usually supposed. The life of the fœtus is invariably sacrificed, and the mother's life often jeopardised. Even when this latter is not the case, the fecundity of the female is often seriously interfered with; numberless instances of so-called acquired sterility being dependent upon the neglect or carelessness of the patient following a miscarriage.

Apart from this also, much serious discomfort and suffering, through many long years, from uterine disorder, is often entailed from want of a little judicious advice and assistance at the time. Many a valuable life has been sacrificed, and many years of suffering and unhappiness produced, in consequence of making light of a miscarriage, either willfully or ignorantly. A fresh conception is allowed to occur before the process of involution has been completed, abortion following again as a certain consequence, until the severe hæmorrhage, anxiety, and confinement to the house call forth inevitably any latent disposition to tubercle or other hereditary disease; and, whilst sorrowing for the life thus prematurely cut short, or vainly regretting the blighted hopes of a fruitful marriage, the knowledge that this depended merely upon a neglected miscarriage will prove no solace to the friends or comfort to the sufferer.

It has been my lot to observe numberless instances where miscarriage after miscarriage has been allowed to take place without a vaginal examination ever having been resorted to, or any attempt made to ascertain the causal condition of this premature expulsion of the ovum; no instructions having been given to the patient as to what precautions should be taken to avoid similar catastrophes, no injunctions as to resting in the horizontal position, or living *absque marito* until the process of involution has had time to be accomplished; in fact, the whole affair being treated as if it were not worthy of serious consideration by the practitioner, or of any moment to the patient.

Dr. Whitehead estimates that over 37 per cent. of mothers abort or miscarry before they attain the age of 30 years. Dr. Meadows, from a collection of about two thousand cases in hospital practice, found that about one woman in every three and one-fifth aborts.

In a series of nearly 2,000 cases of my own hospital patients at all ages, where the facts had been carefully recorded, there were no fewer than 1,147 miscarriages compared with 4,588 children born at full time—a proportion of exactly one in four. This ratio I find to be as nearly as possible the same among my private patients, the increased development of the nervous system among the upper and middle classes compensating for the diminished risk from the accidents which affect the poorer classes.

In the large majority of cases of miscarriage, they will be found to be due to some deranged state of the mother's health, or to some morbid condition of the uterus or its appendages. There are also many what may be called accidental causes, such as blows, falls, sudden agitations from fright, etc., which disturb the equilibrium of the circulation or strongly affect the nervous system. These are self-evident, and will not be here further referred to, inasmuch as, beyond enjoining avoidance of all unnecessary risks when patients are in the early stage of pregnancy, we can scarcely regard these as preventable causes. I am anxious rather to direct attention to the unnecessary waste of life resulting from the frequent recurrence of miscarriages in the same patient, where there is some deranged condition of the uterus or its appendages: causes that may be termed preventable.

The hope of preventing the recurrence of miscarriage depends upon our tracing out—what in every case exists—the efficient cause of it. It is useless to sit down disarmed and passive under the influence of that ignorant dogma which asserts that women have a habit of abort-

ing; that they are labouring under an abortive diathesis. This is no more than saying that women abort because they abort, which is not very instructive, and leaves us still in ignorance of the cause of this often preventable habit.

Syphilis is so frequent a cause of premature expulsion of the fœtus, that Bunnsted, in his work on *Veneral Diseases*, says:—"Repeated abortions form a valuable element of diagnosis in the investigation of suspected cases of this disease in married life." It is rarely that we have a clear and distinct history of syphilis given; for naturally the husband says nothing about it, even when he suspects anything; and the wife, ignorant of the importance of certain primary symptoms that have been allowed to pass almost unnoticed, lays no stress upon them, and is innocent, indeed, of the very existence of such a disorder. We must, therefore, rely upon the objective symptoms, and not trust alone to the subjective. The intelligent practitioner will generally be able to recognise certain well known symptoms that will afford a clue to the nature of the case, such as pallor of the countenance, languor, precarious appetite, sore-throat, falling out of the hair, more or less emaciation or deterioration of the general health, numerous aches and pains, together with local evidence of constitutional infection in the form of endometritis or granular degeneration of the cervix, together with hypertrophy and induration of this portion of the uterus, evidenced by leucorrhœa, menorrhagia, dysmenorrhœa, and numerous other symptoms. Where, in such a case, we have the history of perfect health and vigour preceding marriage, and there have been repeated miscarriages since, we need have no hesitation in at once placing our patient on a mercurial course. It has sometimes been supposed that the cause of the miscarriage in these cases was not the syphilitic taint, but the mercurial treatment to which the patient may have been subjected. This opinion, however, is erroneous. The careful administration of mercury to a pregnant woman affected with syphilis affords the surest protection to her child; and it is very rare for this mineral to produce abortion, unless given injudiciously and in such a manner as to irritate the stomach or intestines. When both parents are affected with syphilis at the time of conception, and the mother does not receive appropriate treatment in the early months of pregnancy, the fœtus will rarely be carried to the full term of gestation.

In administering mercury to pregnant women, the perchloride is to be preferred. The chief reasons for this selection are the ease with which it can be taken, the almost certainty that it will not produce salivation, and the length of time for which it can be persevered with. Under its influence, the patients regain a state of sound health to which they have long been strangers; they increase considerably in weight, their secretions become perfectly natural, and they eat, sleep, and digest well. Moreover, they lose that fearful mental depression which is a frequent result of the contaminated state of the blood. The dose should vary from one-sixteenth to one-eighth of a grain, given in the form of a pill or in solution with bark.

Metritis, in some form or other, is a very frequent cause of miscarriage as well as consequence. Dr. Bennet, in his valuable treatise on *Inflammation of the Uterus*, says that inflammatory ulceration of the cervix during pregnancy is of frequent occurrence, and is the key-stone to diseases of the pregnant state, and the most general cause of laborious pregnancy, obstinate sickness, miscarriages, and hæmorrhages. Dr. Whitehead also lays much stress on an inflammatory condition of the cervix being a frequent cause of miscarriage. Dr. Tilt, in his *Uterine Therapeutics*, says:—"Inflammation of the womb is frequently produced by abortion or parturition; and I am certainly not overstating the fact in affirming that two-thirds of the serious cases of uterine inflammation can be traced to a bad miscarriage or confinement." The prevention, therefore, of uterine disease in married women is tantamount to the judicious management of pregnancy, abortion, and parturition. Did time permit, I could quote numerous authors in support of this statement; but those who have any knowledge of the subject will, I am sure, deem this unnecessary, and those who have not may accept the statement that inflammatory mischief, whether in the cervix only or in the uterus generally, is not only a frequent concomitant, but also very often the cause of miscarriage.

Aptitude for conception is not at all incompatible with inability on the part of the uterus to undergo the requisite changes that take place during pregnancy. It must not, therefore, be considered that, because a patient becomes pregnant, there can be no serious inflammatory mischief; and, when this fact has not been recognised until pregnancy has actually occurred, there is no reason why treatment should not then be resorted to.

Patients frequently consult us complaining of nausea, constipation, bearing-down, menorrhagia, leucorrhœa, burning pain in the left iliac region, and other well recognised symptoms. On examination, we find the uterus enlarged to the third or fourth month of pregnancy,

* Read before the Section of Obstetric Medicine at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

with extensive granular degeneration of the cervix. In such a case, unless appropriate treatment be resorted to, miscarriage will almost inevitably occur sooner or later.

And here I would enter a protest against the very prevalent notion that nothing can be done until after delivery. It is a great mistake. We are in a similar position to those who advocate extreme radical views, having emphatically everything to gain and nothing to lose; for, if we shrink from treating the disorder, miscarriage will almost inevitably result; and, even if it should follow the employment of local remedies, it is in spite of, and not in consequence of, our treatment. We are no worse off than before, and have, moreover, the satisfaction of having attempted to prevent the premature expulsion of the fœtus.

Experience corroborates what physiological reasoning suggests; namely, that the cure of a diseased action in the organs of parturition will contribute to the security of pregnancy. The experience of many eminent practitioners, as well as my own, proves conclusively that inflammation and ulceration of the os and cervix uteri, with mucous or purulent leucorrhœa, may coexist with pregnancy, and that they frequently cause abortion; and also proves that they can be treated successfully during gestation, without necessarily disturbing the process. Whenever there are pelvic pain and leucorrhœal discharge in gravid patients who have aborted in previous pregnancies, the condition of the os and cervix uteri should be positively ascertained.

The treatment found most successful in cases of inflammatory excoriation or ulceration of the lower segment of the uterus is sufficiently simple; namely, local abstraction of blood by the application of a few leeches, or scarification, and occasional cauterisation of the diseased sites; every possible care being taken to prevent local and constitutional disturbance following upon treatment. Vaginal injections, whether sedative or astringent, may safely be resorted to, provided due care be taken not to employ too much force. Lotions composed of glycerate of borax, carbonate of soda, acetate of lead, and sulphate of zinc, are generally found most useful. Pessaries composed of oxide of zinc, carbonate of bismuth, tannic acid, and various other agents, are also of much service.

When we consider that, during the early months of utero-gestation, it is the body of the uterus that is chiefly implicated in the lodgment of the ovum—the cervix not being involved till much later—our fears as regards setting up more irritation than we attempt to relieve may be lessened.

Flexions of the uterus are responsible for a very large proportion of the miscarriages which happen; and where we find one miscarriage after another occurring in succession, it may almost be taken for granted that that patient is suffering from flexion, provided that there is not syphilis. Thus, as Dr. Grailey Hewitt asserts, the same circumstances which frequently induce sterility are liable to produce abortion if the patient do become pregnant. Dr. Albert Smith has shown that retroversion, when it does not preclude impregnation, has a great tendency to produce abortion in the early months. The uterus being in an unnatural position with relation to the pelvic organs, and being pressed downwards and backwards by the superincumbent mass of the intestines, the ligaments, instead of holding the uterus suspended firmly and sustaining it with a mobility just sufficient to accommodate it to the unavoidable movements of the body, now relaxed and useless, allow it to be jostled rudely about and irritated by every change in the relation of the surrounding organs. In such a condition of things, the retentive power of the uterus must be greater than it usually is in a primiparous woman to continue its development, resisting the influences which, from the first, operate and set up an irritability in its tissues. The chief symptoms complained of are generally a sense of discomfort and weight in the pelvis, bearing-down pains, dragging in the groins, frequent micturition, occasionally dysuria and straining on defæcation. It is in these cases that we often find a difficulty, in cases where abortion actually occurs, in complete delivery of the ovum.

Careful reposition of the uterus in cases of retroversion and retroflexion is the first thing to be accomplished. This may safely be done by pressing the fundus upwards, guiding it to one or other side of the promontory of the sacrum, and then adjusting a Hodge's pessary to assist in retaining the uterus in its normal position. Lying in the prone position for several hours during the day is generally advisable. Strict attention to the emptying regularly of the bladder and rectum should always be insisted on. The Hodge's pessary should not be removed until after the uterus has risen out of the pelvis—about the fifth month or so—when a vaginal support will no longer be needed.

There are some few points worthy of consideration as regards the reflex phenomena influencing gestation, to which it may be well briefly to refer. Foremost among these is the morning sickness of pregnancy,

which, when exaggerated in degree, often causes much anxiety and suffering, and occasionally induces abortion; though it is astonishing to what an extent—even to such a degree as to cause death—nausea and vomiting may proceed without exciting the uterus to expel its contents. After parturition, the slightest gastric irritation will excite contraction of the uterus; but, during pregnancy, gastric irritation and sickness, even to death, may occur, without disturbing the *fœtus in utero*. In many of these cases, the insertion into the vagina of a morphia and atropine pessary will at once arrest sickness, when all other remedies have been tried.

A vaginal examination should always be resorted to. Many a case of intractable vomiting, where the *Pharmacopœia* has been ransacked in vain, has been found to depend upon a retroflexed condition of the uterus, the vomiting ceasing entirely on replacement of the uterus, and supporting it by means of a Hodge's pessary.

Gestation and lactation ought never to be permitted to go on at the same time in the same individual; and where it is evident that a patient has become pregnant, the child should at once be weaned. Neglect of this precaution has caused many a miscarriage.

Where neuralgia or toothache causes much distress, wakeful nights and restless days, and there seems to be risk of miscarriage, extraction of any diseased tooth should always be effected; chloroform or nitrous oxide being given to lessen any risk from shock.

Obstinate constipation and, in consequence, the too frequent resort to purgative medicine, not infrequently interferes with the development of the pregnant uterus, or produces so much irritation in the pelvic organs as to cause abortion. The employment of the sulphate of magnesia in small doses, or some form of tonic aperient, repeated thrice daily, will obviate this difficulty far better than drastic cathartics.

Where patients have acquired, so to speak, the habit of aborting, we must be careful to eliminate every possible cause; in these cases, continence must be strictly enjoined—the vaginal irritation, together with the ovarian influence, being often sufficient to determine a miscarriage.

In the management of miscarriages when actually threatened, when pain and hæmorrhage are present, our main object must be to conduct the patient safely through the process, provided it cannot be prevented or averted. A vaginal examination should always be made; for, until we know the exact state of the uterus as regards dilatation of the os, protrusion of the ovum, and intensity of the pains, we are not in a position to decide whether there is a reasonable prospect of averting the catastrophe, or whether we ought to facilitate the expulsion of the ovum. In any case, the hæmorrhage must be stopped; and, supposing the ovum is not sufficiently detached or protruding from the os, ergot should at once be given; and here I would call attention to the fact that ergot does not invariably produce expulsion of the ovum, as many imagine. I have repeatedly given it in large doses where miscarriage was imminent, with the effect of restraining the hæmorrhage, the patient going on to her full time, and being safely delivered of a living child. Where the os is not sufficiently patulous to allow the introduction of the finger, the hæmorrhage being severe, the introduction of a sponge-tent into the cervical canal itself will not only arrest the hæmorrhage, but expedite the dilatation and expulsion of the ovum.

The hypodermic injection of morphia is a valuable method for arresting threatened miscarriage; but time would fail me were I to attempt to mention all the various measures that have been resorted to.

When the ovum has been only partially expelled, and the hæmorrhage continues, the injection of the solution of perchloride of iron, as advocated by Dr. Barnes, should not be forgotten; and when, later on, the discharge from the uterus has any tendency to become at all offensive, the intrauterine injection, twice daily, of a solution of carbolic acid will avert any ill effects in the form of septicæmia, and materially assist the removal of any *débris*.

I have no intention of entering more fully into the management of miscarriages, though the subject is one of great importance. My main object in occupying a brief portion of your time to-day was with the hope of directing more careful attention to the consideration of the subject; and if some here object that nothing new has been brought forward, I would crave their indulgence, and beg them to consider that possibly there are others who will not regret having listened to what, after all, may be new to them.

It seems to me that miscarriages are a much neglected study. Case after case rises up before me where lives have been jeopardised and even sacrificed, hopes blighted, homes rendered desolate, and much heart-burning and physical suffering produced, for want of a due consideration of the importance of the subject; and if only the attention of the few be more earnestly directed to the study of miscarriages, my object will have been attained.

ON THE INFLUENCE OF ALTITUDE AND PRESSURE ON THE "VITAL CAPACITY" OF MAN.

By F. CRESSWELL HEWETT, M.R.C.S., late R.N.

THE influence of altitude upon the spirometric measurements of the expired air (vital capacity of Hutchinson) is a subject that has not met with much attention. Rattray, in his researches on climate, published in the *Proceedings of the Royal Society* (1869-72), incidentally mentions that an ascent of 2,000 feet at Ascension lessened the "vital capacity", as judged of by the spirometer, from 266 to 249 and 243 cubic inches. In seeking to verify these results, I determined, as an opportunity offered, to carry out more extended observations upon the subject. Two officers of H. M. S. *Northumberland* (Lieutenants Campbell and Simpson), whose "vital capacity" had previously been frequently noted, volunteered; observations being taken during a period of three days, the altitude of the place of observation, at Madeira, as determined by an aneroid barometer, corrected for temperature, being 2,950 feet, this agreeing with the altitude given by Dr. Hartung in his *Geologische Beschreibung der Inseln Madeira, etc.* The observations commenced on the morning after the arrival of the party at the mountain, being taken twice daily, morning and evening, before breakfast and before dinner, at about 8 A.M. and 6 P.M. respectively. The vital capacity index is taken from the mean of three trials, the height of the barometer and temperature being noted at the same time.

A.—Previous Vital Capacity=325 Cubic inches.			B.—Previous Vital Capacity=270 Cubic Inches.			
First Day.			First Day.			
Mean v. c. in c. in.			Mean v. c. in c. in. Bar. Tem. (F.)			
1. 290	}	297.5	1. 226	} 241.3	27.78	61
2. 291			2. 246			
3. 290.5			3. 252			
1. 290	}	293.6	1. 247.5	} 257.5	27.72	57
2. 291.5			2. 260			
3. 299.5			3. 265			
Second Day.			Second Day.			
1. 290	}	293.6	1. 267	} 263.6	27.70	55
2. 292			2. 263			
3. 299			3. 261			
1. 298	}	295.5	1. 259	} 257.3	27.65	52
2. 289.5			2. 253			
3. 299			3. 260			
Third Day.			Third Day.			
1. 308	}	310	1. 252	} 258.8	27.64	55
2. 312			2. 262			
3. 310			3. 262.5			
1. 314	}	313.8	1. 254	} 263.5	27.61	52
2. 317.5			2. 268			
3. 320			3. 268			

The previous vital capacity was determined by a series of trials similar to the above; the barometer fluctuating between 30.31 and 30.01 inches; the thermometer between 62 and 69 degrees Fahr.; the maximum variations in the vital capacity being 15 and 19 cubic inches respectively.

If we look at the vital-capacity index under the heading of "trials", we find that there is both in the case of A. and B. a considerable variation in the number of cubic inches registered in each separate series. In the case of A., we find a difference of nine cubic inches between the maximum and minimum indications on the morning of the second day; whilst, in the case of B., there is a difference of six cubic inches. Although, of course, the highest indication registered the true vital capacity, the examination of the whole series of trials leads us to the conclusion that these differences are due to the incomplete filling or emptying of the lungs; and that in a series as the present, where the same cause of error is always acting, for purposes of comparison, the mean of the three trials will be the safest index for our purpose.

Taking, then, the means of the several trials as a fair expression of the vital capacity, we find, in comparing the means, that there is a gradual increase from the morning of the first day to the afternoon of the third. In the case of A., there is a progressive increase from a vital capacity of 290.5 cubic inches to 313.8, or an increase of 23.3 cubic inches; and so, also, in the case of B. (the progression being interrupted on the second day), there is an increase from 241.3 cubic inches to 263.5 cubic inches, or a total increase of 22.2 cubic inches; the amount of increase being strikingly similar in both cases.

Looking now at the thermometric and barometric records, we find that 9 deg. Fahr. and .17 inch embraced the whole of the fluctua-

tions of temperature and pressure, the former ranging between 61 deg. Fahr. and 52 deg. Fahr., the latter between 27.78 inches and 27.6 inches. These changes, being so minute, cannot come to our aid as explanatory of the progressive increase of the vital capacity in both cases, the only explanations remaining being either (1) increased proficiency in the art of "blowing"; or (2) an accommodation of the lungs to the decreased pressure, whatever cause that first occasioned a diminution in the vital capacity being removed or neutralised. The first cannot be explanatory; for, at the sea-level, the vital capacity is almost constant in both cases during a similar series of observations; and, moreover, the steady increase above noted could not be explained by increased proficiency in "blowing", as both had been accustomed to "blow", and had evidently reached their maximum capacity, as evinced by the uniformity of the vital-capacity index during the series of trials at the sea-level.

There only remains the second hypothesis to consider—viz., the gradual removal or neutralisation of some impeding cause to the introduction of air to the lungs. Firstly, are we to consider that the diminution of vital capacity is due to decreased pressure upon the pulmonary tissue, causing the presence of an increased amount of blood in the lungs, and that the diminution of the vital capacity was due to the increased space taken up by the blood, and was an index of the superfluity? and that we are to account for the re-established "vital capacity" by the subsidence of the pulmonary hyperæmia; or, this subsisting, is there compensatory dilatation of the pulmonary air-cells? This latter is most possibly the explanation for the diminished pressure on the lungs still existing; there would be still cause for the hyperæmia, and, therefore, without dilatation of the pulmonary air-cells, still cause for a diminished vital capacity.

Comparing the previous vital capacity with the results of the experiment, we find that, in the case of A. with a previous vital capacity of 325 cubic inches, there was at first a diminution to 290 cubic inches, or a total decrease of 35 cubic inches; which deficit, on the afternoon of the third day, was reduced to only 5 cubic inches. In the case of B., with a previous vital capacity of 270 cubic inches, this was reduced to 241 cubic inches, or a deficit of 29 cubic inches, which deficit was lessened on the third day to 6.5 cubic inches.

From these observations, we may deduce the following conclusions.

1. The vital capacity of man is at first reduced by a diminution of pressure.

2. After a few days, the average capacity is re-established.

ON CEREBRO-SPINAL MENINGITIS.*

By THOMAS COLE, M.D. Lond.,
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IN the present paper, I propose to sketch briefly, and make a few remarks upon, eight cases which were probably examples of the above-mentioned disease. They were all hospital patients. I am indebted to Dr. Coates for the use of notes of three of them (Cases II, VII, and VIII).

CASE I.—George R., aged 12, a schoolboy, became an in-patient on January 25th, 1875. He cut his finger with a hatchet a month previously. His illness began, two weeks before, with headache, loss of appetite, and vomiting. He got out of bed several times without knowing what he was doing. On admission, he complained of pain in the occiput and left side. He could open and shut the mouth well. The head was thrown back; the muscles of the neck were rather firm; the knees were contracted; the flexor muscles somewhat stiff. During his illness, the tongue was fairly clean, and his appetite good. The bowels for a considerable time were obstinately confined; afterwards the motions were passed involuntarily. Once there was slight difficulty in swallowing. The urine was normal, but often passed in bed. Several times, there was much sweating. The nights were sometimes good, sometimes bad—from pain; at others quiet, but sleepless. There was much retraction of the neck, and great pain on trying to bend the head forward. Opisthotonos existed for many days, with occasional spasm of the legs. Once it was difficult to make him open the mouth. The tongue was always well protruded. At one time, there was blowing with the mouth, also temporary drawing down of its left angle, and, at the same time, right internal strabismus. Twitching of the mouth, and slobbering out of its right corner, also occurred. The pupils were always normal, once rather large. The legs became flaccid, and the arms and hands seemed to lose all power, and eventually the right

* Abstract of paper read before the Bath and Bristol Branch.

arm was quite paralysed. One day, the breathing was occasionally stertorous. He was rather stupid now and then, and one day half-insensible on his back. There was considerable pain in the back of the neck, especially on movement, also varying pains in the left side, trochanters, and knees. Asthenia and wasting were marked. The morning temperature varied between 97.4 deg. Fahr. and 103.4 deg. Fahr., averaging about 99 deg. Fahr. The evening temperature varied between 99 deg. Fahr. and 103.2 deg. Fahr., averaging over 100 deg. Fahr. The pulse varied between 54 and 108; usually it was but little accelerated, and once only a little uncertain in rhythm. Respiration, as a rule, was slightly hurried. The treatment consisted of nourishing diet, chloral to relieve pain, and extract of physostigma. The latter was given in one-eighth of a grain doses every six hours on January 22nd; on the 23rd, every five; on the 25th, every four; on the 31st, every three hours; on February 8th, every six hours. On February 22nd, it was omitted.

CASE II.—Catherine II., aged 2, living at Weston, was taken ill on April 24th, 1875, with sickness, headache, and retraction of the neck. She fell into a well fourteen days before, but suffered no visible injury. She kept crying, and, when touched, was very hyperæsthetic all over. She was arched up like a bow. The motions and urine were passed in bed. She was very feverish, and much wasted. There were no bedsores. A few days before death, the child lay in a half-conscious state, and died quietly on May 22nd, 1875, the symptoms having continued unrelieved. No *post mortem* examination was permitted. The treatment was at first liquor ammoniæ acetatis, and afterwards the liquor hydrargyri perchloridi.

CASE III.—Henry T., aged 13½, a butcher's boy, living at Lambert's Buildings, was admitted on April 5th, 1875. He was taken ill on March 29th with frontal headache, followed the next day by pain down the whole back and vomiting. The head had been retracted and turned to the right side since the second day. The illness began without appreciable cause. He lay in bed crying, from pain from the occiput to the sacrum, extending over the whole dorsal surface. There was much tenderness when he was touched. There was also pain half-way down the back of the right thigh and over the surface of the abdomen, which was also tender. The tongue was dry in the centre; the edges were whitely furred. Bowels confined. Temperature, 103.4 deg. Fahr.; respirations, 30; pulse, 108. During the illness, the appetite was usually fair; the tongue was more or less coated, and often very dry; thirst prevailed; sickness was very common; and the bowels were nearly always, sometimes obstinately, confined. There were great emaciation and weakness. The urine was normal until April 21st, when it was albuminous. On the 22nd, it was acid, smoky, and the specific gravity 1020. It became more and more bloody till the 27th, on which day it was clear. It was again albuminous on the 30th; on May 1st, bloody; on May 3rd, there was no albumen; from the 4th to the 9th, it was albuminous; on the 10th, it was bloody again; on the 13th, clear but albuminous; on the 20th, alkaline from amorphous phosphates; no albumen, but some hyaline granular and epithelial casts; on the 24th, it was normal. Some nights were very bad; but hypodermic injection of morphia generally ensured a good one. There was occasional sweating. The right ear became dusky inflamed from pressure, and two large bedsores formed over the trochanters. They perfectly healed. Great retraction of the neck and opisthotonos existed nearly all the illness through, gradually relaxing towards the end. Once he could not clench the right fist well, nor extend the fingers. The pupils were often unequal, the right being usually larger than the left; occasionally they were dilated. He was very deaf. There was occasional nocturnal delirium. The day the urine became albuminous, he seemed quite unconscious and very much changed; but the day after he was quite rational. Very severe pain was suffered all the time. It affected the forehead, back of the neck, shoulders, right arm, gluteal regions, and legs; and there was much hyperæsthesia. The respirations varied from normal to 44 per minute. As a rule, they were rather accelerated. Coarse râles were discovered on the day the albumen appeared. The pulse was not quite regular then. It varied between the normal and 144, being usually over 90. The temperature varied in the mornings between 97.8 deg. Fahr. and 104 deg. Fahr.; the evening temperature between 98 deg. Fahr. and 104.4 deg. Fahr., generally over 100 deg. Fahr. He left the hospital well on June 14th. The treatment consisted of generous diet and wine. Bromide of potassium and chloral were at first added, with hypodermic injections of morphia sometimes combined with atropia. The latter were of immense benefit in relieving the pain. The extract of Calabar bean was ordered two days after admission, in one-eighth of a grain doses every four hours; next day, every two hours; next, one-sixth of a grain every hour; next, a quarter of a grain every hour; three days afterwards, a quarter of a grain every half-hour; next day, half a grain every half-hour. This last dose was

continued for twenty-four hours, and then the drug was abandoned. He subsequently took iodide of potassium, ergot, perchloride of mercury, bark, and phosphorised cod-liver oil, with aperients.

CASE IV.—Clara S., aged 3½, was admitted on April 1st, 1875. She was taken ill fourteen days before with frontal headache and vomiting. Three days afterwards, the head became retracted. On admission, the muscles of the back of the neck were in a state of spasm, and the child complained of much pain in the head, crying out in her sleep, "Oh dear, my head!" Temperature, 101 deg. Fahr.; respirations, 24; pulse, 115. During the attacks, the nights were fair. The appetite was pretty good; but there was a great deal of vomiting, with furred and dry tongue. The bowels were at first regular, afterwards more confined, and the breath offensive. There were much emaciation and debility. The urine was normal. The pupils were once dilated. There was much retraction of the neck, and warping towards the right side. She had considerable pain in the head, chiefly the forehead and back of the neck. Once she was drowsy. The hair fell off very much. The pulse was generally over 130. The respirations were a little hurried. The morning temperature varied between 97 deg. Fahr. and 101.4 deg. Fahr.; generally under 100 deg. Fahr.; the evening temperature between 99 deg. Fahr. and 102.6 deg. Fahr.; generally over 100 deg. Fahr. Generous diet was given. Bromide and iodide of potassium were first tried; then juice of conium and calomel were added. Quinine followed, and afterwards bichloride of mercury and bark.

CASE V.—Henry II., aged 2½ years, was admitted on March 15th, 1875. The mother stated that she had lost one child from convulsions; another died a fortnight previously from a similar complaint to that from which this child was suffering. He was taken ill a month ago with sickness, thrice in one day, and diarrhœa. He had been quite healthy up to that time. The sickness did not recur; but he rapidly lost flesh, and presented symptoms like those now present. He had bedsores; lay with his eyes half-open; the pupils widely dilated on moving. He kept rolling the eyes about. The head was tonically retracted. There was no actual paralysis. He kept moving his limbs about, drawing the legs up, and opening and shutting the mouth. The *tâche cérébrale* was not marked. He screamed, ground his teeth, and coughed. Temperature, 100.1 deg. Fahr.; respirations, 20; pulse, 104. He had fair nights all through, and did not appear to suffer very much pain. He was sick very often, and had no appetite for some time. The bowels sometimes were very loose, at others very confined. Once there was a smart attack of diarrhœa. As he was getting better, the abdomen became tumid, the veins full, and the liver somewhat enlarged. This may have been due to the quantity of food he took during convalescence. The pupils were always very widely dilated, and vision was, no doubt, at times very imperfect. The head was retracted, and the legs were drawn up. He occasionally ground the teeth. If lifted up, he would fall backwards immediately, as if he had no power over his body and limbs. The temperature was once over 100 deg. Fahr., but soon became normal. The pulse was very rapid at first. He was emaciated and weak a long time, and could not walk alone. On June 3rd, he left quite well. He took iodide of potassium and bark; afterwards syrup of the iodide of iron and phosphorised cod-liver oil.

CASE VI.—Alice C., aged 3 months, became an out-patient on May 3rd, 1875. Ten days previously, on taking her from the cradle, her mother found the head drawn back and the legs drawn up. The child cried much, and once or twice was sick. She still suckled, but was much wasted. She cried loudly when the head was moved forwards. She was ordered a grain of hydrargyrum cum cretâ three times a day.—May 13th. The neck was just as retracted. She cried very much; she had very bad nights. The powder was repeated twice daily, with five grains of bromide of potassium every night.—May 17th. She had no appetite. The neck was the same. She evidently suffered much pain. She cried incessantly.—May 24th. The head was not quite so retracted. She was ordered a grain of iodide of potassium, four grains of bromide of potassium, and two grains of ammonio-citrate of iron, three times a day.—May 27th. She was greatly emaciated. Cod-liver oil and steel wine were ordered. The child became gradually worse, and died a few days afterwards.

CASE VII.—Arthur N., aged 12, living at Limpley Stoke, a quarry-boy, was admitted on April 24th, 1875. On coming home on March 13th, having been quite well, he complained of pain at the back of his head, and the neck soon became retracted. There was no sickness. He had been delirious on and off, and, on several occasions since, had vomited round worms, the last four days ago. Three weeks ago, he became hemiplegic on the left side. The bowels were at first confined, but were now regular. When admitted, he lay in bed with the head turned to the left side, and complained of great pain in the back of the neck when it was moved. There was left hemiplegia, the tongue was

protruded to the left, and the mouth drawn to the right side. He could not tightly close the left eye. The left half of the tongue was more flabby than the right. The left arm and leg were wasted, and the thigh and leg were hyperæsthetic. There was a slight tendency to œdema of the left foot. There were a few yellow opaque sudamina over the abdomen and chest. He complained only of pain in the thigh and in the back of the neck when not touched. Tongue clean. The pupils were equal and normal. He passed urine in bed. The nights were bad at first; were relieved by morphia, and soon were good without it. The appetite remained fair. The motions were usually passed involuntarily. No worms were evacuated after santonin and jalap. There was constant incontinence of urine. It was normal. The pupils were equal and normal. When he left the hospital on August 26th, the paralytic symptoms were but little relieved. All through, he had much pain in the neck, left leg, and arm. This gradually abated. The pulse was usually quick, but became normal before he left. The temperature never exceeded 100.2 deg. Fahr., and soon subsided. Treatment consisted in the administration of iodide and bromide of potassium, the hypodermic injection of morphia, then the hypophosphite of soda, and subsequently the syrup of the iodide of iron, cod-liver oil, and strychnia.

CASE VIII.—John G., aged 14, stable-boy, was admitted on October 15th, 1875. He was taken ill five days before with pain in the head and legs, and sickness. He had slept badly, with talkative delirium. The bowels were open several times a day. On admission, the head was retracted; there was pain all over it and in the thighs. The tongue was a good deal furred, and moist. His appetite was better than at first. The bowels were regular. He was slightly deaf. The first two nights were bad, with much talking and shouting; hypodermic injections of morphia gave him a succession of good ones. The sixth of a grain had to be used. This lost its effect after a short time, and the nights were restless. The dose was augmented with success, and the morphia was left off on October 30th. The tongue was furred and foul at first, then became dry, and there was much thirst. The bowels were more or less confined unless medicine was given. The pupils were normal. The neck was much retracted, so that he could not lie on the back; it was gradually relaxing. There had been a great deal of pain in the head, back of the neck, and right thigh; it was much abated on November 2nd. He had been very deaf. Herpes came on the upper lip. At the beginning, the urine was loaded with urates, very acid, with a specific gravity of 1023. It gradually cleared, and became neutral. On October 23rd, albumen appeared; it was absent the next day. The urine was alkaline. On the 30th, he was very apathetic; on the 26th, respiration had been slightly hurried. The pulse had never exceeded 108; one day, it was a little intermittent. The morning temperature varied between 100 deg. Fahr. and 103.8 deg. Fahr.; the evening temperature between 103.4 deg. Fahr. and 105.6 deg. Fahr. On October 31st, it sank in the morning to 98.6 deg. Fahr.; in the evening to 99 deg. Fahr. On November 1st, it was 98.6 deg. Fahr. The case is not yet complete; but there is every prospect of speedy recovery. Treatment has consisted in the administration of the bromide of potassium all through, with hypodermic injections of morphia. The iodide of potassium was given at first, and a blister applied to the nape of the neck. November 22nd. He is quite well.

REMARKS.—At the outset, the question naturally arises, Were these cases examples of cerebro-spinal meningitis? If they were not, what disease did they represent? Were they tubercular meningitis? If so, the results of that malady were never so favourable in eight consecutive cases. For six out of eight to recover is an event unknown in the practice of any single person, or even in the collective experience of the whole profession. The numerous cases that have come under my care have always terminated fatally. Nor do I remember to have seen one in which persistent retraction of the head occurred. Case VI perhaps approximates rather closely to this disease; and, taking into consideration the tender age of the child (although epidemic meningitis attacks infants), and the absence of *post mortem* evidence, I am rather doubtful as to the diagnosis in this instance. The peculiarities of the pulse so common in tubercular meningitis were absent in all those under consideration, with trifling and temporary exceptions. And it is rare to get so many successive cases of such long duration. In all except one, there was a total absence of convulsions. Many other points of contrast could be noticed, did time permit. Were they simple cerebral meningitis? This complaint is generally ushered in by violent convulsions, with intense fever, headache, and rapid breathing; and runs a hurried course, very seldom lasting longer than six days, and often terminating in two. Were they tetanus? The first case had a history of cut finger, which was somewhat calculated to mislead. There was no previous injury in all the rest; so that, if they were tetanus, they must have been idiopathic in their origin. There were no exacerbations of

the painful spasms, as in lock-jaw; no trismus; no marked difficulty of swallowing; and fever and more or less head-symptoms were present. But, granting they were cases of cerebro-spinal meningitis, did they come under the sporadic or the epidemic variety? This point is of great interest and importance. Sporadic cerebro-spinal meningitis, in which the membranes of the base and ventricles of the brain, with the sub-arachnoid space of the spinal cord, are especially inflamed, is, according to Dr. Gee, comparatively common in London. The symptoms are similar to those of the epidemic form of the disease, so far as the meningeal condition is concerned. Herein lies the chief difficulty. It is well known that there are three distinct varieties of the malady:—Firstly, the simple form, in which there is a predominance of the nervous phenomena; secondly, the fulminant, in which there is terrible blood-change, evidenced by hæmorrhages into the skin, and accompanied by marked depression of the vital powers; thirdly, the purpuric form, in which the former two exist in varying proportions together. In each epidemic, cases are observed which link together all three forms of the disease; and even the symptoms of them all may be grouped together in one individual. Our cases were clearly of the simple kind, although it is interesting to note the renal hæmorrhage which occurred in No. 3 Case. It is certainly worthy of notice that all of them occurred between January 7th and April 24th, 1875, except the last. During that period, I saw one or two others of a suspicious character, but have purposely excluded them from present consideration. Since I have been in practice, I have seen no cases at all resembling them. There can be no doubt that they did not represent an epidemic constitution of any severity. This is proved by the comparative mildness of the cases themselves, their chronic course, and the limited nature of the outbreak. The patients lived in various quarters of the city; one at Limpley Stoke, and another at Weston. Still, it is somewhat remarkable that so many exactly similar cases should have been under treatment at the same time.* Perhaps some of my brethren here can offer, from their experience at that period, some evidence towards the solution of this difficulty. I cannot but think myself that there must have been an epidemic origin to account for the coexistence of such a number of cases. The ages of the patients furnish another point of interest. They varied from three months to fourteen years. It is stated that in some epidemics children mostly suffer. This would coincide with what took place on this occasion. Many points of resemblance may be noticed between the symptoms in the several cases presented. Thus, in the initial stage, six out of the eight had intense headache, mostly frontal; the other two being too young to express themselves on this point. It is, however, a significant fact that they screamed and cried a good deal. Six had vomiting; all had retraction of the neck; in two, it was also drawn to one side. Pain down the spine and general hyperæsthesia were also prominent symptoms. With regard to temperature, I felt at the time that the thermometer would have registered much higher had the cases been more recent when they came under observation. Case VIII corroborates this impression. The temperature was sometimes considerably lower in the evening than in the morning. The pulse ran high in some of them—up to 150 or 180; the younger the child the higher the pulse. There seemed to be some relation, although not a very strict one, between the temperature and pulse. Yet sometimes it was surprisingly slow, being in the first case as low as 66 per minute. The rapidity of respiration seemed in all to depend upon the febrile movement. The asthenia, rapid wasting, and tendency to bedsores, were remarkable. Vomiting, obstinate constipation, or involuntary action of the bowels, occurred in nearly all. The condition of the urine in Case III was remarkable. I attribute this to the elimination of some morbid material, and it seems to me to link the case with the purpuric variety of the disease. It is strange that temporary albuminuria occurred also in Case VIII. The frontal and occipital headache, pains in the neck, back, legs, sides, abdomen, and arms, the general hyperæsthesia, retraction of the neck and opisthotonos, and spasms of the legs, occurred too frequently to be accidental symptoms. Delirium and fleeting unconsciousness happened three or four times; but there was general torpor in them all. The condition of the pupils and eyes, and the various degrees of paralysis, demanded attention. I cannot divine the etiology of these cases. Supposing them to be examples of cerebro-spinal meningitis, its causation is wrapped in obscurity. It seems to prevail especially in cold seasons of the year. High and low latitudes, healthy and unhealthy places, well drained and badly drained, suffer alike. Some believe it to originate in an analogous manner to the zymotic class, others do not recognise any resemblance. Diseased grain has been blamed as the cause. Although there is evidence to the contrary, the Massachusetts Medical

* The mother of one of the children stated that she had lost a child fourteen days before from the same sort of illness.

Society agreed in its non-infectious nature. It attacks more children under 14 years of age than adults. With regard to treatment, a variety of remedies was employed. The bromide of potassium, chloral, and henbane were useful in relieving pain; but the hypodermic morphia carried off the palm, and I believe Case III would have succumbed without it. It would require much more experience to state positively the value of the other drugs employed. I am inclined to believe the disease is very little influenced by drugs. The cod-liver oil, especially phosphorised, was of undoubted service during convalescence. I can also recommend the ice-bag to the spine. The Calabar bean seemed to produce no physiological effect. It was obtained from three different sources, and I believe was well prepared. Yet one patient took it in fair doses for a month, and another in very large doses. Twenty-four grains in twenty-four hours is a considerable quantity for a boy only 13½ years old. But there was no more loss of motor or reflex activity of the cord nor diminution of pain; no more enfeebling nor slowing of the heart's action, nor interference with respiration, than during the time the patients were not taking the medicine. Nor did it produce any giddiness, torpor, excessive secretion of tears and saliva, vomiting or purging, muscular twitching, or the least contraction of the pupils. It would seem that the bean cannot be so poisonous as it has been stated to be. I think much of the success of these cases is due to the *vis medicatrix nature*, a power which has a far higher place in the cure of disease than we often suspect or allow. I should be much disposed, were any new cases to come under my care, to push belladonna, with purgatives and other eliminants. Such an occurrence may at any moment enhance the interest and importance attaching to this group of maladies. The few drops of silently falling rain to which we pay but little heed may usher in a terrific storm, pregnant with destruction, desolation, and death.

P.S.—I should be grateful if any members who may have seen similar cases would kindly communicate them to me, as the matter will be more fully discussed at a subsequent meeting of the Branch.

THE PRESENT EPIDEMIC OF SCARLET FEVER IN BRISTOL.

By DAVID DAVIES, M.R.C.S.Eng.,
Medical Officer of Health for the City.

I.

THE *bête noire* of health officers is here in force; and has, after a struggle of seven months, set our regulations at defiance, and re-asserted its usual fatal character. I will give an account of my knowledge of it in the form of short propositions.

History of the present Epidemic.—A few cases, isolated and at different points, appeared in the autumn of 1874. These were, so far as I know, successfully stamped out by isolation and disinfection. Cases kept dropping in at intervals during the winter of 1874 and 1875. By redoubled energy, we succeeded in keeping the disease within narrow limits, and at isolated points. All infected houses and clothing were disinfected. Drains in localities wherein the disease prevailed were kept saturated with disinfectants, viz., sulphate of iron and carbolic acid. Handbills containing instructions and cautions for the prevention of its spread were freely circulated.

With the approach of spring, the cases multiplied; in the summer, still more so; until, last week, we had 28 deaths from it in a population of 196,000. Judging by the history of former epidemics, I do not think we have yet reached the highest point, which, in the epidemic of 1870, was 35 deaths in one week. We still disinfect and do our utmost to prevent its spread; but I acknowledge most freely (as with regard to this disease I always have) that we have utterly failed to produce much effect on it, except to postpone it in an epidemic form for four or five months. During the quarter ending September 30th, we lost 161. In Bristol, the disease, as an epidemic, has very regularly observed a cycle of about four years; of the cause to which this is due, I can form no opinion.

Type of the Epidemic.—A small proportion of the cases have been of a most malignant character, the poison destroying life in eighteen or twenty-four hours by acting on the blood, and through the blood as a depressant on the nervous system. Death in these cases has taken place before there has been time for the development of the rash on the skin. A considerable number of the cases have been of the middle type, usually called "scarlatina anginosa". Many of these have died from excess of zymosis and throat-affection; but, judging by the returns of mortality and the frequent entry of "scarlatina", "dropsy", or "nephritis" in the returns, I believe that more than one-third of the

fatal cases were originally light, and became fatal through an affection of the kidneys, produced by exposing the skin to cold during the convalescent stage. Having formed this opinion, I had a handbill of cautions on this head circulated extensively among the poor. I believe it has done some good. This form of death is more frequent among the poorer class than among the rich.

In connection with this subject, I append a letter which I have received from my friend Dr. Gray, the experienced medical officer of the Children's Hospital. As the letter is, in my opinion, a very original communication and a most important one, I give it in full, hoping that Dr. Gray will publish a more extensive account of his experience in a separate paper.

"Bristol Hospital for Sick Children, Royal Fort,
St. Michael's Hill, November 20th, 1875.

"My dear Sir,—May I draw your attention to what I believe to be a sufficiently marked feature of the present scarlet fever epidemic to deserve special recognition, viz., the occurrence of a number, probably no small proportion, of cases of the latent form of the disease? I would include not only those where dropsy has followed an attack of the fever so slight as to have escaped notice, but also those in which the renal complication was primary; for it seems to me certain that here and there cases have occurred, without rash and without sore-throat, in which at the very outset the whole force of the poison has fallen upon internal organs—cases for which the term "scarlet fever" is literally a misnomer, and which can only be regarded as such from the fact of their occurring during an epidemic of that fever, and also because they seem to be quite as capable of communicating the poison as those in which it develops itself in the usual way. It is solely on account of the importance of this latter point that I have ventured to trouble you on the subject, because I think you will agree with me, that such cases are very likely to be a means of propagating the disease in an insidious and dangerous manner that is easily overlooked. I suppose I must have observed nearly a dozen of them, the last having presented itself only on Thursday; and I have thought that perhaps the occurrence of this latent form has not happened to come under your notice, as no reference has been made to it in your reports. You will know best whether there is any use in cautioning the public to beware of it. Probably you would think it futile to bid them beware of an invisible enemy! The only effective precaution that I can see lies in their being very suspicious just now of every attack of illness in their children, until its non-identity with scarlet fever becomes quite manifest.

"I imagine that isolated cases of this obscure kind do occur in most epidemics, but they must surely have been unusually numerous during this one.

"If I can furnish you with any further particulars that would be of any interest to you, I shall be happy to do so.—Believe me, my dear sir, yours sincerely,
"JOHN H. GRAY."

"David Davies, Esq., Medical Officer of Health."

As my paper is given in the capacity of a public officer, I offer no views on the medical treatment of the disease.

LIGATURE OF THE EXTERNAL ILIAC ARTERY WITH CARBOLISED CATGUT, FOR ANEURISM IN A SYPHILITIC SUBJECT.

By A. B. R. MYERS, M.R.C.S.Eng., Surgeon, Coldstream Guards.

PRIVATE A., Coldstream Guards, aged 33, service fifteen years, was admitted into hospital October 4th, 1874, for a large pulsating aneurismal sac implicating the right external iliac and femoral artery. Three weeks before admission, the patient strained himself in running, and soon afterwards observed this swelling, but he failed to report himself sick until compelled to do so by pain. In 1863, he was in hospital for the first time, and only for twelve days, for primary syphilis. The following year he was under treatment twice for a most severe secondary pustular eruption, which was treated with mercurial fumigation; and since then he has been in hospital eight times with specific ulcers of the leg, which, as a rule, readily healed under an iodide of potassium treatment, leaving, however, very brown stained cicatrices.

On admission, the sac, circular in shape, had a diameter of three inches, and pulsated very strongly; and, owing to the patient's great muscular development, much force was required to compress the external iliac sufficiently to even partially arrest the circulation.

It is needless here to record the treatment day by day of this case; suffice it to say that to November 20th mechanical and digital compression with and without the administration of large doses of chloralhydrate were tried, with great perseverance and to the utmost endurance

of the patient, and also flexion of the thigh on the abdomen, but with no benefit, excepting, no doubt, in developing to some extent the collateral circulation, and thus assisting much in the future treatment. On November 24th, the aneurism measured four and a half inches longitudinally, and four and a quarter inches transversely, the increase having taken place chiefly on its proximal side; and I then performed the following operation, assisted kindly by Mr. Gascoven of St. Mary's Hospital, as well as by my colleague Surgeon-Major Trotter. Having made the usual external incision, commencing about an inch above, and to the inner side of the median line of Poupart's ligament, the oblique and transversalis muscles were, owing to their great thickness, very freely divided. No notice was taken of the transversalis fascia. The peritoneum, with abdominal contents, was thus easily detached and drawn inwards; but the artery was with difficulty reached, as it seemed to have been considerably pushed inwards by the long course of mechanical pressure, but, pulled outwards slightly with a forceps, the ligature needle was readily passed round it without any attempt being previously made to open the thin sheath which surrounds the vessels there. Perfectly fresh carbolised catgut was used; and, owing to the fear that the first ligature might not have been well applied, and having a great belief in its non-irritating properties, I put another round of it of the same material, and in juxtaposition. The wound was then sewn up, and the whole limb, having been well enveloped in cotton-wool, was raised, and a hot bottle applied to the foot.

On examining the foot a few hours afterwards, it was warm, and the patient was quite comfortable. Again I will omit the course of the case, beyond stating that a great portion of the wound towards each end healed by first intention, and that this process was partially retarded by his having a troublesome cough, which strained the abdominal parietes; and for a time there was a rather free discharge, due to the man's state of health, and not apparently set up by the ligatures, which were never observed to come away in it.

On January 6th, he was allowed to get up; and on February 8th, he rejoined his battalion, when his general health was good, and hardly any traces of the aneurism were left; and, I may add, the man has continued quite well to the present time.

This case is published by permission of Surgeon-Major Cay.

SPONTANEOUS CURE OF AN OVARIAN CYST.*

By W. JACKSON CUMMINS, M.D.,

Physician to the Cork South Infirmary and County Hospital.

THE patient, a married lady, aged over 40, with no children, had for some years been off and on under my care for a muco-sanguineous discharge from the bowels. In December, 1873, she received a fall from her horse, and a few days afterwards called on me, as she complained of being slightly hurt in the abdomen. On examination, there was no trace of injury to be seen, but the hypogastric region was found occupied by a tumour tending rather to the left side, and looking like a pregnant uterus. The lady was entirely unaware of its presence, and stated that she menstruated regularly, and had no signs or symptoms of pregnancy. After repeated and careful examination, the diagnosis of ovarian cyst was made, and, in order to confirm this, she was advised to consult Dr. Kidd in Dublin, which she did, and who, in consultation with Mr. Hamilton, reported on the case as follows. "On introducing the uterine sound it was found to pass two inches and no further. The tumour is without doubt 'ovarian', nearly unilocular, and tolerably free from adhesions. No operation should be attempted at present, as it has not interfered with the patient's general health, and no certainty exists as to its rate of growth." She was ordered iodide of potassium ointment and Blanchard's pills, and advised to return home and await the progress of the case. The following are the measurements of the tumour then taken, in inches.

	1874.	Jan. 21st.	26th.
Circumference of abdomen at ninth rib	-	-	27½
" one inch above umbilicus	-	30¼	30½
" at crest of ilium	-	33¼	35
Distance from end of sternum to umbilicus	-	5¾	6
" " umbilicus to pubes	-	7½	7¾
" " umbilicus to right anterior superior spine of ilium	-	7	7½
Distance from umbilicus to left anterior superior spine of ilium	-	7	7½

There was slight crepitus to the right of the umbilicus on full inspiration.

* Read before the South of Ireland Branch.

On her return I saw, but did not examine her, and some time afterwards she began, with my permission, to drink broom-tea. Previously to this time, she suffered severely from cramps in the stomach, and one night was awakened with a kind of violent wrench in the part, which occurred twice in a few seconds. This was followed by a gradual cessation of the cramps, but there was no diminution in the size of the tumour, but rather the contrary. Shortly afterwards, she was seized with a severe bilious attack, and took a dose of castor-oil, which was followed by purging and vomiting. As the menstrual period came round, the left leg from thigh to toe became stiff and swollen, with inability to put it to the ground. It was at this time (March 1874) that she commenced to take the broom-tea, and ceased the use of the pills and ointment; the tumour being in precisely the same condition. From this time, however, it gradually diminished in size, and, in seven weeks, had entirely disappeared. She had taken during that period a wineglassful of the broom-tea twice daily. I had no opportunity of examining the lady after her reported cure; but, as she was to pass through London on her way to the Continent, I wrote to Mr. Spencer Wells, stating the nature of the case, and Dr. Kidd's opinion, and asking him to examine her, which he did, and replied as follows. "Mrs. M.'s case is probably one of rupture of an ovarian cyst into the peritoneal cavity, with absorption of the fluid. Its occurrence during the use of broom-tea can hardly be more than a coincidence. The base of the cyst can now be felt about as large as an orange to the left and in front of a rather large uterus."

Dr. Kidd, to whom I communicated the result, seemed to agree with Mr. Wells's view of the case, as I also do myself, though the very gradual diminution of the tumour testified to, both by the patient herself and her husband, a clergyman of high intelligence and judgment, would seem unfavourable to this explanation of the cure. This case agrees to a great extent with the views expressed by the most celebrated ovariologists of the day, who, when speaking of the utter inutility of drugs in such cases, mention the fact that spontaneous cures have taken and will take place during the use of some inert placebo.

Whether the cure here took place by rupture into the peritoneal cavity, and consequent absorption of the fluid; or, whether it was the result of direct absorption without rupture of the cyst-wall, is a question on which I shall be glad to hear the opinion of the members, though it may not necessarily arise in connection with the interesting case I have detailed.

THERAPEUTIC MEMORANDA.

NITRIC ACID AS AN UTERINE CAUSTIC.

I HAVE read with much interest an article from Dr. Braithwaite, in the BRITISH MEDICAL JOURNAL for November 13, on nitric acid as a caustic in uterine practice, and I can fully confirm all he says as to its superiority to other caustics. I believe that I have tried them all; but, after using the nitric acid for at least twenty-five years, I have no doubt of its superiority. It does just what is wanted and no more, rarely gives any pain, and leaves no ill-effects. If Dr. Braithwaite will turn to pp. 245, 285, etc., of Churchill's *Diseases of Women*, he will find additional testimony to that which he has quoted; and I may add that it is used and held in high esteem by all the Dublin obstetricians.

F. CHURCHILL, M.D., Fellow and ex-President of the King and Queen's College of Physicians, Ireland.

TREATMENT OF CANCER BY CITRIC ACID.

S. C., AGED 69, mother of seven children, had always had very good health. About two years and a half ago, she first found difficulty, with occasional pain, in swallowing, followed by regurgitation of food after a variable interval. Twelve months ago, she applied for treatment. There was then no marked cachexia; no emaciation; very little pain. She had regurgitation of food after every meal, and in the interval constant regurgitation of viscid fluid, clear and colourless; never any blood, etc. By the aid of œsophageal auscultation, an obstruction could be easily made out to be at the cardiac orifice of the stomach. She was then treated in a London hospital, and returned apparently dying; anæmic, cachectic in a marked degree, and unable to swallow anything, everything going down a certain distance and then being vomited. At her urgent request to give her something to "cut the phlegm", I gave her large doses of citric acid, combining with it minim-doses of ipecacuanha wine, on Dr. Ringer's plan, the good effect being very marked; the vomiting was almost stopped, and, from being unable to swallow anything, she could eat and enjoy bread and cheese and beer; she gained flesh and strength, and even did her own washing. After a few

months, the urgent symptoms returned, and she now complained of obstruction higher up. On trying to feed her with the stomach pump, a stricture could be felt a few inches below the fauces, which could be passed, and another impassable one lower down. Nutritive enemata slightly relieved; but she gradually sank and died on December 4th, 1874. Thinking that perhaps the relief in swallowing was due to ulceration through the stricture, I several times stopped the citric acid, and once or twice substituted tartaric acid, but always with the result of bringing back the difficulty. The citric acid, as she said, "always cut the way for the food". A necropsy was made thirty-six hours after death. The abdominal parietes were loaded to the thickness of one inch with very yellow fat. The heart and lungs were healthy. Four inches from the fauces, the œsophagus was reduced to the size of a No. 11 catheter by a ring of hard material in the middle of the œsophagus and a quarter in depth. The cardiac orifice of the stomach was surrounded and almost occluded by a mass two inches and a half by three inches in diameter, hard and nodulated on the outside, but pulpy and disorganised where the œsophagus passed through. On section, it had a firm white fibrous stroma, and presented all the naked eye characters of scirrhus. The œsophagus was largely dilated. The stomach and bowels were not much reduced in size.

JOHN H. WOOD, M.B., Great Bradfield.

CLINICAL MEMORANDA.

IMPROVED METHOD OF PERFORMING SYME'S AMPUTATION.

DURING my absence on the Continent last month, a short paper appeared in the JOURNAL by Dr. Joseph Bell of Edinburgh, describing a "modified and improved" method of performing Syme's amputation "by saving the periosteum of the os calcis"; and, in the subsequent number but one, Dr. Aitken of Carlisle was so kind as to bear evidence that he had seen me do this fourteen times successfully between 1869 and 1873.

I do not at present wish to enter into any statement of the merits or advantages of this departure from the usual plan, nor the further "modification" of rarely sawing off any portion of the leg-bones, except the malleoli, which I also employ, but will content myself by saying that for ten years I have occasionally, and for eight years almost invariably, followed the plan described by Dr. Bell in every case in which it could be put into practice, and that the success has been almost unbroken. I have referred to it in frequent clinical reports, and a short mention of it is made in a paper of mine giving the results of fifty amputations at the ankle, in the BRITISH MEDICAL JOURNAL for August 28th, 1869. I hope before long to lay a second series of cases before the profession, in which this practice will be explained.

GEORGE H. B. MATHIEU,

Regius Professor of Surgery, University of Glasgow.

TINEA CIRCONATA OCCURRING IN VERY NUMEROUS PATCHES, AND WITH UNUSUAL RAPIDITY.

ALFRED and EDITH G., aged 9 and 4½ respectively, were brought to me at the Hospital for Diseases of the Skin on November 11th. Edith, the younger, presented a large number of circular patches of ringworm on her face, neck, and extremities. Alfred also had numerous patches on his face and neck. The girl who acted as their nurse also had several patches; and I was told that an elder sister was beginning to suffer in the same manner.

One point of interest in the case lay in the superficial resemblance between the ringworm and an early or slight condition of psoriasis in the child Edith. The eruption consisted of very numerous patches and rings, none larger than a halfpenny, and many no larger than three-penny pieces, situated on the face, neck, backs of forearms, and fronts of knees; a few were scattered on other parts of the limbs; there were, at least, forty patches in all. The symmetry of the eruption was very marked. Although the typical psoriasis regions were affected, there were, however, no patches exactly on the tips of the elbows, nor precisely on the centre of the fronts of the knees, while the amount of epidermic scale, though somewhat deceptive on the smallest spots, was nowhere large in quantity nor silvery as in psoriasis.

The child's grandmother said that the eruption had begun only a fortnight before, and she pointed out the largest ring, one on the face, as having been the first spot to appear. Thus the rapidity with which numerous successive transplantations of the fungus took place was another unusual feature in the case. The same peculiarity was ob-

served in the boy; his first patch appeared some days later than the girl's; at his first visit, the patches were already numerous, though much less so than in his sister; a week later, notwithstanding the use of remedies in the interval, he had a number of small fresh patches. In the interval some smaller patches appeared in a very few days. There were no patches on the head in any of the cases. The mycelium, which was very plentiful both in the smallest and in the largest patches, was, on the average, larger than in some other specimens with which I have carefully compared it; and the spores, found abundantly in some of the fine hairs, were somewhat smaller than usual. This apparently slight departure from the ordinary type of the ringworm fungus may be noted, without assuming that the peculiarity has any necessary bearing on the rapid spread of the disease in these cases. It would be interesting to inquire whether atmospheric conditions, such as prolonged and excessive damp, favour the growth of the skin-fungi, as is the case with many other fungi; and whether any special prevalence of rapidly spreading ringworm has been noticed during the late excessively wet season.

J. McFADDEN, Nuffield Street, F.R.C.S. Eng.

A CASE OF OPIUM-POISONING.

On October 25th, at 6.30 P.M., a child, aged twenty-one months, was brought to my surgery, having had administered to it, in mistake, a teaspoonful of laudanum. The mother, who gave the dose, asserted that the spoon was full, and I have myself ascertained that its contents would be, at least, eighty minims. Twenty minutes must have elapsed from the administration of the drug to my seeing the child. It was then quite wakeful, and the pupils natural; but in about ten minutes the latter began to contract, the eyelids to close, and the head to droop. I gave strong emetics of sulphate of zinc and mustard, with only partial success, as the contents of the stomach were not ejected for fully an hour afterwards. Knowing that keeping the child awake was its only chance of life, I ordered it home, and followed immediately myself. I then had recourse to cold water, galvanism, ammonia, strong coffee, etc.; and, on my departure, left instructions with the parents to keep it awake, if possible, till 4 A.M. With constant perseverance, they succeeded in doing so, and at the hour named the drug had apparently exhausted itself, as the child began to cry and sit up voluntarily. Soon afterwards, it was put to bed, and, I am happy to say, is now quite recovered.

I should mention that I had been giving the child medicinal doses of opium three times a day during a fortnight previous to this occurrence, which would fortunately have a tendency to render it less susceptible to the action of the poison.

I consider this case interesting in a medico-legal point of view, inasmuch as it shows the interval from the administration to the poisonous symptoms setting in; the time necessary for the action of the drug on the system to be expended; and also the recovery of so young a subject from so large a dose of a drug known to be peculiarly active in the case of children.

J. McFADDEN, Batley.

LARGE DILATATION OF CARDIAC EXTREMITY OF STOMACH.

IN 1858 and 1859, I attended a lady, 39 years of age, for abdominal enlargement and faulty digestion. She was the mother of one child, whom she had suckled partially, and who was then about seven years old. No second pregnancy. Her catamenial visitations had been regular but scanty. There was no uterine disease. Her chief trouble was inappetence and rejection by eructation—not by vomiting—of all or the greater part of everything she took as food or beverage. The ejected material was usually a thin muco-serous fluid, often without taste, or tasting sometimes of the liquid food she had swallowed. Solid food in any form could not be taken. She had no desire for food or drink, but requested only to be left quiescent. The urging to take ingesta was done simply to maintain vitality; but she would have preferred to starve. The bowels were very inactive, and every form of aperient returned by eructation. The abdomen, which had a girth of about forty inches at the umbilicus, gave no sign of solid formation in any part, but was clearly fluctuant all over, with a thin wave on percussion, and not painful. I proposed to remove the fluid by tapping, believing the case to be one of ascites; but the operation was not allowed, and she gradually sank from anorexic starvation. On opening the abdomen after death, no effusion was found in the peritoneal cavity. The abdominal space was found to be occupied by an enormous cyst, which contained from twenty-four to twenty-six pints of a hazy muco-serous fluid, largely albuminous. The cyst consisted of a dilated state of the cardiac end of the stomach, at which point it had a diameter of three or four inches, but expanded largely over the sigmoid region,

across the hypogastrium, upwards in front of the ascending colon, and across under the liver and in front of the stomach as far as the splenic region. The organs of the chest and head were quite healthy.

JAMES WITTEHEAD, M.D., Manchester.

DISINFECTANTS.

THE question of the value of different substances as disinfectants is so important in the practical treatment of many medical and surgical cases, that it appears remarkable that at present we are unable to estimate the potency of some of those most commonly in use. It must have occurred to some who were present at the discussion which took place at the Clinical Society on the treatment of surgical wounds and injuries with salicylic acid, that there might possibly be some difference between the acid when dissolved in water combined and uncombined with phosphate of soda. The solution employed by Mr. Callender was, we may presume, a combination of one part of salicylic acid, three of phosphate of soda, and fifty of water. The extent to which salicylic acid alone is soluble in water is about 1 in 300; it is not correct to reason of the effects of solutions of such different composition as are referred to as though they were the same. This instance of our liability to disregard apparently unimportant details should lead us to examine results of experiments with various disinfectants with some care; for it is important that such practical tests as those employed by Mr. Callender should be attended with such definite results as the time and labour bestowed upon them deserve.

It might, for example, be suggested that the local inflammatory condition which followed the use of salicylic acid, when combined by means of phosphate of soda with only fifty parts of water, was not an improbable result of such a combination. It is also quite a fair question to put to anyone who advocates some particular substance in some particular form or degree of dilution, what reasons he may have for the assertion he makes. There are many who imagine that it makes very little difference whether we use Condy's fluid, permanganate of potash, carbolic acid, or any other disinfectant. It is a pity they should remain under this delusion, which is kept up by the theoretical views entertained of the *modus operandi* of disinfectants. A most able and scientific chemical friend of mine was quite certain that "disinfection" was only another name for "deoxidation", and most implicitly believed that the permanganate of potash was the best material for disinfection; at least he held that belief till a short time since, when, by some persuasion, he was induced to look at a slide under the microscope on which he saw some of those mysterious and active agents of disease (which Professor Lister has no insufficient reasons for regarding with some respect) gyrating in the interior of a blood-corpuscule apparently as freely as we move about an ordinary room. It would be a breach of confidence to repeat the expressions of surprise my friend uttered. It was sufficient that he renounced all chemical notions of disinfection, and rather experienced the absolute impossibility of dealing with living organisms of such extraordinary activity, yet of such minuteness.

Still we can deal with them with very good results; and many of those who speak of Professor Lister's method are, I am certain, unacquainted with the very basis of his practice, which, it was satisfactory to hear, was approved of by Mr. Smith and Mr. Heath, who stated that they had taken the trouble to judge of it for themselves. Now, by an example, I may illustrate the kind of research which must be carried out before the method adopted by Mr. Callender of testing the practical value of such a disinfectant as salicylic acid can be fairly employed.

If we take a solution of the acid of strength 1 in 300, and introduce into it some fresh organic matter, a piece of animal tissue not decomposing, we shall find that, at the end of three or four weeks, and probably longer, there is no disagreeable odour given off by it, and that by microscopic examination we can detect very few, if any, traces of decomposition. I say very few, if any, because temperature has some effect. If, on the other hand, we introduce some decomposing substance into a similar solution, the arrest of decomposition is not effected. The living organisms continue to live and move. Again, on treating a solution of carbolic acid of 1 in 50 in the same way, we find that decomposition is at once arrested. But it would be unfair to compare a solution of 1 in 50 of carbolic acid with 1 in 300 of salicylic acid. Thus we see that, to obtain any satisfactory results in respect of any particular substance, we must make a separate series of experiments. We might find perhaps that, in the case of a recent wound, a solution of salicylic acid of 1 in 300 would answer every purpose, and prevent decomposition; but, in a chronic case, where the odour of the discharge would lead to the conclusion that decomposition of fluids and tissues was actively going on, we might obtain better results from the use of a solution such as carbolic acid of 1 in 50.

Many facts such as these must be generally known before we can expect unanimity amongst practical physicians and surgeons on the important question of antiseptic treatment. It is on such facts that Professor Lister has advanced to his present position; and his success in practical results is the best proof of the accuracy of his scientific observations.

ROBERT J. LEE.

OBSTETRIC MEMORANDA.

POST PARTUM HÆMORRHAGE: SEVEN CASES: RECOVERY.

IN three hundred cases of labour attended by me, and of which I have notes, *post partum* hæmorrhage occurred seven times. All the women recovered. In four cases, the bleeding was severe. In six cases, it was checked by placing the patient on her back, introducing the hand into the uterine cavity, injecting cold water, and tight bandaging. In one case, perchloride of iron was used. When I first saw this case, the os uteri admitted the tip of one finger. The cervix was remarkably thick, and this, together with a smart bleeding which had occurred an hour previously, led me to think that the case might be one of placenta prævia. This, however, it was not. The head presented. The hæmorrhage recurring and no good progress being made, I ruptured the membranes and gave ergot, with little or no effect. I then dilated the os uteri with Barnes's dilators, and delivered with long forceps. The placenta came away speedily, and was followed by sharp hæmorrhage. This was readily checked by injecting a solution of perchloride of iron. The patient made a good recovery. My experience leads me to believe, with Dr. Weir, "that it is well to give the placenta good time"; and I think that many cases of flooding are induced by hurry and rough handling in its removal.

JOHN CRAIGIE, M.B., Lyme Regis.

ON INJECTION OF PERCHLORIDE OF IRON IN POST PARTUM HÆMORRHAGE.

THE case of death recently recorded in the JOURNAL by Mr. Boddy, which resulted from the injection of perchloride of iron into the uterus, induces me to forward notes of a case I attended on the 25th of September, 1874, and the recovery of which I entirely attribute to the speedy injection of the above solution. Mrs. H., aged 40, a multipara, had been extremely anxious for some time about the result of her pregnancy, in consequence of having met with a fall when in her sixth month, and also of having subsequently experienced pain and uneasiness over the right inferior abdominal region. On the date named, I was summoned in the forenoon to attend a primipara, and had just finished adjusting the binder after the removal of the placenta, when a messenger arrived informing me that Mrs. H. was in labour, and urgently wished my early attendance. I was in time to witness the birth of the child, and the almost simultaneous expulsion of the placenta from the uterus; but in a few seconds there followed a most alarming gush of blood, which continued at short intervals. After having manipulated the uncontracted uterus externally, removing clots and applying cold to the genitals without avail, I injected five ounces of solution of perchloride of iron (*viz.*, one part of the strong pharmacopœial solution mixed with four parts of water). This had the immediate effect of arresting the hæmorrhage, and also of causing the uterus to contract; for several hours afterwards, the patient had all the symptoms of threatened fatal syncope; in fact, I never saw a case so near approaching a fatal termination. After having been fed carefully for some hours with wine, brandy, chicken-broth, etc., given in spoonfuls every few minutes, she progressed in strength, and ultimately made a good recovery. As I was single-handed at the time, and situated at a distance of seven miles from the nearest practitioner, the case made a strong impression upon me, and so fully demonstrated to my mind the value of the perchloride injection that I now never attend a case of confinement without first providing myself with an injecting apparatus and solution ready for use.

It may also be interesting to mention that, in April last, I was in attendance upon a case of placenta prævia, where palliative treatment had failed, and where delivery of the child at seven months was necessary. In this case, there was a tendency to hæmorrhage; I, therefore, took the precaution, before passing my hand up to remove clots, membranes, etc., to dip it in a solution of the perchloride, and also afterwards injected an ounce of the fluid. This case terminated favourably to the mother.

RICHARD HARRISON, (Brit. Med. Journal) L.R.C.P. Lond., Dartmoor.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

LEITER'S HYPODERMIC SYRINGE.

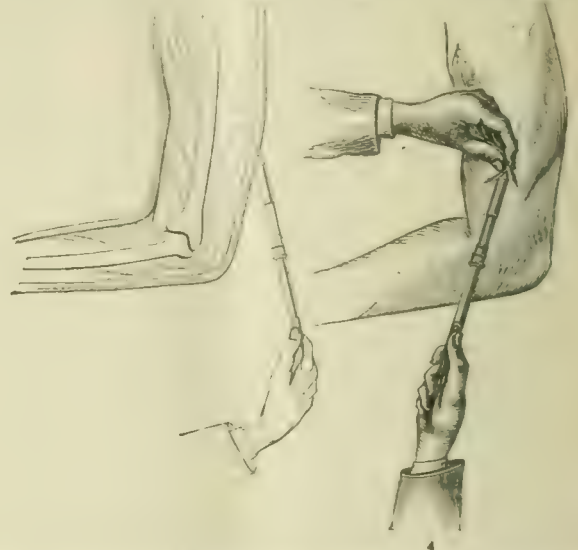
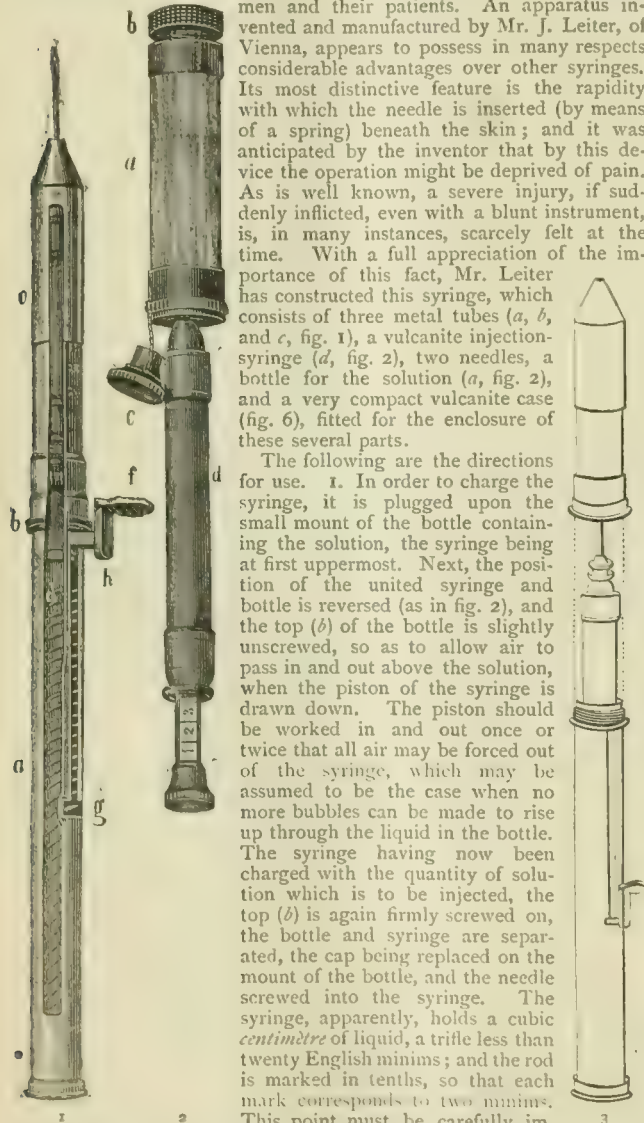
PERHAPS no pain-annulling remedy at the present day is more frequently employed than morphia injected by the hypodermic syringe; and nothing except a few slight drawbacks, which have hitherto seemed to be inseparable from the use of the instrument, has prevented its almost universal employment. All improvements rendering it more nearly perfect are, therefore, likely to be highly acceptable to medical

men and their patients. An apparatus invented and manufactured by Mr. J. Leiter, of Vienna, appears to possess in many respects considerable advantages over other syringes. Its most distinctive feature is the rapidity with which the needle is inserted (by means of a spring) beneath the skin; and it was anticipated by the inventor that by this device the operation might be deprived of pain. As is well known, a severe injury, if suddenly inflicted, even with a blunt instrument, is, in many instances, scarcely felt at the time. With a full appreciation of the importance of this fact, Mr. Leiter has constructed this syringe, which consists of three metal tubes (*a*, *b*, and *c*, fig. 1), a vulcanite injection-syringe (*d*, fig. 2), two needles, a bottle for the solution (*a*, fig. 2), and a very compact vulcanite case (fig. 6), fitted for the enclosure of these several parts.

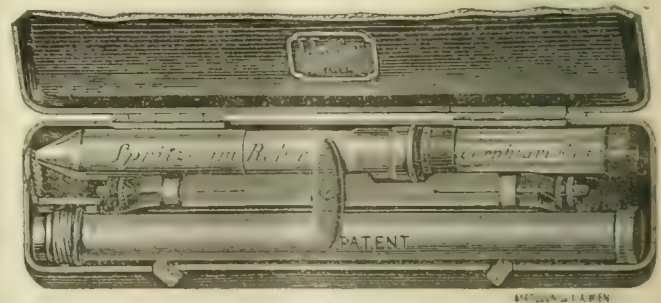
The following are the directions for use. 1. In order to charge the syringe, it is plugged upon the small mount of the bottle containing the solution, the syringe being at first uppermost. Next, the position of the united syringe and bottle is reversed (as in fig. 2), and the top (*b*) of the bottle is slightly unscrewed, so as to allow air to pass in and out above the solution, when the piston of the syringe is drawn down. The piston should be worked in and out once or twice that all air may be forced out of the syringe, which may be assumed to be the case when no more bubbles can be made to rise up through the liquid in the bottle. The syringe having now been charged with the quantity of solution which is to be injected, the top (*b*) is again firmly screwed on, the bottle and syringe are separated, the cap being replaced on the mount of the bottle, and the needle screwed into the syringe. The syringe, apparently, holds a cubic centimetre of liquid, a trifle less than twenty English minims; and the rod is marked in tenths, so that each mark corresponds to two minims.

This point must be carefully impressed upon British practitioners, who, otherwise, mistaking the marks for minim measurements, would inject double the intended quantity of solution, a most serious error, seeing that the solution of morphia for subcutaneous injection, prepared according to the new Appendix to the *British Pharmacopœia*, contains one grain in twelve minims. Any medical man using one of the instruments would do well to measure accurately the capacity of the syringe; after which, if so disposed,

he might re-mark the piston-rod. 2. The bottle having been replaced in the case, and the needle screwed into the syringe, any air in the needle should be expelled by pressing the piston slightly upwards, until the injected fluid becomes visible at the outlet on the point of the needle. 3. The charged syringe is next to be placed in tube *b* (Fig. 1), the needle projecting from its conical end; and the tube *c*, sliding over the tube *b*, and regulating the depth to which the needle shall penetrate the skin, is to be placed at the position intended for the ensuing operation. 4. The spiral spring in the long tube *a* (Fig. 1) is next pressed together by the trigger (*f*), and locked in the slot *g* (Fig. 1); the tube *b*, inside which is the charged syringe, is screwed into *a* (as shown in Fig. 3), and the instrument is ready for use. The point of the apparatus being placed and held in position, the needle is forced beneath the patient's skin by the release of the trigger of the spring, whilst the continued pressure of the spring at once forces down the piston and discharges the fluid into the subcutaneous tissues. In Fig. 4, the appli-



cation of the needle by a second person is shown, the skin being pinched and raised between the finger and thumb. Figure 5 is supposed to represent the mode of application by the patient himself when he has not a hand free for pinching and raising the skin. The needle then enters the limb in a slanting direction. But we doubt if even with this instrument any patient can be trusted to inject himself, as it would be so very easy for him, whilst suffering from severe pain, to insert a poisonous quantity of the strong solution of morphia, when using this or any of the ordinary hypodermic syringes. The only safe instrument by which a patient might perhaps be permitted to inject himself is one containing no more than the quantity prescribed for him; but even then, as the liking for the soothing effect of the morphia increased, the times of its application would be liable to become too frequent. In Fig. 6, the various parts of the apparatus as fitted in the case are ex-



hibited. The syringe lies in the tube with the conical end. The sliding-tube, by which the depth to be reached by the needle is regulated, is pushed home upon the tube it encloses, otherwise it is too long for the case. The needles are made of steel, with a coating of platinum inside, and are nickel-plated on the exterior, to prevent rust. A bundle

of the usual fine wire is also found in the case, with which to remove any obstruction in the needles. To fill the bottle *a* (Fig. 2) with the solution, the top, *b*, is unscrewed. The syringe can of course be used simply as any other ordinary injection syringe. Messrs. Krohne and Sesemann are the appointed agents in London for its supply, and the low price (eighteen shillings) at which it is sold is not the least of its recommendations. If manufactured in England, its cost would probably be double the present price. As regards the nature of the operation, we cannot quite endorse the sanguine description of the inventor, who calls his instrument *an apparatus for painless subcutaneous injection*; but we have always found the patient upon whom this and the ordinary syringes have been used give the decided preference to Leiter's, on account of the quickness with which the operation is effected, and the comparative absence of suffering with which it is accompanied. One man suffering with ulcer of the stomach, associated with very severe pain and much vomiting, so that he could retain scarcely any medicine (not even opium) administered by the mouth, was always relieved by morphia, hypodermically injected; but the ordinary syringe frequently caused him to weep from the pain it produced, whereas on the forty or fifty occasions when Leiter's syringe was used, he gave but little heed to the trifling smarting which it caused.

The piston-rod should be occasionally looked to, washed, and freshly greased, that it may accurately fit the interior of the syringe, which must also be air-tight in all directions except at the point of the needle, because upon the release of the trigger the solution is forced to escape wherever the smallest passage exists. We do not know how the vulcanite syringe will be found to stand continued usage. It seems to be made with thin walls; if thicker, it might perhaps be less liable to crack or become warped. But, under all the circumstances of the case, vulcanite seems to be the best material of which it could be formed.

The metal tubes should be kept bright and clean, and always rubbed with a dry cloth directly after use, and a small wire placed in the needle before that it is replaced in the case. With these precautions, it would seem that Leiter's instrument cannot easily get out of order. It is certainly an ingenious, valuable, and low-priced addition to the armamentum of the physician and surgeon.

DOUBLY DISTILLED WHISKY.

EXCEPT in the private cellars of persons who make sure of having their spirits, particularly whisky, of full mature age, by laying it down like port wine, there is scarcely the possibility of procuring Scotch whisky of sufficient age to assure the elimination of amylic alcohol (fousel oil). The process of ageing usually adopted has less to do with any certain lapse of time than with a system of continuous blending or mixture. Whisky almost direct from the still is vatted with other previous mixtures from time to time, extending back perhaps ever since the commencement of the distillery. How much of the old whisky really remains, would require a calculation almost equal to that of the differential calculus. Whatever advantage of flavour is derived by these means, we may be certain that the fousel oil of the newer distillate cannot in any way be removed thereby. It is therefore gratifying to find that, casting prejudice aside, a most successful attempt has been made to get rid of the fousel oil during a process of reduplicate distillation. The Scotch whisky produced by Messrs. Bernard and Co.'s new double distillation process has been examined by Drs. Stevenson Macadam, Paul, and H. C. Bartlett, who certify that the removal of the fousel oil has been most complete and efficacious; and although the fousel oil has been so perfectly removed, the more delicate ethers which constitute the true flavour of whisky are as pronounced and agreeable in this whisky as in any malt whisky, not peat reek, after years of laying down.

GARD'S PATENT MEAT-ESSENCE EXTRACTOR.

WE have received a drawing and account of a machine made by a Mr. Gard of Colchester for making extract of beef in a steam-jacketed saucepan of easy use and portable size. It is alleged—and with justice, we think—that such an apparatus for making beef-tea gives an extract far superior to what is obtained by the usual methods. The price of the machine is eight shillings. It is recommended to our notice by Dr. Bree of Colchester.

QUINETUM.

A PREPARATION of the whole alkaloids separated from East India bark has been used for some time in the Indian hospitals, as well as in private practice, with great success. The concurrent testimony of

medical men in our Indian possessions is to the effect that quinine is not so greatly superior to the whole alkaloids as to make it worth while to separate the sulphate in its pure state. Mr. Thomas Whiffen of the Quinine Works, Battersea, now offers to the profession a similar preparation, which he calls quinetum. It is in the form of a fine granular non-adherent powder of a pale buff colour. The proportions of the various alkaloids present will of necessity vary with the sample of bark used; but, we think, not so much as to be of moment therapeutically. Sulphate of quinetum is a white crystalline body with a faint pink tinge, greatly resembling sulphate of quinine; and we are informed that the preparation can be supplied to the profession at about one-half of the cost of quinine.

SELECTIONS FROM JOURNALS.

SURGERY.

FALSE ABSCESSES OF THE BONES AND NEURALGIC OSTEITIS.—At the meeting of the Paris Academy of Medicine on October 5th, M. Gosselin remarked that, in 1836 and 1846, Brodie published nine cases which drew attention to that form of osteitis in which, after the disease had lasted for a long time and without necrosis as a necessary accompaniment, the inflammation terminated by suppuration and the formation of an interstitial abscess more or less deeply hidden in the thickness of the bone, and without communication with the exterior. Since that time, other cases had been published by several authors, amongst others by M. Edouard Cruveilhier (Thesis 1865), by M. Broca, etc. M. Gosselin had been led to consider that the symptoms attributed by the authors to this affection, and especially the obstinate and acute pain which is said always to accompany them, are not characteristic. From the details of six cases he had himself seen, and from the critical analysis of those which other writers had recorded, he thought himself warranted in deducing the following conclusions. 1. In the long bones condensed by an old osteitis, cavities may exist which are not abscesses, and there may be neuralgic pains which have no reference to the presence of these cavities. 2. Neuralgic osteitis may exist even without any symptom, but always in a bone hypertrophied by long-standing osteitis. Trephining may be useful, and is not dangerous in these cases of hyperostosis with osteo-neuralgia.

AMPUTATION BY A COMBINATION OF THE CUTANEOUS AND MUSCULO-CUTANEOUS PLANS.—Dr. D. Hayes Agnew (*Philadelphia Medical Times*, August 7th, 1875) recommends the following method of amputating, as obviating the objections to the ordinary methods. He makes two oval cuts through the skin down to the deep fascia, on opposite sides of the limb, raising the integument only a short distance, say three quarters of an inch; and then applying the knife at the junction of the skin flap and the deep fascia, cuts the muscles obliquely back to the bone or bones, as the case may be; or, if transfixation be preferred, thrusts the knife through at the angles of the tegumentary wound, and cuts from within out. He finds, however, the former the more convenient plan. The adjustment between the divided surfaces will be complete. This method is adapted to any part of the forearm, arm, or thigh, and even to the leg.

THERAPEUTICS.

SUBCUTANEOUS INJECTIONS OF WATER.—Dr. Lélut, in a communication to *L'Union Médicale* of October 5th, states that, during the last three months, he has employed subcutaneous injections of water only for the relief of pain, with the most successful results. He relates how he was induced to adopt this method of treatment by pure accident. He had left a bottle containing a solution of morphia on his desk. His servant upset the bottle, and filled it with water to conceal her carelessness. The next day, Dr. Lélut, having occasion to repeat a hypodermic injection in the case of a patient suffering from sciatica, used the liquid from the usual bottle. When he saw his patient the next day, he found him in a most lively frame of mind, and was thanked by him in the following terms. "Oh! doctor, how grateful I am to you. You relieved all my pain without making me feel sick." He was astonished at this result in a patient who had suffered from nausea and vomiting after each injection. He naturally proceeded to examine the solution used, and was astonished to find only pure water in the bottle. He repeated the experiment during the ensuing days on several patients, and invariably found that he gave them relief and avoided nausea and vomiting; he has consequently, as above stated, continued to employ the same plan from June last up to the present time, with, as a rule, satisfactory results.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, NOVEMBER 27TH, 1875.

RAILWAY PATHOLOGY.

THE case of *Harris v. the Midland Railway Company*, tried before Baron Pollock recently, is of interest from several points of view. In the first place, we are glad to find that at least one learned judge correctly appreciates the ambiguity of some medical cases. He is willing to admit that we may entertain opposite views without being either dishonest or ignorant. After hearing the evidence of the plaintiff's witnesses, counsel announced that they had agreed to a settlement. Baron Pollock thereupon said "he had come to the conclusion that this was one of those cases in which the learned counsel on both sides would have to leave to the jury a question of the highest physiological and scientific refinement, on which the most eminent men in the medical profession were not agreed"; and that, therefore, he approved of a settlement having been arrived at, saving both sides the additional cost of a more prolonged trial.

Turning now to another aspect of the case, we find in it some points of great scientific interest. The history of the man we have gathered from the *Times* report, which, though, as usual, excellent in its way, is of course not detailed. We should very much like to see the *verbatim* report of a dozen or two railway cases in print. The consideration of such a volume would do a great deal to promote the formation of sounder, because less exclusive and dogmatic, opinions on many points; but we fear no one will be public-spirited enough to incur the cost of so unremunerative an undertaking.

The accident occurred on December 10th, 1874. The present symptoms are paralysis of sensation and voluntary and reflex motion of the foot, leg, and lower half of the thigh on each side, with absence of wasting and presence of faradaic muscular excitability. The man also suffers much pain in the head, back, and sides. From these facts, his medical witnesses, Dr. Ramskill and Mr. Erichsen, properly—indeed, necessarily—inferred that the paralysis was of a functional (outside courts of law called hysterical) nature. Mr. Erichsen seems further to have stated that "the whole of the plaintiff's symptoms might fairly be referable to concussion of the spine". We are fain to confess that the true pathology of hysterical paralysis is unknown to us. Brodie's notion, still held by many, that it is a paralysis of the will, is to our minds quite inconsistent with the usually attendant anaesthesia and analgesia. We can conceive a patient not having the will to move his legs, but we cannot conceive his being able to avoid the perception of pain by being unwilling to perceive it. We think that it would be better for writers on the subject of railway cases to employ Dr. Abercrombie's more exact term, "concussion of the cord", when they are speaking of that disorder, rather than the very inexact one commonly used, of "concussion of the spine". Surgeons always say concussion of the brain, not concussion of the skull.

To return to *Harris*. Whilst we are willing to admit that some of the local manifestations of hysteria may depend upon disorder of the cord, we cannot admit that at present the evidence or the arguments justify us in considering this as proved. In the recent edition of his work on *Concussion of the Spine*, Mr. Erichsen admits that the general hysterical condition which not unfrequently follows railway accidents is referable rather to mental shock—that is, fright—than to any mecha-

nical one. He also assumes, on the authority of Hammond, that hysteria depends upon anæmia of the cord. That even spinal irritation has this origin we cannot admit to be an indisputable theory. But, even if it were beyond question, there are undoubtedly other hysterical phenomena which cannot be so accounted for. The emotional centres are certainly not in common parlance to be styled parts of the spinal cord, and yet their disturbance is one of the leading features of hysteria. But, if we cannot accept Mr. Erichsen's arguments, neither can we submit to his authority on the subject of hysteria. His views are both vague and inaccurate. For example, he says, speaking of the "more intense cases" of anæmia of the cord, "the legs and feet are cold; there is no reflex sensibility or movement in them; they are not susceptible to the electric stimulus, either as regards *muscular irritability* or cutaneous sensibility". Now, it is a received dogma that, as Meyer puts it, "except in cases in which the hysterical is united with peripheral paralysis, the electro-muscular contractility of the muscles, whose motions are not under the command of the will, is perfectly preserved, although their sensibility is lessened or entirely gone". If the paralysis be produced by concussion of the cord, it is not peripheral, and therefore the muscles ought to be electrically excitable, as they are in *Harris's* case; but, as Mr. Erichsen says in his book, they are not in cases of hysteria or spinal anæmia. Again, speaking of hysteria generally, he says it is a "word which serves as a cloak to ignorance, and which merely means a group of symptoms *all subjective*". Now, without insisting that cutaneous insensibility or indifference to most powerful batteries is scarcely to be put aside as a subjective symptom, we must remind Mr. Erichsen that the symptom which is most nearly universal in hysterical cases is the discharge of a large quantity of limpid watery urine. This is not merely not a subjective symptom, but one which it is ordinarily impossible for any one to produce directly at will. With regard to the anæmic cord, he seems to throw doubt upon his own views by suggesting that the so-called condition may arise from "concussion or vibratory jar, in consequence of which its molecular condition is disturbed". If this be so, why assume a further condition of anæmia or anything else? Again, he suggests that the anæmia of the cord may be due to a primary concussion of the sympathetic system, constricting the spinal vessels. It appears to us, in the first place, that there is no organ in the body less liable to be concussed than the sympathetic system, as distinguished from the cord. In the next place, disordered blood-supply, if it exist, is much more likely to arise from concussion of the vaso-motor centre or centres of the cerebro-spinal system, from which, and not from the sympathetic, the vaso-motor nerves are, according to Schiff, exclusively derived. It is true that this view would justify Mr. Erichsen in attributing the phenomena to which we have been referring to concussion of the cord. To this we have no objection; our object being, not to start theories of our own, but to inculcate the necessity of moderation in dogmatizing upon very intricate and obscure lesions. Some cases which have come under our notice at an early date after injury would seem to show that the brunt of a concussion may fall elsewhere than on the spinal cord. In two instances, the chief symptoms have been slow pulse, slight icterus, and concentrated scanty urine. A very similar collocation of symptoms presented itself to us in the person of a lady who had been greatly shocked by hearing that her daughter had the small-pox. Cases of sudden jaundice from fright are well known, and sudden loss of appetite from the same cause still more common. In these cases, it is likely that there has been commotion either of the nucleus of the pneumogastric in the floor of the fourth ventricle, or of some portion of the vaso-motor centre. This is a branch of railway pathology worthy of more attention than it has yet received. We are encouraged to point out such deficiencies as these by the fact that, since we in a similar manner called attention to the importance of oxaluria with excess of urea as a sequela of railway accidents, Mr. Erichsen has referred to it, although inadequately, in his last edition. Probably, with more time for investigating its relation to these cases, his next edition will enter more fully into the subject; and in the meantime we

draw his attention to the fact that, in speaking of oxaluria, he does not distinguish the simple form from that much more important one which is associated with excess of urea in the urine.

We may take this opportunity of raising another question of very wide bearing. Given a case of concussion of the spinal cord, is the result a reduction in the emission of nerve-force from the concussed grey matter of the cord, or an increase of it? Probably most persons would say the former; but it is, on the contrary, probable that, at all events, in many cases—for example, in the two above mentioned—if not in all, the effect of such a commotion is to facilitate the escape of the nerve-force.

The questions we have raised have an interest beyond the necessities of the trial or scientific curiosity. They cannot fail to influence the treatment of these persons, which is at present, as far as drugs go, eminently fruitless and unsatisfactory. Above all, we commend to all concerned in this investigation the sage dictum of Baron Pollock, that we have here to do with questions “of the highest physiological and scientific refinement”.

TYPHOID FEVER AT CROYDON.

A DEPUTATION of gentlemen living at Croydon, Selhurst, and South Norwood, waited upon Mr. Sclater-Booth at the Local Government Board on Nov. 18th, with reference to the recent outbreak of typhoid fever in those districts. Mr. Grantham, M.P., introduced the deputation, and, in the course of his remarks, said that the fever had brought desolation into many homes in Croydon; he said that the public had been rather startled, especially as no steps were being taken to ascertain the cause of the outbreak. Mr. Grantham also stated, that “the matter had been warmly debated at board meetings, but nothing practical was done”; he stated, also, that some members of the Board of Health were in favour of an investigation, while others were not; and the public had consequently lost confidence in the capacity of their local representatives to deal with the evil. A long memorial was then read by Dr. Chambers, urging upon the Local Government Board the duty of instituting an investigation into all the causes which gave rise to the outbreak. The memorial branched off into a number of possible and impossible causes, the information regarding which was mainly obtained from unofficial sources, and suggestive merely; whilst, if the reports which are now before us of the proceedings of the local board itself are correct, some of the statements are scarcely borne out by the facts, especially that which makes out that the fever was not mainly confined to the district supplied by the Croydon waterworks.

Mr. Sclater-Booth, in reply, said he could not at all be surprised that a second outbreak of the serious character described should have aroused their attention and that of the public at Croydon, and that they had taken such steps as they had upon the subject. When he was made last familiar with the matter, it seemed to him that there was very little doubt, if any, as to the cause of the outbreak, which then seemed to be confined exclusively to districts supplied by the Croydon waterworks. That, however, he understood, was not now the case. He regretted being unable to give a direct answer off hand to what had been urged, but had the deputation been fixed for a later period of the year, he would have been prepared with a distinct reply. But it was only that morning that he had received from the Local Board of Health of Croydon an official and authoritative answer to inquiries made by his office. Their report was an elaborate one, and contained a document which appeared to be an expression of perfect confidence on the part of several gentlemen residing in the neighbourhood in their medical officer. Those papers must be carefully read over before he would be in a position to give a positive answer to their question. Steps should be at once taken to accomplish this, and a reply would be furnished without delay. The deputation thanked Mr. Sclater-Booth for his courtesy, and retired.

We are not surprised that the residents have waited upon the President of the Local Government Board; but they went too late. If

wiser counsels had existed among them, they would have taken care that their interests were confided to the care of better hands.

Whilst we sympathise with them most sincerely in the affliction which has fallen upon them, we cannot give that sympathy unreservedly. The election of the members of the local board is in the hands of the ratepayers. They have chosen certain men to legislate for them; and, now that the fruits of that legislation are visible, they, like the frogs in the fable, call out; but it is too late as regards the past. We have the reports of the Croydon local board before us. We find in those reports that their colleague Dr. Carpenter warned the members (the elected of Croydon and Norwood) of the danger they were certain to incur, if they continued in the course of wasted water and intermittent supply. They gave no heed to his warning. Their representatives gave no attention to his warning, and the memorialists allowed his opposition to be unsupported by any outside help. Even when the fever did come, every obstacle was put in the way of the sanitarians upon the board; by some of the memorialists themselves, every kind of wild suggestion was made but the right one; and now that Dr. Carpenter's opinions are shown by a tremendous weight of evidence to be right, and the board have yielded to that evidence, deciding to do everything which has been pressed upon them by our Associate, and which it appears that Dr. Carpenter has urged on them for the past ten years, the ratepayers rush to the Local Government Board for help, instead of taking measures to help themselves.

We thought Englishmen were self-dependent and did not want extraneous help. We think now, that the way in which the Croydon memorialists ought to act is to elect men to govern them who are competent to do it, and not to have upon their board individuals who are unable to see anything which is beyond the value of a bit of paving or a load of bricks. It is to the material of the board that the ratepayers must turn their attention, and not to the Local Government Board. They will have an opportunity of making a sweeping change next March, and if the memorialists wish to save themselves from future visitations, they will take care that a better class of men represent them in the future.

The medical officer of health, Dr. Philpot, has presented to the Local Government Board a very full report upon the matter, which will be worthy of perusal, as it bears out in all the principal features the points which have been urged upon the attention of the local board of health of Croydon by their colleague for many years past.

If anything would do local self-government a serious harm, it is the action now taken by those who have memorialised the Local Government Board, and who appear to be scarcely aware of the position in which they place the whole question.

THE UNIFICATION SYSTEM ON ITS TRIAL.

It is, no doubt, satisfactory to those who have at any time considered themselves imbued with the spirit of prophecy when their predictions become accomplished facts; and we must plead guilty to some measure of this human weakness, on learning the turn which army medical matters have recently taken at Aldershot. We need scarcely remind our readers that, on the appearance of the now famous warrant of March 1873, we took the earliest opportunity of pointing out some fatal defects in its construction, and more especially drew attention to the injustice of the subsequent circular, which made medical officers in charge of hospitals directly responsible for stores. Public opinion shared our apprehensions, and a strong protest against this and other clauses was transmitted to the Secretary of State for War by the entire medical staff at Malta, and a copy of this temperate and well reasoned document is now before us as we write. Although it might reasonably have been expected that serious annoyance and discomfort must arise from interrupting medical men in their purely professional career, and inflicting extra duties upon them for which they have had no special training, and for which not one farthing of special remuneration has been allowed, we did not anticipate so speedy a confirmation of our

views. But the fact is, that so many and serious have been the appeals made against charges for articles of hospital equipment at Aldershot, that it has been found necessary to assemble a board of military and medical officers, who will thoroughly investigate the entire question. We understand, for example, that the surgeon in charge of the first station hospital is held responsible for £85; that between £30 and £40 are written to the debtor side of the medical officer until recently responsible for the second establishment at Aldershot; and that one of our military colleagues in the Bermudas has a similar heavy debt hanging over his head. Although the court of inquiry will probably have concluded its labours before we go to press, we shall not at present do more than place these facts before our readers, in the full conviction that Major-General Primrose and his colleagues will acquit themselves of their difficult task with skill, fairness, and discretion.

THE Grocers' Company have made a grant of £50 to the North-Eastern Hospital for Children, Hackney Road.

DR. JOHN CHARLES BUCKNILL, Chancery Visitor of Lunatics, has resigned that office, owing, we regret to learn, to failure of health. The post, which is of the value of £1500 a year with travelling allowances, is in the gift of the Lord Chancellor.

WE would call the attention of our readers to the meeting of the medical profession which is to be held on Tuesday next, at the Medical Society's rooms, to consider the advisability of endorsing and supporting the British Medical Defence Association.

MR. W. A. RYDER, a merchant at Bicester, has been presented with a piece of plate by a number of anti-vaccinators at Banbury, in recognition of his having gone to prison for seven days rather than vaccinate his child.

PROFESSOR LEOPOLD DITTEL of Vienna lately received on his name-day, from a patient of his, Baron Sina, a valuable present in the form of an elegant casket containing twelve notes of 1,000 *gulden* each (in all about £1,250).

A STATUE of Dr. Schuh, formerly professor of surgery in the University of Vienna, who died about ten years ago, was publicly unveiled in the General Hospital of that city on November 9th. The principal address was delivered by Dr. Salzer, *primarius* of the hospital.

WE are happy to be able to state, after careful inquiry, and on the authority of Mr. A. Southey, medical officer of health, who has investigated the matter personally, that the report as to typhoid fever having made its appearance in Eton College is entirely without foundation.

A NEW society for the "Protection of Vivisectionable Animals", is announced, of which Miss Cobbe and Dr. Hoggan are the secretaries. The prospectus is brief, but it announces comically that the programme "will be pursued with as much moderation as is compatible with its objects".

DR. HEBRA, the distinguished professor of dermatology in the University of Vienna, has been suffering from an attack of pleuropneumonia. He has so far recovered as to be able to leave his bed; but the commencement of his course of lectures is deferred until Dec. 13th, and in the meantime he has two months' leave of absence to complete his convalescence.

ACCORDING to the *Journal Officiel*, there is so considerable an accession to the ranks of the medical students at the University of Vienna, that the lecture-theatres are too small to accommodate them. The same state of things has occurred in the Faculty of Medicine, where, for some of the courses of lectures, double the number of students that can be received have put down their names.

ON All Saints' Day, there was not a single body waiting for *post mortem* examination in the mortuary in Vienna. For more than ten years not a day had passed in which the mortuary did not contain bodies from the General Hospital (with 3,000 or 4,000 patients), or from elsewhere. A white flag was hoisted on the building to give public notice of the rare event.

THE commissioners appointed last session to inquire into the practice of experiments on animals will meet on December 11th to receive final evidence; after which, they will proceed to consider their report. A circular has been issued by the Commission to several public institutions in which physiology is taught, asking for information as to the number of animals, including frogs, which are annually made use of for experimental purposes.

IN conformity with orders issued by the Government of India, a subordinate medical establishment has been organised to accompany the staff during the tour of His Royal Highness the Prince of Wales to the various parts of India. The European apothecary and the native doctor, who served the Duke of Edinburgh under the orders of Dr. Fayer during his late visit to India, and who are now employed in the Lahore circle, have been appointed to the medical establishment.

SCARLET FEVER AT ALDERSHOT.

SCARLET fever is happily not making much progress at Aldershot. Ten or eleven children are under treatment in the contagious ward adjacent to the female hospital, and one nurse has caught the infection; but it is satisfactory to note that no case had broken out a few days ago among the men, although several had been under observation. Sore-throat, as often happens during the threatening of such an epidemic, is, however, very prevalent in the camp.

THE ABOLITION OF SMALL-POX.

IT is, remarks the Registrar-General, worthy of note that no death has been referred to small-pox during the past four months in London, which has an estimated population of 3,445,166, although the corrected average number of fatal cases of this disease in the corresponding period of the last ten years is 337. This complete immunity from fatal small-pox in London for so long a period is without parallel since civil registration was established; and may be safely assumed to be entirely unprecedented. We note that one death was last week classed to small-pox, but that it was a fatal case of chicken-pox; and that, during the last eighteen weeks, 16 deaths in London have resulted from that disease. (*Brit med Journal*)

THE MANCHESTER PROVIDENT SCHEME.

WE have lately published a correspondence upon this subject. At the commencement, we took occasion to say how important, in our opinion, was the experiment which is now being tried at Manchester; and how sincerely we wished it success, both in the interests of the profession and of the public. We regard it as a fortunate circumstance that the movement is supported by influential laymen, who have no personal or pecuniary interest in the matter, and who are solely actuated by philanthropic motives. In some respects, their independent position is, no doubt, an advantage, by enabling them to judge impartially on many questions which must arise in the management of a comprehensive scheme. But, on the other hand, the fact that they are laymen may, perhaps, prevent them from entering into the feelings of the profession. We have always maintained that, if provident institutions are to be permanently successful, they must be so constituted as to be acceptable to the medical men who serve them; and to ensure this, it is necessary that the medical officers should have a fair share in their management. This argument is all the stronger in proportion as the dispensaries become self-supporting. As the number of benefited members increases, it is essential that the medical men should have the power of checking the admission of unsuitable applicants. The difficulty which has formed the subject of the recent correspondence in our

columns seems to have arisen from a neglect of this precaution. There is no greater danger to the very existence of a provident dispensary than the admission of persons of a higher social grade than that for which it is intended. Medical men must, in self defence, protest against such a step. The proposal to admit friendly societies naturally suggested danger on this score. But if greater care had been taken to ascertain the individual opinions of the medical officers, we believe that the present difficulty might have been avoided, and a scheme agreed upon which would have been acceptable to all. We hope that even now it is not too late to reconsider the question; and that such modifications will be introduced into the rules as will not only restore confidence, but ensure in the future an even greater amount of success than that which has been already achieved.

MEDICAL ADVICE IN NEWSPAPERS.

AN inquest was held last Saturday on the body of a young man, Edward Saunders. It appeared by the evidence that he had been for a long time very reserved and strange in his manner, and that he suddenly disappeared in October last. His body was found floating in the Thames last week, and in his pocketbook was found a note, apparently from the editor of the *Family Herald*. This note was to the effect that deceased would have an answer to his communication on a future occasion, and in the meantime recommended him to consult a medical man. The following entry in the pocketbook was in the handwriting of deceased.

"Should my body be found, which I devoutly hope it may not, I think it as well to give some explanation of what will be called a rash act. Having written to the editor of the *Family Herald*, and received such an answer as to lead me to suppose myself mad, I have made up my mind to kill myself. I might, for aught I know, go raving at any moment, and do some one else a mischief. The only thing that has hitherto restrained me from suicide has been the fear of causing sorrow to my parents, but that may be soon got over; whereas, if I were to live a lunatic, they would be always in trouble about me, and by doing this—*i. e.*, killing myself—I end their trouble and my own. I have not written this with the hope of getting my body buried in consecrated ground, that being an affair of little moment to me, but simply in order that the cause of my death should be known."

A verdict of suicide while of unsound mind was returned.

RECENT URBAN MORTALITY.

DURING last week, 5,557 births and 3,696 deaths were registered in London and twenty other large towns of the United Kingdom. The mortality was at the average rate of 25 deaths annually in every 1,000 persons living; and the death-rates in the various towns were as follows. Sunderland, 16; Wolverhampton, 17; Norwich, 18; Portsmouth, 19; Hull, 20; Liverpool, 21; Sheffield, 23; Birmingham and London, 24; Leeds, 25; Manchester, 26; Glasgow, Nottingham, and Bristol, 27; Edinburgh and Leicester, 28; Newcastle-upon-Tyne and Bradford, 29; Dublin, 31; and Oldham and Salford, 35. The zymotic death-rate was 8.1 and 9.1 in Salford and Nottingham respectively. The 529 deaths from the seven principal zymotic diseases in the eighteen large English towns, included 185 from scarlet fever, against 226, 231, and 260 in the three preceding weeks. The annual death-rate from scarlet-fever last week was equal to 1.5 in London, 2.8 in Bradford, 3.5 in Salford, 4.3 in Bristol, and 4.5 in Nottingham. The fatality of scarlet-fever showed a general decline, whereas that of measles had increased. In London, 2,462 births, and 1,603 deaths, were registered. The births were 116 above, whereas the deaths were 71 below, the average of the week. The annual death-rate was equal to 24.3 per 1,000, and was 22 per 1,000 in the west, 22 in the north, 28 in the central, 24 in the east, and 26 in the south groups of districts. The 1,603 deaths included one from small-pox, 51 from measles, 96 from scarlet fever, 14 from diphtheria, 63 from whooping-cough, 27 from different forms of fever, and 30 from diarrhoea, or 282 deaths in all, and 9 above the average of the week. The fatal cases of small-pox and fever were considerably below the average, whereas those of each of the five other zymotic diseases showed a marked excess. Scarlet fever

was especially fatal in Mile End Old Town, and in Gray's Inn Lane, St. James', Bermondsey, and Somers Town registration sub-districts. The death classed to small-pox was a fatal case of chicken-pox. The deaths referred to diseases of the respiratory organs, which in the five previous weeks had steadily increased from 194 to 349, further rose last week to 371, but were 38 below the average of the week; 213 resulted from bronchitis, and 113 from pneumonia. The Asylum District Fever and Small-pox Hospitals at Homerton and Stockwell contained 352 patients on Saturday last, of which 66 were under treatment for fever, 270 for scarlet fever, and not one for small-pox. The London Fever Hospital contained, also, 101 patients, including 12 cases of enteric fever, and 82 of scarlet fever. In outer London, the general and zymotic death-rates were 19.2 and 3.1 per 1,000 respectively, against 24.3 and 4.3 in inner London. Eight more fatal cases of fever were registered in Croydon. Of 10 deaths in Wimbledon during the past two weeks, 9 have been referred to measles. At Greenwich, the mean reading of the barometer during the week was 29.73 inches; the mean temperature of the air was 45.8 deg., or 3.8 deg. above the average. The general direction of the wind was S.W., and the horizontal movement of the air averaged 19.6 miles per hour. Rain fell to the amount of .32 of an inch.

SHILLING DISPENSARIES.

WE frequently receive handbills or advertisements purporting to set forth the advantages of some new "provident" dispensary; but, on examination, we find that they have nothing "provident" about them, and that the name is only adopted at the present time as one likely to meet with public favour. Sometimes the name is varied, and they are styled "independent", or "self-supporting" dispensaries. But, in all of those to which we allude, the system is the same. Persons are attracted by the offer of cheap or gratuitous advice, while the "manager" or "principal" of the so-called provident institution maintains himself in fact by the sale of drugs. We do not complain of this mode of earning a livelihood. It is but a modified form of "counter-practice", and such practitioners are almost a necessity. Last week, the advertisement of such a "provident, self-supporting medical dispensary", appeared in a Hull newspaper. In it advice is offered "to the labouring and poor classes by a physician of twenty-five years' experience in general practice. Medicines charged for—adults one shilling, children sixpence, to be paid for at the time". The "principal" is himself a member of the Independent Order of Good Templars, and the institution is said to be "conducted on temperance principles". Query, does this mean that no alcoholic tinctures are prescribed? The principle of ready-money payment is undoubtedly good for the poor, and saves them from the burden of debt. But it is scarcely honest to call such institutions "provident", for the essence of providence is to *provide for the future*; and that which makes it possible for high-class men to accept provident dispensary appointments is, that the continuous subscriptions in health form a remuneration in some degree adequate to the attendance during sickness.

THE PLYMOUTH PUBLIC DISPENSARY.

A MOVEMENT has been set on foot with the view of converting the public dispensary at Plymouth into a provident institution. For the last seven years, there has been a provident dispensary in the town, but the gratuitous relief which could be easily obtained at the public dispensary has been a great obstacle to its progress. Now, however, the governors of the public dispensary seem inclined to reconsider the basis upon which their institution stands, and we trust they will give the provident system a careful consideration. Mr. W. H. Algar has addressed a letter to the governors in which he points out the special advantages of provident dispensaries, and, in order to show that they are united to the wants of a large section of the working classes, he says:

"It may be asked, What class of persons avails itself of the provident dispensary in this town? To this it may be replied, that about

85 per cent. receive wages of less than 21s. per week, and an examination of the list of members will show that 'labourers, artisans, and the wives of artisans (who are already members of sick clubs), servants, dressmakers, tailoresses, porters, fishermen, sailors, soldiers, and policemen's wives, laundresses, and people of this sort, are those who avail themselves of this institution. There is scarcely one per cent. whose average earnings would amount to 30s. per week, but there are many whose weekly wages are as low as 11s., 13s., and 12s. The rate of wage of the servant and dressmaking class would certainly be even less than this. The under secretary informs me, that it is a constant remark of the members, that they 'much prefer paying a penny a week than to go about begging for a paper'; and they greatly appreciate the privilege of selecting their own doctor. If 836 persons of this humble class (representing 1,141 possible patients) voluntarily join a provident dispensary, in spite of the attraction of gratuitous medical relief freely offered close by, are we not bound to look well into the matter and see if the time has arrived when the public dispensary should be altered in its character?"

These figures prove that the provident dispensaries are found to be a boon even by persons earning very small wages. In a town like Plymouth, there must surely be room for more than one such institution; and when the wants of this class are fully met, there can be but a very trifling number of cases besides those whose care properly fall to the Poor-law medical officers.

THE WEST RIDING ASYLUM.

THE annual *convalescence* at the West Riding Asylum, Wakefield, which has now been held by the Director, Dr. Crichton Browne, for the last few years, came off last week with great success. The chair was occupied by Mr. Spencer Stanhope, M.P., Chairman of the Visiting Committee of Magistrates; and Dr. W. H. Broadbent, of St. Mary's Hospital, London, delivered an address on the Theory of Construction of the Nervous System. The address embodied the leading points in the papers in which Dr. Broadbent has of late years forcibly enunciated some extremely interesting views as to the construction and functions of the nervous centres, and still further developed their applications to the study of disease. The lecture was full of matter of great interest and value, and we shall have the opportunity of shortly publishing it for the information of our readers. There were present at the meeting between three and four hundred medical men of the locality, including Drs. Heaton, Clifford Allbutt, and Eddison, Messrs. Wheelhouse, Teale, and Jessop, of Leeds; Dr. Rabagliati, of Bradford; Mr. Dyson Wood and Mr. Fowler, of Wakefield; Dr. Harrington Tuke, of London; etc. At the conclusion of the address, Mr. Ernest Hart moved a vote of thanks to the orator, observing that English medical science boasted in the last generation a Bell and a Marshall Hall, who laid the foundations of progress in the anatomy and physiology of the nervous system, and the treatment of diseases of the mind and nervous system. We might add now to the list Lockhart Clarke, Ferrier, Hughlings Jackson, and Broadbent, as no unworthy followers in the footsteps of those benefactors of mankind. The West Riding Asylum, under the initiative of its present most able director, was affording facilities for the furtherance of the studies of these men, and for the application of their work to the treatment of mental disease; and in doing so, with the hearty concurrence of the visiting magistrates, Dr. Browne was setting a high example, which could not but be fruitful in great results, and might well be widely imitated. Dr. Heaton seconded the vote, which was passed by acclamation. Dr. Tuke proposed, and Dr. Orange of Broadmoor seconded, a vote of thanks to the chairman. The meeting then proceeded to examine a series of tables which were provided with objects of professional interest in the body of the hall; and, after doing honour to the liberal refreshment provided by Dr. Browne for his guests, dispersed well pleased with an evening of rare professional interest. Among the objects displayed from the West Riding Asylum were many pathological specimens of value shown at a table presided over by Dr. Robert Lawson, one of the medical officers of the asylum. They included a very instructive preparation of the brain of a chimpanzee, and a comparative series of brains, most useful for the study of function. Four

brains, showing localisation of adhesions in general paralysis, were prepared by a new method (steeping in a nitric acid solution). This method is obviously very superior to the ordinary modes of removing the membranes, and promises to yield useful results. The table presided over by Dr. Herbert Major and Dr. Bevan Lewis was crowded with a quite unique collection of microscopic preparations from the collection belonging to the asylum, illustrating the histological condition of the convolutions of the human brain in the healthy adult, in the fœtus, and in various forms of insanity; and similar series of the medulla oblongata, spinal cord, sciatic nerve, and sympathetic ganglia. Among these preparations were the series illustrating Dr. Major's thesis for the M.D. degree at Edinburgh, which received the gold medal, and his own and Dr. Lewis's papers in the West Riding Reports. At another table, presided over by Dr. J. Arbuckle and Mr. Bracey, were a series of drugs and medicinal preparations. Among those "in use at the West Riding Asylum", we noticed picrotoxine, conia, hyoscyamine, solamine, etc., which have been made the subject of an important investigation, which will be found in the forthcoming annual volume of the West Riding Asylum Reports. Altogether, the tables presented the reflection of an intellectual activity and clinical zeal which are only too rare in asylums, and which are also observable not only in the valuable annual volume of Reports which this asylum now produces, but in the resulting order, cheerfulness, and alert vigilance of the whole administration. It is satisfactory to note that the administrative results are admirable, both as to cures and to expenditure. The good results of the infusion of the spirit of scientific research into a great curative establishment are nowhere more apparent than at the West Riding Asylum, which, under the singularly able direction of Dr. Crichton Browne, is in every respect a credit to the county and an honour to this country.

TYPHOID FEVER AT UPPINGHAM.

APROPOS of some observations in our recent report, Mr. Bell writes to us: "I deny the right of the sanitary authority to censure a medical practitioner entirely unconnected with them. I deny the power of the medical officer of health to summon me to a meeting, which he did verbally, through the inspector of nuisances. I distinctly deny that I withheld information; as, previously to the meeting, I had two or three conversations with Mr. Haviland, and answered all his questions, and had daily been called upon by the inspector of nuisances, to whom I had given all information in my power."

THE WORCESTER INFIRMARY.

AT the monthly meeting of the Executive Committee on Monday, the appointment of Dr. James Wilson as physician to the infirmary was moved by the Right Hon. Earl Beauchamp and unanimously agreed to. This was the only application for the office, which was rendered vacant by the resignation of Dr. Inglis. Dr. Wilson holds several degrees, and has seen a great deal of service, having served with distinction in the late American war as surgeon to the forces, and subsequently held an appointment as surgeon in the British navy, which he has just resigned after eight years' service. He has also held office on board the Duke of Edinburgh's ship.

MR. RAY LITTLE'S ADDRESS.

OWING to some curious chapter of accidents, we have not received, nor have we seen in any other medical paper, any report or notice such as is usually forwarded of the President's address at the Epidemiological Society. A rather full report of a portion of it appeared in the *Times*, loaded with adulation of Sir William Jenner, whose genius and industry, it seems, have solved the riddle of continued fevers, and brought us, with the help of Mr. Simon and his staff, to our present vantage-ground. We are loth to criticise reports in daily papers of medical addresses; but there is something in the prominence which has been given to this address, and the circumstances which surround it, which have called for remark. We have often insisted on the value of Sir William Jenner's admirable work, and cannot be supposed

to be less impressed with its value than others. Nevertheless, we regret to find in this report that Stewart's skilful investigations and Murchison's splendid labours are ignored, and their names not so much as mentioned. Mr. Radcliffe must know well how vastly these labours and those of Budd have contributed to the acquisition of the knowledge upon which Dr. Farr and Mr. Simon and his staff have based their investigations and reports; and, if the fault of omission were with the *Times'* report, we should have been glad to see Mr. Radcliffe correct it in the columns in which the report appeared.

THE EARL OF DENBIGH ON HOMŒOPATHY.

SPEAKING at Birmingham a few days ago, at a luncheon in connection with the opening of a homœopathic hospital, erected at a cost of £17,000, the Earl of Denbigh said he had been a homœopathist forty years, having begun to practise the system when at Eton. The foundation of a "homœopathic hospital" could hardly have been more appropriately inaugurated than by such a speech. Homœopathy, as such, can hardly be said to exist, although a scientific juggle which takes the name of that ancient delusion still persists. It is, however, exceedingly interesting to know that this intelligent nobleman's convictions were acquired when a schoolboy at Eton, and that "he began to practise the system there."

DR. INGLIS.

A MASSIVE silver salver and a purse of gold have, we are pleased to see, been presented to Dr. Inglis of Worcester, on his leaving that town for Cheltenham, after resigning office as a physician to the infirmary, under circumstances highly honourable to himself, and to which we have several times referred. The salver, which is inscribed with suitable expressions of esteem from his numerous friends, was presented in the Worcestershire Medical Society's rooms, by Mr. G. W. Hastings, in the presence of a number of influential residents.

SCOTLAND.

It has been arranged that Lord Derby, the Lord Rector of Edinburgh University, shall deliver his address to the students on the 17th of next month. He is to be presented with the freedom of the city on the 18th.

THE late Mrs. Marshall of Glasgow has bequeathed the sum of £1,000 to the Glasgow University for the foundation of two bursaries; one in divinity, the other in medicine. She has also left upwards of £800 to the local charities.

IN January last, Mr. Isaac Jolly bequeathed the residue of his estate, valued at £2,500, in equal parts to the Royal Infirmary and Incurable Hospital, Aberdeen. The first instalment of £500 each, free of legacy duty, has just been paid. No conditions were attached to the bequests.

A SCHEME is on foot for introducing a new supply of water into Burntisland; and estimates have been given in, according to which 350,000 gallons of water *per diem* will be supplied, the cost of the works being estimated at £16,000. A *plebiscite* among the ratepayers is to be taken on the subject.

NEW SMALL-POX HOSPITAL IN GLASGOW.

FOR some time past, the ratepayers in the neighbourhood of the old small-pox hospital have been very pressing in their claims for its removal to some part of the town less densely inhabited. It was consequently determined by the authorities to build a new small-pox hospital in the neighbourhood of Belvidere, near the fever infirmary. This building is now approaching completion. It consists of five pavilions running north and south, each pavilion being divided into four wards, two in the centre for cases in an acute stage, and one at each end for convalescents; the two centre wards have no communication with one another, except from the outside. Each of them will

accommodate 11 persons, and each of the convalescent wards 7; giving a total accommodation of 110 beds for acute, and 50 for convalescent cases. There is a nurses' room attached to each pavilion, and all the internal details and arrangements are carried out upon the most approved principles. The hospital is in an excellent situation, away from the noise and smoke of the city, and close to the banks of the Clyde. At present, there are no cases of small-pox known to exist in the city, nor has one been reported for the past two months.

THE VACCINATION ACT.

AT the Edinburgh Sheriff Court last week, Andrew Howieson was charged with having contravened the eighteenth section of the Vaccination (Scotland) Act by refusing to allow the operation of vaccination to be performed on his child, aged twelve months. He pleaded guilty; and was sentenced to pay a fine of five shillings and expenses, or, in default, to suffer ten days' imprisonment. This is the second offence under this Act committed by Howieson.

ADULTERATED TOBACCO.

IN consequence of complaints having been made to the Inland Revenue Office regarding the sale of adulterated tobacco in Edinburgh and Leith, an inquiry was instituted during the past summer, which ended in the prosecution of a number of tobacconists in the police courts last week. The tobacco was in all the cases found to contain sugar and liquorice, the full penalty for such act of adulteration being £200. A modified penalty of £50 was imposed in a number of cases.

DISEASE IN GREENOCK.

THE burgh medical officer of Greenock, Dr. Wallace, in a recent report to the police committee, has stated that typhus fever has appeared in a severe form in some districts of the town; and has enjoined on the authorities the necessity of providing additional hospital accommodation as well as a convalescent home. The report also pointed out the considerable destitution at present existing in the town, owing to slackness of trade; and suggested that help should be given to the sufferers. At a meeting of the Town Council, on the day the report was sent in, it was agreed to expend £200 in purchasing clothes, blankets, etc., for the poor; and arrangements were set on foot for opening the Craigie Knowes Hospital.

THE PROPOSED HOSPITAL AT CRIEFF.

THE local authority, acting in concert with the parochial board, have met to consider the question of hospital accommodation. Lady Willoughby, whose handsome offer towards a building and endowment was announced some time since, had suggested that the house be erected for surgical operations only, and not for infectious diseases; but the meeting considered that, in a place like Crieff, that would be impracticable. It was agreed to communicate with Lady Willoughby, and point out the urgent necessity for an hospital for infectious diseases in preference to any other.

ELECTION OF LUNACY BOARDS.

AT a meeting of the Edinburgh County Commissioners, a letter was read from the county of Argyle regarding the mode of election of lunacy boards. At present, these boards are elected by the prison boards, but should be elected by the commissioners of supply, and made financially responsible to them. The committee of the county of Argyle had, last session, had an interview with the Lord Advocate on the subject; but his lordship could not promise any action then. The Edinburgh county board agreed with the views expressed in the letter; and decided to communicate with the Lord Advocate, with a view to see whether a Bill on the subject could be introduced next session.

FREEDOM OF TEACHING.

WE observe that Mr. John Chiene, in his introductory address to the students of the extramural school in Edinburgh, makes reference to the initiation of what may or may not be a similar kind of school in

Glasgow. We would commend to the notice of the directors of the Royal Infirmary the following paragraph.

"This essential feature of our method—to allow each to choose his place on our teaching staff—directly encourages the individuality of the taught. Individuality means freedom. You are free to choose your teacher, and in most branches you have an abundant choice. You choose your teacher on account of his individual worth. He may have certain peculiarities; it is desirous he should ventilate them. He may believe in his methods of conveying instruction; he can put them to a practical test; and, if he be a true prophet, his labours will be followed by well-merited success. Glasgow, I am glad to see, is beginning the good fight. All success to those gentlemen who have obtained permission to lecture in the Royal Infirmary of that city. The results to themselves will be self-improvement. The result to their University will, I feel sure, be an increase in its efficiency."

It is this freedom of teaching which we have repeatedly contended for in these columns; and we are sure that, if the directors of the Infirmary take the experience gained in the extramural school in Edinburgh as their guides, the result will be an immense stimulus to medical teaching in Glasgow; whereas, if they simply set up a second "institution" with a full staff of professors, it will be a struggle for existence between it and the Andersonian. Such a struggle would hardly subserve the interests of medical teaching in Glasgow, and would postpone indefinitely that competition with the University which is much to be desired.

THE TREATMENT OF FEVER AND SMALL-POX IN PAISLEY.

THE neighbouring town of Greenock has provided itself with a hospital to meet any possible epidemic of small-pox; but we regret to observe that the authorities in Paisley seem to have no intention of stirring in this matter. During a recent epidemic, no fewer than eighteen cases of small-pox occurred in the infirmary among patients admitted for other diseases; and of these, five died. The small-pox temporary hospital was in connection with the infirmary, and there was no doubt as to the source of infection. Startled by this epidemic, ground was acquired for a small-pox hospital; but, now that the immediate danger has passed away, there seems no intention of proceeding with its erection. We suspect that the authorities are much more anxious to improve the appearance and respectability of the town than to promote comprehensive measures for its sanitary improvement. It is well known that Paisley has next to no drainage, and yet there is the greatest disposition to give this subject, as well as that of a small-pox hospital, the go-by. We trust that the inhabitants will succeed in persuading their rulers that it is not safe to trifle with the lives of the community.

IRELAND.

THE President of the Surgical Society of Ireland has issued cards of invitation for the opening meeting on the 26th instant.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE College held a meeting on Saturday to elect a Vice-President in room of the late John Hamilton, Esq., and a member of Council in room of Dr. George H. Kidd, who resigned his seat on the Council. Dr. George H. Kidd was unanimously elected Vice-President, and Dr. John Cronyn was elected a member of Council in the room of Dr. Kidd. Dr. Cronyn was opposed by Dr. Darby of Bray, who stood second on the list. The other candidates either did not appear or were in a small minority.

DUBLIN HOSPITAL SUNDAY FUND.

THE returns received up the present show the amount of the collections to be over £3,000. Returns from nineteen churches have not yet been received. These are estimated to be equivalent to about

£200, which, together with additional and special subscriptions, are expected to raise the fund to about the same as last year. About fifty churches have co-operated this year which had not collections last year. The number of collections was about one hundred and ninety. It would thus seem that there has been a falling off. This, however, is not really the case; for Messrs. Moody and Sankey had a collection, which amounted to the large sum of £270. No similar sum was expected this year; and the new churches joining have for the most part been small, and situated in remote parts of the country. We are glad to state that there has been an increase in the amount collected in the majority of the churches which co-operated last year. In spite of all difficulties and opposition, Hospital Sunday may now be considered an established institution in Dublin.

THE DUBLIN BARRACKS.

WE regret to learn that the prevalent rumours of death sickness among the officers and men quartered in Dublin are well founded. There can be no doubt that zymotic disease has prevailed to an unusual extent in the Dublin barracks, and that for over a year enteric fever has been almost constantly present in one or more of the barracks. There are situated in Dublin the following barracks. 1. Royal (cavalry and infantry); 2. Linen Hall (infantry); 3. Aldborough (infantry); 4. Richmond (infantry); 5. Island Bridge (cavalry); 6. Beggar's Bush (infantry); 7. Portobello (artillery); 8. Pigeon House (a fort in the sea at mouth of river, miscellaneous staff and engineers); 9. Ship Street (infantry). Enteric fever has prevailed in Nos. 1, 4, 5, 6, and 7; in all cases, officers have been attacked and deaths have occurred. Enteric fever at present prevails in No. 1. Dublin is badly drained, there is no system of main drainage, and the authorities are fighting about the matter with the citizens. Dublin is a filthy and unhealthy city, with a death-rate of over 30 per 1,000 within the city, and 27 in the district, a great portion of which is almost rural. In Beggar's Bush, the unhealthiness was traced to bad drainage, which has been remedied. In Richmond, the drainage is, we believe, into a cesspool. Linen Hall is not much used, and is unfit for use as a barrack. Aldborough is said to be healthy. Richmond has been unhealthy, but is said to be improved by better drainage and water-supply. Island Bridge is in a very low district, and cannot be properly drained until a main drainage system is established for the city. Beggar's Bush seems now to be in fair condition. Portobello has generally been healthy, is well situated on high and open ground. Pigeon House may be said to have no drainage, it is practically in the sea; it is, however, usually healthy, and the enteric fever seemed to be contracted outside in a filthy Dublin suburb called Ringsend, which is near the fort. Ship Street is badly situated, and surrounded on two sides by old and unhealthy houses. The other sides are bounded by the castle grounds; in fact, the barracks and castle are connected with one another. The castle itself is not healthy, and enteric fever has from time to time prevailed even among members of the Lord Lieutenant's household. The Dublin physician who sends us the above details, adds, "I have had myself to treat patients from Island Bridge, Richmond, and Royal barracks, all suffering from enteric fever".

DUBLIN OBSTETRICAL SOCIETY.

THE first meeting of the thirty-eighth session took place on Saturday evening, at the College of Physicians, Kildare Street; Dr. Lombe Atthill, President of the Society and Vice-President of the College of Physicians, occupied the chair. There was a large attendance of members and visitors. The Honorary Secretary (Dr. J. R. Kirkpatrick) read the report of the Council, which alluded to the business of the Society during the past session. Reference was also made to the retirement of Dr. Churchill in terms of the deepest regret; and his reply to the address presented to him by the Society prior to his departure from Dublin was also read. The report also showed that at the present time there were 11 honorary and 148 ordinary members, and 13 associates on the roll of the Society.—Dr. M'Swiney moved

the adoption of the report; and, in the course of his remarks, congratulated the Society on its continued prosperity. He referred with pleasure to the graceful allusion in the report to that distinguished ornament to the science, Dr. Churchill.—Dr. Cranny seconded the motion, which was agreed to.—The President then delivered the inaugural address. He thanked the members for the honour they had done him in placing him in the chair—an honour enhanced by the fact that it had been filled by men so distinguished as his immediate predecessors. Since the last meeting, Dr. Evory Kennedy and Dr. Churchill had withdrawn from practice. To them a few words of homage were justly due. The former, were it only on the grounds that he founded the Society, should be held in grateful remembrance. But he had besides other substantial claims on regard. Placed forty-two years ago at the head of the Rotunda Lying-in Hospital, he speedily recognised the field which lay before him in the investigation of the then unknown affections which are peculiar to women; and if, to those who profited by the labours and experience of Bennet, Simpson, Marion Sims, and a host of other writers and thinkers, Kennedy's observations, published more than thirty years ago, seemed imperfect, it must be remembered that he was a pioneer and an original observer. Dr. Athill believed that, as he was founder of this Society, so he was the first Irish practitioner who directed special attention to that important branch of our profession now embraced by the term gynaecology. Of Dr. Fleetwood Churchill he felt it difficult to speak. Kind and frank by nature, rendered doubly so by the unostentatious yet fervent piety which pervaded his every action, he was a kind and sincere friend, ever ready to impart to others that information which his great experience and untiring industry had enabled him to acquire. In his early career, he had much to contend against; and, when success had crowned his exertions, it seemed to be his greatest pleasure to encourage those who were, while struggling, down-hearted and desponding. Dr. Athill said he should remember with gratitude the words of encouragement afforded by Dr. Churchill to him in bygone years, when, weighed down by care and disappointment, he almost despaired of success. Dr. Churchill retired with the sincere and deserved regret of all, and the equally well deserved respect of every member of this Society. There were few of the members who had not from time to time availed themselves of his professional skill in trying and difficult cases; while his reputation as an author was probably greater than that of any other Irish practitioner. The President then proceeded to review the transactions of the Society during the past session, which, he considered, compared favourably with those of other societies, to which he also referred in terms of commendation. The President was warmly applauded at the close of his address.—On the motion of Dr. Denham, seconded by Dr. Kidd, it was decided to print and publish the President's address in the *Proceedings* of the Society.—The result of the balloting for the officers of the Society for the ensuing session was then declared as follows:—*President*: Dr. Lombe Athill. *Vice-Presidents*: Dr. Cronyn and Dr. More Madden. *Treasurer*: Dr. Roe. *Secretary*: Dr. J. R. Kirkpatrick. *Committee*: Dr. Denham, Dr. Johnston, Dr. Kidd, Dr. M'Clintock, and Dr. Ringland.—Dr. M'Clintock moved a vote of thanks to the distinguished visitors who had on that occasion honoured the Society by their presence.—Dr. Byrnes seconded the resolution, which was cordially adopted.—The President of the College of Physicians (Dr. Gordon) and Dr. Kidd (Vice-President of the College of Surgeons) responded.—The Lord Mayor-elect (Dr. Owens) also returned thanks, and defended the general conduct of the much-abused corporation; and said that, if people knew the time its members devoted to the business of the municipality, the body would not be maligned to the extent it was.—The Deputy-Governor of the Apothecaries' Hall having also returned thanks for the compliment that had been paid the visitors, the proceedings were brought to a close.

NAVAL MEDICAL SERVICE.—An examination of surgeons in the Royal Navy who are eligible, and who may be desirous of qualifying for the rank of staff-surgeon, will be held at the Royal Naval Hospitals at Haslar and Plymouth, on Tuesday, January 18th, 1876.

ASSOCIATION INTELLIGENCE.

WITH a view to giving increase of prominence to the scientific proceedings of Branches, and to the improved classification of matter, we propose henceforth to report only the official and administrative business of Branches under the head of Association Intelligence, and to transfer their medical and scientific reports to the columns in which are recorded the proceedings of Societies generally. We shall be much obliged if the Honorary Secretaries will kindly arrange their MSS. accordingly.

WEST SOMERSET BRANCH.

MEMBERS of this Branch are requested to take notice that Henry Alford, Esq., Taunton, will perform the duties of Honorary Secretary and Treasurer during the temporary absence of Dr. Kelly, who has gone to Mentone for the winter.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

THE next meeting, to be held in the Music Hall Buildings, Aberdeen, on Saturday, December 4th, at 3 o'clock in the afternoon, will be devoted to a debate on the proper place of Alcohol in Therapeutics. The debate will be opened by Dr. Urquhart.

J. URQUHART.
ALEX. OGSTON.

November 11th, 1875.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

A MEETING of the above Branch will be held at the Greyhound Hotel, Croydon, on Thursday, December 9th, at 4 P.M.; Dr. ADAMS in the Chair.

The following papers are promised.

1. Dr. Wiltshire: Two Cases of Puerperal Hyperpyrexia treated by Cold.
2. Dr. Tilbury Fox: Remarks on Lichen Rubra.
3. Mr. Christopher Heath: A Case.
4. Dr. Duncan: Prognosis in various forms of Apoplexy.
5. Dr. Lanchester: Case of Tamarind-stone in the Trachea, fatal in Four Months.

Dinner will take place at the Greyhound Hotel, at 6 P.M. Price 6s. a head, exclusive of wine.

JOHN H. GALTON, M.D., *Honorary Secretary*.

Woodside, Anerley Road, S.E., November 22nd, 1875.

BATH AND BRISTOL BRANCH.

THE second ordinary meeting of the above Branch will be held at the Royal Hotel, College Green, Bristol, on Thursday evening, December 9th, at 7.30 P.M.: W. M. CLARKE, Esq., President.

EDMUND C. BOARD, *Honorary Secretary*.

Clifton, November 24th, 1875.

SOUTH EASTERN BRANCH: WEST SUSSEX DISTRICT.

THE next meeting will be held at Worthing, on Friday, December 10th; A. H. COLLET, Esq., in the Chair.

Any member desirous of reading a paper, or communicating any case of interest, is requested to give notice to the Honorary Secretary forthwith.

WM. J. HARRIS, *Honorary Secretary*.

13, Marine Parade, Worthing, November 15th, 1875.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

THE first meeting of the nineteenth session (1875-76) was held at Rochester on November 10th; ROBERT ROSS BROWN, Esq., in the Chair.

Next Meeting.—It was decided to hold the next meeting at Gravesend in March 1876; Dr. Gramshaw to be Chairman.

Papers were read by Mr. A. W. Nankivell, Mr. R. Cobb, Mr. R. R. Brown, and Dr. J. V. Bell.

Dinner.—The members and visitors, to the number of thirteen, dined at the Bull Hotel.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 23RD, 1875.

SIR JAMES PAGET, Bart., D.C.L., LL.D., F.R.S., President,
in the Chair.

Sugar in Healthy Urine.—Dr. PAVY made a brief communication on the presence of sugar in healthy urine, which he stated to occur more frequently as a transitory condition than was generally supposed. He demonstrated and explained the test which he used; viz., 1. boiling with liquor potassæ; 2. boiling with bismuth, potash having been added; 3. boiling with sulphate of copper, tartrate of potash and potash having been added to the urine; 4. fermentation.

ON AORTIC ANEURISM IN THE ARMY, AND THE CONDITIONS ASSOCIATED WITH IT. BY FRANCIS H. WELCH, F.R.C.S., NETLEY.

THE object of this paper was to endeavour, by deductions made from a series of *post mortem* examinations conducted at the Royal Victoria Hospital, Netley, to place certain features of causation and pathology of aortic aneurism upon a basis of stability. The average death-age was 32 years; average period of service performed by the soldier, 12 years; average duration of the lesion, 1½ years. In five instances, the dilatation was multiple, the largest number of aneurisms in any one case being four; and, in two instances, an innominate aneurism was superadded to the aortic sac. The lesions (otherwise than the sac itself) observable in the bodies were arranged under two heads; (a) those mechanically produced by the aneurism; and (b) those indicative of a diathesis or general internal agency, generally syphilitic. The author stated that statistics of aortic aneurism in the army showed that the disease was not peculiar to climate, station, or occupation, nor connected with age or any condition of system brought about by length of service; and upon this negative basis was superadded the positive basis furnished by the morbid anatomy and life-history of the cases comprised in the paper. The deductions arrived at were placed in the form of two propositions, the first of which referred to the condition of the vessel, and was as follows. "The aneurismal tumours are associated with, and preceded by, a diseased condition of the contiguous layers of the internal and middle coats of the vessel: a tissue-growth, terminating in degeneration, which, by impairing the elasticity and contractility of the walls, allows their expansion and dilatation under the tension of normal arterial blood-pressure, or this abnormally increased by any cause." The term "atheroma" was regarded as unsatisfactory, as it expressed one possible phase only—that of degeneration; and allowed the accumulation, under the same nomenclature, of structural changes, divergent in origin and progress. Two forms of deterioration were embraced by it; one a distinct tissue-growth—an endarteritis, an active lesion—having, as one of its sequelæ, the aneurismal sac; the other, a mere opacity or occasional fatty degeneration of the inner surface of the vessel—a passive phase—followed, apparently, by no very deleterious results between eighteen and forty years of age, the period of the soldier's service. The pathological chain of continuity between the aortic disease characterised by a tissue-growth, and the aneurismal sac, was complete; and hence the important problem in etiology was to elucidate the exciting agencies in the development of the endarteritis of the internal and middle coat; and these were given in the second proposition as follows. "These two forms of textural derangement of the aorta" (the two spoken of as included under "atheroma") "are dissimilar in origin and causation. The limited passive opacity is connected with long-standing diseases of various kinds, inducing a diminished vitality of the system at large; the structural growth is, in the major number of instances, associated with syphilis, and, in a minor degree, with rheumatism and alcoholism as causation. Hence it follows that, as the latter phase is the commencement of that pathological sequence of events under one aspect, terminating as aneurism, the means for the prevention of the aneurismal tumour must be essentially directed towards the elimination of these special exciting agencies." The 34 cases of aneurism analysed stood as follows. In 50 per cent., the subjects were saturated with the syphilitic virus, and had no other diseased conditions of importance; in 14 per cent., syphilis was probably present, but not beyond doubt; in 5.8 per cent., there was acute rheumatic diathesis; in 5.8 per cent., excessive intemperance; in 2.9 per cent., syphilis, rheumatism, and alcoholism combined; in 17.64 per cent., there was absence of information as to any known conditions; and in 2.9 per cent., no associated condition could be elucidated. A table was also given to show the associated systemic conditions of the aortic lesion, as exemplified in 117

cases as follows: 46.1 per cent. in undoubtedly syphilitic subjects; 6.8 per cent. probably syphilitic, but not beyond doubt; 21.3 per cent. in phthisical subjects; 14.2 with no records for determination; 5.9 with heart-disease; 5.7 with various other diseases individually small. The table included both forms of the aortic disease: the active growth as well as the passive degeneration; but showed a great preponderance with syphilis. The lesions were separated as follows. In 56 cases of syphilis terminating fatally through special lesions, 60.7 per cent. illustrated aortic nodulation, the major part of a severe type; and in about one-third of these (*i.e.*, 18 out of 56), the vessel-disease had led to dilatation, more or less pronounced: that is to say, were in the infantile stage of aneurism. Adding these infantile aneurisms, and including one infantile aneurism subsequently mentioned as due to the acute rheumatic diathesis, to the 34 of this paper, the total was 53; and of these, 66 per cent. occurred in subjects infected with syphilis, but with no other diseased conditions to neutralise the deductions. Again, in 106 *post mortem* examinations, the non-existence of syphilis was fairly deducible, and the following results were obtained. Five cases of aneurism were present, which were included in the table under acute rheumatism, intemperance, and no known cause. The aortic disease, in one instance was severe, and had led to dilatation, in an acute rheumatic diathesis with great intemperance; in five, the inner wall of the vessel was corrugated, but not dilated; three were phthisical; one had alcoholism; one had aortic valve-disease; in 29, the lesion had the form of atheroma, or mere opacity; and of these, 15 were associated with phthisis, and the remainder with renal affections, dysentery, diabetes, scrofula, lupus, and cancer, in nearly equal proportions. The author inferred that the syphilitic virus must be regarded as a very potent cause of the arterial lesion, and its sequel, aneurism; but not as the only one, for the acute rheumatic poison and alcohol must be regarded as minor agencies. The chest-constrictions to which the soldier was liable from accoutrements, pack, etc., acted as fostering influences to the diseased conditions engendered by syphilis, rheumatism, and alcoholism, probably inducing dilatation in the deteriorated vessel, though no such result might ensue under ordinary circumstances, and under such amounts of physical exertion as pertained to the civil portion of the community. With regard to the adoption of preventive measures against aneurism, the author remarked that attention must be primarily directed to the suppression of the causes of the aortic disease, notably syphilis; and, secondarily, against the conditions of dress, etc., which assisted in its development.

THE PRESIDENT said that the point in the paper demanding special attention was the relation between syphilis and aneurism of the aorta. He thought that the idea was becoming prevalent among surgeons that there was a connection between syphilis and aneurisms in other parts—such as popliteal aneurism, etc.—especially in younger subjects.—Dr. DOUGLAS POWELL thought that the description of the pathological conditions was accurate and minute, and was an addition to our knowledge. But it was a question whether the lesions could be regarded as special to syphilis. He had met with only one case of arterial lesion which could be traced to syphilis; and here the depressions were present not only in the aorta, but also in the pulmonary artery. He thought that army-surgeons had been led to exaggerate the relations between syphilis and disease of the aorta. An opinion could not be arrived at as to the underlying cause of aortic aneurism, without considering the causes of disease of the heart and of the whole circulatory system in soldiers. And certainly syphilis was a very rare cause of disease of the heart in adults. He thought that Mr. Welch had been somewhat biased by the life-history of the patients. In the army, the fact that a soldier had syphilitic disease, in however slight a form, was noted; but what would be here considered an intemperate use of liquors was not, unless the men were actually drunk. He had been struck by the great proportion of cases of constitutional syphilis in the army returns; being as many as all other diseases of the genito-urinary organs taken together. The heart was not stated to be syphilitically affected in Mr. Welch's cases.—Mr. BRIDENELL CARTER asked for a more precise definition of the term syphilis; whether the term included mild as well as severe cases. He had met with a case of aortic aneurism occurring twenty years after a slight attack of syphilis.—Mr. MYERS differed from Mr. Welch as to the cause of aortic aneurism in soldiers. Dr. Maclean of Netley had published statistics which indicated that syphilis was not a special cause of aneurism; and was it to be supposed that medical men in London, where syphilis was very prevalent, would have failed to observe the connection between it and aneurism if it existed? It was known that syphilis produced degeneration, and so might give rise to disease of the aorta. Netley was not a favourable place for investigating the relations of syphilis to aneurism; for soldiers were brought thither from all parts of the world, suffering from an accumulation of diseases. The production of aortic aneurism was

favoured, in great measure, by constriction from without. It was well known that aneurism was liable to be developed at points subjected to strain.—Dr. DRYSDALE said that it would have been better if there had been a more detailed description of the cases described as syphilitic. He thought that the slightness of an attack of syphilis did not negative the idea that an aneurism occurring after many years might be connected with it.—Sir WILLIAM GULL objected to the use of the word nodes in speaking of deposits in arteries. These deposits occurred in all forms of arteritis. The author of the paper admitted syphilis to be a cause in common with other conditions; but as he (Sir W. Gull) understood syphilis, it had special characters common to nothing else. Referring to the cases of aortic aneurism said to have been cured by iodide of potassium, he thought that there had been errors in diagnosis. He believed that syphilis was a cause of aneurism, but only indirectly.—Mr. WELCH said that the life-histories were taken from the medical history sheets. These, as well as the records of the *post mortem* examinations, were drawn up by different surgeons; and there could be no doubt that the cases recorded as syphilitic were such; there being distinct records of such symptoms as sores, skin-eruptions, sore-throat, nodes on the tibia and cranium, diseased tonsils, cirrhosis of the testicle, etc. No doubt other causes than syphilis would produce aortic aneurism, just as nodes on the leg might have a non-syphilitic origin.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, NOVEMBER 16TH, 1875.

G. D. POLLOCK, F.R.C.S., President, in the Chair.

Cancer of the Male Breast.—Mr. MAUNDER exhibited a cancerous breast, removed fourteen months ago, and the man from whom it was taken. The man was forty-four years of age. For two years, his left nipple was cracked, and a sanious fluid exuded. The cancer grew to the size of a Tangerine orange; it was removed. The man did well, and there was no return of the disease in the scar or in the seat of injury.—The PRESIDENT requested that an opportunity should be afforded for an examination of the histological characters of this tumour by the Morbid Growths Committee; and this request was acceded to.

Sclerosis of Brain and Spinal Cord.—Dr. GOODHART showed a specimen taken from a married woman, aged 38, who had had several children, and was free from syphilis. Two and a half years ago, she first felt her legs becoming stiff, especially on wiping her shoes. Then came on spasms, both clonic and tonic, with jerking of the head and nystagmus. There was no impairment of sensibility; and the electro-motor sensibility was unaffected. Ultimately, the soft palate became paralysed, pneumonia set in, and the woman died. There was found grey induration in patches. The cord was most affected, and the white matter of the brain. Under the microscope, the usual characters of sclerosis were found.

Ulcerative Endocarditis.—Dr. COUPLAND brought forward a case of ulcerative endocarditis. The man had suffered from dyspnoea, with valvular lesion, producing a murmur; and died of dyspnoea. He was a man in good health, except rheumatic pains in his limbs at times. He was ill one month; and the most prominent symptom was pain in the præcordium. There was hypertrophy and dilatation, most marked on the left side. In the left ventricle was found a pouch of the mitral valve—an aneurism of it, in fact. There was extensive disease of the aortic valves. The mitral valve was diseased on its ventricular surface.—Dr. HILTON FAGGE asked if the vegetations from the aortic valves touched the mitral valves. Friction and the contact of such vegetations often set up secondary disease in the parts touched by them.—Dr. COUPLAND replied that the same view had suggested itself to him in other cases as well as this one. In this case, there were no vegetations long enough to have so acted; at least, none now left.

Fracture in a Gorilla.—Dr. CRISP showed a well united fracture in a long bone of a gorilla. He said that, in the lower animals, fractures often united very neatly; and such was the case in this instance.

Rickets in the Pheasant.—Dr. CRISP exhibited specimens of rickets in the pheasant. The tibiae were bent at right angles. The bones were cartilaginous, and little ossific matter was present. These pheasants were reared under hens, and lived in a confined space. The skull was fairly ossified, and the spinal column was also good. The lower limbs were the most affected. Many of the birds quite recovered, and had since been shot.

Embolism of the Pulmonary Artery.—Dr. HILTON FAGGE brought forward a case which occurred in a medical man who had been suffering from enteric fever with a high temperature. He improved much, when he was again taken ill with much dyspnoea, and died. The intestinal ulcers were healthy, and the lungs were free from disease. The heart was flabby, and there were clots in the right heart. The first part

of the pulmonary artery was free from clot; but, at its division, a clot was found consisting of four cords, of the size of a lead-pencil, twisted together. On examination, it was found to consist of one single long clot folded on itself. The vena cava and its branches were normal. It could not have been formed *in situ*, and must have come from a long and large vein, possibly the femoral.—Dr. CRISP thought this view ought to be received with caution.

Diverticulum of the Intestine.—Dr. HILTON FAGGE showed an instance of distended diverticulum of the intestine. It occurred in a female who had acute strangulation of her intestines. An exploratory examination was made, and a knuckle of intestine was found in the right femoral ring. The patient died shortly afterwards. A pouch of mucous membrane was found forced through the serous layer, in two places, both in the jejunum. There was some atrophy of the heart, and the intestines were matted together, with little tendency to replace themselves.

Tubercle of the Pancreas.—Dr. BARLOW exhibited a case of tubercle of the pancreas, the existence of which was denied by English pathologists. It occurred in a girl aged two years. There was a strong consumptive family history on both sides. She herself had had bad health following an attack of measles. On *post mortem* examination, miliary tubercle was found throughout the lungs. There were tubercular granulations in the kidneys, and nodules on the peritoneum. There were some diseased glands near the pancreas, which was all right apparently. When the pancreas was cut into, the disease was at once evident. Under the microscope, there were seen cell-growths betwixt the lobules and around the vessels. The gland-elements were granular.

Osteosarcoma of the Jaw.—Mr. HOWARD MARSH brought forward a tumour of the jaw from a boy aged 14. It existed six months. There was no pain. The growth was entirely on the anterior aspect. It was punctured, and thought to be sarcomatous. The whole bone was removed, and the case did well. On microscopic examination, it was found to be osteo-sarcoma.

Tubercular Lupus of the Tongue.—Mr. FAIRLIE CLARKE exhibited a case of tubercular lupus of the tongue, which had shown itself in a patient of Mr. Teevan's at the West London Hospital. The patient was a bricklayer, aged 18. The family history was good; there was no cancer, no phthisis, and no syphilis. The adjoining mucous membrane was thick and velvety. The soft palate was gone. The case was seen by Sir James Paget, who confirmed the diagnosis. On examination by the microscope, the interstices of all the affected tissues were found to be filled with small round cells. Tubercular lupus of the tongue was very rare. Such a case had never been brought before the Society hitherto; there were a few notices among continental writers.—The PRESIDENT asked if the soft palate had healed at all; if there were any cicatrix.—Dr. HILTON FAGGE had seen a similar ulcer some time ago, with these tubercular ulcerations elsewhere. On microscopical examination, it was found not to be truly tuberculous. He had once seen a laryngeal ulcer spread into the soft palate.—Mr. HOWARD MARSH said Sir James Paget had described tubercular ulceration of the tongue some time ago.—Dr. GREENFIELD said several cases had recently been described in a Parisian journal.—Dr. GOODHART asked if the man died of phthisis.—Mr. SPENCER WATSON agreed with Mr. Clarke, that primary lupus in an ulcerative form was extremely rare on mucous surfaces. He instanced, however, a case of isolated, if not primary, lupus of the conjunctiva of the eye as having been associated in one individual, with lupus of the nose. At the same time, he thought that the erythematous form of lupus was not so very uncommonly met with in the mucous membrane of the nose, and that many cases of *oæna* were due to that disease within the nostrils.—Mr. F. CLARKE replied that there was attempt at healing in the soft palate. The man died of the disease, and not of phthisis.

Fatty Tumour of the Male Breast.—Mr. MAUNDER brought forward a case of fatty tumour of the male breast. It was merely a lump of fat, which, however, gave to the man's breast the appearance of a woman's breast when in full lactation.

Hydatids in the Heart.—Dr. GOODHART showed hydatids in the heart from a man aged 20, who had no symptoms, and was actively at work when he died. He had been on the treadmill some time before, and occasionally fell, but was thought to be malingering. On *post mortem* examination, the pericardium was found adherent, and pus escaped from a cavity in the septum ventriculorum in tearing off the pericardium. The remains of a hydatid were found, with hooklets attached.

Syphilitic Growth in the Cerebral Sinuses.—Dr. DOWSE brought forward a case of syphilitic growth of the cerebral sinuses from a man aged 39, who was healthy, but had had syphilis. He had had pain in his skull, but no fits. His sight had failed, and his smell was impaired. His motor power was affected. The bowels were constipated. Over the

brow, a cicatrix was found. There was neuro-retinitis. The gait was unsteady, but there was no paresis. Sensation was good. His head felt heavy. The intellect was little affected. On *post mortem* examination, the cranium was found thick. The inner surface was normal. Near the torcular Herophili was a mass which had invaded the tentorium cerebelli. There were adhesions to various parts. The mass was yellow and firm. On microscopic examination, it was found to consist of wavy tissue and round cells.

Gliosarcoma of the Brain.—Dr. DOWSE showed a gliosarcoma of the brain. It was found in a man aged 48, who belonged to an excitable family. He had fits when young. His gait was peculiar, and his memory was impaired. There was pain in the head. The man was not able to stand or to balance himself; but he could run without falling. There was evidently no sclerosis. He had epileptic fits. There was no special change before death. On *post mortem* examination, there was no atheroma. The growth itself was of cone-like form, not unlike the choroid plexus, and was found in the anterior portion of the corpus callosum. Both hemispheres were invaded. Under the microscope, the mass was found to be highly vascular, and to contain round, oval, and spindle-shaped cells.—Dr. GOWERS asked if both sides were affected.—Dr. DOWSE said they were; the right side most.

Glioma of the Brain.—Dr. GOWERS showed a good specimen of glioma of the brain. On section, it was found degenerated in its centre. It was translucent and greyish. On microscopic examination, it was found to consist of minute fusiform cells, with prolongations. It was in the left cerebral hemisphere; the paralysis was complete. When the patient first came to the hospital, there was loss of consciousness, and convulsive seizures; the paralysed side was rigid. The movements were chiefly on the sound side. The left side ultimately became paralysed. The tumour was situated where the fibres radiate out from the corpus callosum to the hemispheres. There was no other lesion.

Congenital Malformation of the Oesophagus.—Mr. HOWARD MARSH showed, for Dr. ILOTT, two cases of congenital malformation of the oesophagus. The blind extremity terminated at the cricoid cartilage in each case. The lower end terminated at the division of the bronchi. All causes of this malformation were alike; the lower end joined the trachea. They were cases of arrested development. No operation could be of any service. In answer to a question from Mr. Thomas Smith, Dr. ILOTT said they were not the children of the same mother. In one of the cases, the arteries were abnormal. Food found its way from above into both bronchi.—The PRESIDENT said there was a specimen in St. George's Hospital from an old gentleman whose food regurgitated, where there was a pouch at the upper part of the oesophagus, very like those shown.—A MEMBER said a similar oesophageal pouch was in the Hunterian Museum.—Mr. WAGSTAFFE said a similar pouch had come under his notice.—Dr. ILOTT said the deformity was congenital. The pharynx ended in a pouch. A probe passed from the lower end into the trachea.

Tracheotomy.—Mr. CLEMENT LUCAS showed parts after tracheotomy. The interest lay chiefly in the operation, which was performed by a single thrust of the knife.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, NOVEMBER 3RD, 1875.

WILLIAM OVEREND PRIESTLEY, M.D., F.R.C.P., President, in the Chair.

THE PRESIDENT announced that Dr. Farre had accepted the Honorary Presidency of the Society.

Hydrocephalic Head impeding Delivery.—Dr. EDIS exhibited an infant, which presented by the breech. Traction upon the trunk failing to accomplish delivery of the head, Dr. Edis was sent for. Examination of the abdomen showed that no second child was present, so that the question of twins with locked heads was negatived. The patient was a pluripara, and vaginal examination failed to detect any deformity of the pelvis. The child being dead and the head evidently much enlarged, perforation behind the right ear was effected; a gush of clear fluid confirming the supposition that had been made, that the case was one of hydrocephalus. Delivery was then readily accomplished. The head, when distended with fluid, measured seventeen inches in circumference. The patient convalesced normally. The placenta had been examined microscopically by Dr. Coupland, who failed to detect any change in its structure throwing light upon the case.

General Anasarca in a Fetus.—Dr. PROTHEROE SMITH exhibited a fetus of six months and a half, the subject of general dropsy. The mother, aged 35, had previously had three living children born, three miscarriages, and three premature labours at the twenty-sixth week following each other. The last fetus was now shown. In the last two

pregnancies, she had suffered from albuminuria and liver derangement. Before the eighth labour, the patient was kept lying up and well fed; before the last, she got about, and was thin. On both occasions, there was incompressibility of the pulse and flushing of the face; and the labour was attended by considerable hæmorrhage both before and after. The body of the fetus was anasarca; there was a large quantity of clear brownish yellow fluid in the peritoneal cavity, and also some fluid in the pericardium and pleural sacs. The kidneys were healthy. The placenta was large, and consisted of only the foetal portion.—The PRESIDENT inquired whether there was any trace of syphilis in the mother, and whether the œdema existed during the life of the fetus, or was only a *post mortem* appearance, the result of decomposition.—Dr. SMITH replied that the foetal heart had been heard the day before birth.—Dr. BRAXTON HICKS inquired whether there was any symptom of obstruction to the funis, to which Dr. Smith replied in the negative.—Dr. SNOW BECK stated that the fetus when born was in such a fresh healthy condition, as to preclude all idea of decomposition.

Case of General Dropsy in a Fetus.—Mr. LAWSON TAIT related the particulars of a case, where the skin was so tense that it was not possible to bend the limbs without risk of bursting the skin. The scalp was so distended that the bones could nowhere be felt; and, in fact, the head had been mistaken for the breech during labour. The abdomen was enormously distended by highly albuminous fluid, as also the pleuræ and pericardium. The placenta was large and very œdematous. The cause of the general dropsy seemed to be the premature closure of the channel between the auricles, there being no direct opening between the auricles through the foramen ovale.—Dr. PROTHEROE SMITH considered this to be evidently a disease primarily and altogether of the ovum; whereas, in his own case, the disease had originated from the disordered health of the mother. He would like to know whether any of the Fellows had met with similar instances—hyperæmia, with liver-derangement. There was in his own case great peculiarity of the pulse, which was extremely incompressible; the mother's lips were of a crimson tint; and she had several abortions. One woman, who had aborted seven times, he had bled once, and she went to full time. In his case, he had tried abundance of fruit and wine in one pregnancy, and exactly the reverse in the latter; the result being the same in both. He had witnessed in a few cases frequent consecutive abortions at about the fifth and sixth month arrested by venesection, and followed in succeeding pregnancies by living children.—Dr. MADGE could hardly accept Dr. Smith's explanation as to the cause of the death of the fetus. He had given considerable attention to the subject, but he had never understood that a common disease or derangement of the liver in the mother could affect the child *in utero* in a somewhat similar way. It was well known that the mother may be morbidly affected in many ways, even with albuminuria resulting in convulsions, and still give birth to a perfectly healthy child; a syphilitic history, if such existed, might afford an explanation: the foetal liver receiving the tainted blood direct from the mother became affected with syphilitic inflammation and deposit, leading to obstruction of the portal system and ascites.—Dr. ROUTH inquired if there had been any specific examination of the foramen ovale of the first child.—Dr. HEYWOOD SMITH replied that the heart on examination was found to be perfectly normal. The last three times, pregnancy had ceased at the twenty-sixth week, showing that there was some disease of the ovum. The liver was also disordered in former confinements. He would be glad if any Fellow of the Society could throw any light upon the intermittence of the albuminuria during pregnancy.—Dr. SNOW BECK remarked that he had the opportunity of examining both Dr. Smith's cases, and had also seen two other very similar specimens. The clinical histories of both had been very much alike: healthy living children at first; then, premature expulsion of dead fetuses about the sixth month, presenting evident signs of previous and serious disease. Effusion of fluid into the peritoneal cavity existed in all, far too large in quantity to be the result of *post mortem* change. The organs, excepting the liver, were healthy; this was paler than normal, soft, readily torn with the finger; the liver-cells being much broken down. The parents were singularly free from even the suspicion of a syphilitic taint. The effused fluid was too large and too generally diffused to be caused by any mechanical disturbance of the circulation. The only probable explanation of this condition of the fetus appeared to be from some deficient or altered state of the nutrition; whether foetal or maternal, it appeared impossible to determine from the facts at present known.—The PRESIDENT said that, in considering the pathology of these cases, it was well to bear in mind that the subcutaneous cellular tissue in children after birth was prone to become œdematous from the infiltration of serum in certain depressed conditions of health. It was no uncommon occurrence in hospitals to find children who had been ill fed and exposed to adverse influences the subjects of a general œdema, which might

proceed to an extreme degree, without such malformation or disease as to account for it. The villi of the placenta in Dr. P. Smith's case had the appearance of being atrophied, and he might suggest that possibly the redema in the child was due to its imperfect nutrition *in utero*, and to the passive congestion thus induced.

On a New Form of Blunt Hook and Sling for assisting Delivery in Cases of Breech-Presentation.—Dr. J. G. SWAYNE (Bristol) brought forward a communication on this subject. The instrument consisted of an ordinary blunt hook, with the end curved back upon itself, so that a loop could be hitched upon it. When the hook was withdrawn, after being passed over the groin, the sling, consisting of a piece of strong silk cord with a loop at each end, was left *in situ*. Traction was then made in the usual way; and, as the sling was padded, there was less risk of injuring the soft parts of the child than when the ordinary blunt hook was employed.—Dr. BRAXTON HICKS thought that in the use of the blunt hook sufficient attention had not been given to the assistance afforded by external pressure applied to the fundus uteri in breech cases, and the delivery of the aftercoming head through the brim. He thought half the strain was taken off the thigh, and that without undue crushing of the uterine wall by the hand pressure. Text-books generally omitted to notice the great help given; and, although he had no doubt some practitioners employed extreme pressure, yet very frequently it was never thought of, but all the force was put upon the hook.—Dr. MADGE had had reason to be dissatisfied with the blunt hook. He was afraid that in any case when much force was required some injury must be inflicted, whatever the plan adopted. He had suggested covering the hook with India-rubber, compressed sponge, or wash leather. If this could be properly carried out, it would probably be a safer instrument than Dr. Swayne's, and could be much more quickly and easily applied.—Dr. AVELING remarked that the duration of India-rubber was only about three years; it then became brittle; and, if put aside, would then be found useless. He feared, therefore, that the suggestion, though ingenious, was not very practical.—Dr. C. GODSON agreed that, whenever a foot could be brought down, in impacted breech, it was the best plan to adopt; but where this was impossible, the hook must be employed. He had recently tried that known as Lazarewitch's, but found that the bulb at the extremity of the hook was the point which received the force applied, and pressed severely upon the tissues. He regarded it as a dangerous instrument. In one instance, the skin had been cut through, and much bruising of the surrounding soft tissues produced by its employment.—Dr. LAWRENCE had seen a case where the saphena vein had evidently been lacerated from the use of a blunt hook. The sling was far less likely to cause injury.

Prolapse of the Funis during Labour.—Dr. GEORGE ROPER read a paper, tending to show that this accident was rarely primary, but mostly the result of some other abnormality. After alluding to the various conditions predisposing to this complication of labour, and mentioning the different methods of accomplishing reposition, he stated that the real difficulty consisted in keeping the cord within the uterus after it had been returned. The best means of doing this seemed to be in securing the firm adaptation of the presenting part to the os uteri. The question of turning in place of forceps was then considered; the author preferring the latter method, considering that there was no shock to the mother. Reports of six cases were given. The author concluded by stating that prolapse of the cord was, for the most part, associated with some other complication of labour; and that it behoved us to make observations as to what that complication might be, as the management of the cord would, in a great measure, depend upon the nature of the complication; in some cases, the funis could be saved from pressure; in others, not.—Dr. BRAXTON HICKS had employed cephalic version in transverse presentations with prolapse of the cord, using one hand externally to press down the presenting part into the os uteri, the funis being pushed up simultaneously by the internal hand.—The PRESIDENT asked if Dr. Hicks combined the postural method with reposition of the cord.—Dr. HICKS replied that he had not found it necessary. He had experienced no difficulty in pressing up the head and carrying the cord up by the same hand as quickly as possible, and then the outside hand pressed the head into the os. In prolapse with head-presentation, pressing the breech to the fundus was not needed as in transverse presentations.—Dr. J. BRUNTON thought Dr. Roper had not given sufficient prominence to the postural method. He (Dr. Brunton) had found it the most satisfactory of all methods of treatment of prolapse of the cord, and considered it applicable in all cases. He questioned whether Dr. Hicks would be able with his middle finger to reduce a long loop of cord protruding from the vagina; by the postural method this could be done.—Dr. EDIS called attention to the correct postural position being the genu-pectoral or knee-shoulder, not knee-elbow position, as had been spoken of by many.—The PRESIDENT referred to a paper read by Dr. Thomas of New York eighteen years

ago.—Dr. ROPER asked what was the rationale of the postural position. Gravitation would not account for it. (*Medical Journal*)

Note on a Diseased Placenta.—Mr. LAWSON TAIT narrated briefly the outlines of a case. The patient, aged 29, miscarried three months after marriage. She bore a child at full term next, which died of convulsions three days after. She next miscarried between the sixth and seventh month; and again about the seven and half month, the child being alive. When six months advanced with her next, Mr. Tait put her upon chlorate of potass and perchloride of mercury, and she went her full time, and was delivered of a healthy living child. The chief point of interest was in the appearance of the placenta. It was disproportionately small to the size of the child; and fully two-thirds of its surface had undergone a peculiar change. This the author had examined most minutely, and described most thoroughly; the communication being one of much scientific interest.

CORRESPONDENCE.

NIGHT MEDICAL SERVICE.

SIR,—I was surprised to see in the JOURNAL for November 6th that the Parisian authorities had only lately determined to begin a night medical service for urgent cases in that city, as we have had such a service in Rome for nearly two years, and Paris is generally thought to be ahead of the Italian capital in most sanitary matters. Here the charge of the public health is undertaken by a special sanitary branch of the municipality.

When the night service was established, a pharmacy was selected in each of the five Rioni—the old Regiones—into which the city is divided for municipal purposes. These five pharmacies remain open all night, and are marked by a gas-lamp of peculiar form, coloured red, and distinctly inscribed "Servizio Sanitorio notturno". To each of these are attached a certain number of physicians and surgeons—the distinction between those two branches of the profession being carefully maintained throughout Italy—who attend in rotation, receiving for each night of such attendance (from 10 P.M. to 6 A.M.) the sum of seven francs, and any fees they may recover if called to patients who can afford to pay. I do not know what sum the chemists receive. I may add that there are city guards attached to each pharmacy.

The system works well, and the municipality publishes a monthly account of the number of persons attended to during the night by the medical men in the five districts. The cases are numerous enough to make me certain that the Prefect of the Seine has greatly underrated the sum he will require, in the event of the pauper patients in Paris bearing a like proportion to population that they do here.

I am, sir, yours truly,
LAUCHLAN AITKEN, M.D.
52, Via Frattina, Rome, November 12th, 1875.

MEDICAL EDUCATION.

SIR,—In the report of the meeting of the Council of the Royal College of Surgeons, I observed a suggestion by Mr. Marshall of a compulsory examination at the end of the student's first winter session, or immediately after the commencement of the succeeding summer session.

I trust that the expression of an adverse opinion will not be considered by the Council an act of presumption on my part, but I cannot think that the multiplication of examinations can prove beneficial. What with frequent *vivâ voce*, and occasional written class examinations, prize examinations, and at some schools even *test* examinations, it would appear that our students are already over examined. It is true that the examination proposed would be more authoritative, but we are not told what would be the result in the case of those who failed to pass it, or how long in such an instance the primary examination proper would be postponed.

The blot in our present system, now that so much is required of our students, seems to be that men are allowed and even required to attend hospital practice and lectures on the practical subjects, while they are working in the dissecting-room and physiological laboratory. Students who seek the degrees of the University of London, or who intend to remain at a medical school four years, are careful to avoid this overlapping of subjects, but still they are obliged to put in an appearance in the wards to comply with the College requirements. On the other hand, the majority of students adopt the plan of crushing through all their hospital practice and lectures in two years and a half, or at most in three years, and present themselves badly prepared for all their examinations. See what this means in one of these student's second winter

session. If he be industrious, he endeavours to attend lectures on anatomy and physiology, to work in the dissecting room, and in the physiological laboratory, to read up for his primary examination, and, I suppose, to prepare for his second. I should think that this was sufficient for an ordinary student, especially if he is not content, he further vainly tries to profit by attending lectures on medicine and surgery, and by an assiduous attendance in the medical and surgical wards, on the medical institutes, and at the various demonstrations and demonstrations, and I have even heard of a student during a recess, saying, "Can it be wondered at, that a student should be somewhat bewildered on presenting himself for the primary examination?"

In my humble opinion, and I have already given expression to it, the remedy is, to separate entirely the curriculum for the primary examination from that for the pass examination, the latter to be commenced after the primary examination has been passed. I am aware that reasons are given for maintaining the present system, but I am quite sure that the objections to it far outweigh these reasons. The knowledge of anatomy and physiology can be kept alive by testing it in its practical bearing upon medicine and surgery at the pass examination, and the result would be more satisfactory than at present if an uninterrupted study of those subjects had been previously secured. I believe that, if our examining bodies enforced such a change as I have suggested, the "number of rejections" would rapidly diminish, and that "many would be diverted from" what is now called "an idle and profitless course of study".—I am, sir, your obedient servant,

GEORGE COWELL.

George Street, Hanover Square, November 18th, 1875.

CATGUT LIGATURES.

STR,—With reference to your report of the account which I gave at the last meeting of the Clinical Society of a case which had been under my care in St. Bartholomew's Hospital, will you allow me to state that the opening in the femoral artery, from which bleeding took place, was in the front wall of the vessel, and immediately beneath the knot of the ligature? The assumption is, that the coats of the vessel, bruised at this point by the ligature, ultimately sloughed and separated by ulceration. The coats of the artery had not been injured in the operation, except through this action of the ligature-knot. The wound healed by the first intention, but reopened to a slight extent at the part opposite to the sloughing process in the vessel. After recurrence of the bleeding (despite the treatment employed for its control), it was thought right to amputate the limb, and the patient died the day following. I am, yours faithfully, GEORGE W. CALLENDER.

November 24th, 1875.

HOSPITAL OUT-PATIENT REFORM.

STR,—I shall feel much obliged if you will permit me to draw the attention of members of Branches of the Association throughout the country, and particularly of the secretaries of those Branches, to the important service which they can render to the cause of hospital reform by passing resolutions similar to that which appears in to-day's JOURNAL as having been passed unanimously at the annual meeting of the Shropshire Ethical Branch, "fully approving the efforts now being made in London to check the gross abuse of hospital charity".

From communications which have reached me from time to time, I have reason to believe that, in many provincial cities and towns, the abuses complained of, though not reaching such enormous proportions as in London, are still much felt, and an expression of opinion similar to that quoted above would greatly strengthen the hands of those in the metropolis who have now for some years been struggling against difficulties in the way of reform, which at a distance can perhaps hardly be fully appreciated.

I desire also, with your permission, to direct the attention of your readers to an able article bearing on this subject in the current number of *Practical Medicine*, in which, with regard to the ventilation of hospitals, "S.E." quotes from Mr. Erichsen's *Hospitalism, and the Causes of Death after Operations*, four principal causes of mortality, among which we find the following as No. 2:—"The out-patient department being under the general roof of the hospital, this not merely demoralises the public, occasions loss and injustice to the medical practitioner, wastes and embarrasses the funds of the hospital, and carries disease all over the building, but, being generally near the entrance, obstructs the passage ways and exposes all who come in and go out to dirt and disease." Commenting upon this particular cause of mortality, "S. E." observes that "the question of out-patients has been entrusted to special committees, who will, doubtless, arrive at some means of settling it; but we are inclined to think that the whole business should be handed over to dispensaries, supported either by private

subscriptions, by parish funds, or by a co-operative system of the poor of each parish, by which a small weekly or monthly contribution would entitle the payer to medical attendance when ill, and the physicians would be paid according to their services. At any rate, hospitals should not be burdened with this dangerous, expensive, and thankless work."

These sentiments so fully express what has been for some time the growing conviction of my own mind, that I rejoice to see them urged in such a forcible manner as can hardly fail to attract the attention of the profession and the public. I am, of course, quite aware that many of the former will consider the change proposed as of too radical a nature; and, indeed, I feel convinced that it is to the timidity or hostility of many of our profession who are connected with hospitals that so little has yet been accomplished in the way of reform of so-called medical charity in London. In writing this, I do not for a moment forget the valuable services rendered to the cause by Dr. Meadows, the late Dr. Anstie, Mr. Fairlie Clarke, Mr. Wordsworth, and others connected with the cause. I am, however, as I have said, brought into exceptions to the general rule. The question, however, really concerns the rank and file of the profession quite as much as those who are its leaders, and it is for the former, if the latter will not do so, to consider the subject fully in all its bearings. I would, therefore, suggest that this subject of out-patient reform should be brought before as many branches of the Association as possible for discussion, and that, when it has been well debated by them, a representative meeting should be held under the auspices of the Metropolitan Counties Branch, at which delegates from other Branches might be invited to attend.

I am, &c. H. NELSON HARDY.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

BARNHILL POORHOUSE, BARONY, GLASGOW, AND ITS MEDICAL OFFICER.*

WE have before us a pamphlet of forty-six pages, being the report of Dr. Strehill Wright, Physician to Barony Poorhouse and Hospital, to the House Committee, as to the hospital arrangements existing in this, the largest parish workhouse in Scotland. It is in many respects a most remarkable document, whether regard be had to the courage implied in laying before the parochial authorities the structural and sanitary defects of the building, or to the proof it exhibits of unusual professional ability and research on the part of the author, an ability not always seen in persons content with a workhouse sphere of action. We, therefore, propose to lay before our readers a brief epitome of its contents, referring those who are interested in such matters to the pamphlet itself.

If we had space to do so, we should be able during the last ten years has had an average population of 1,000 inmates; and here let us remark that, from Dr. Wright's figures we learn, that in this workhouse there has been the same steady growth of the sick and infirm element that is noticeable in all our urban establishments. Thus, in 1864, of a total population of 1,202, 299 were sick or infirm; in 1874, the number of inmates had fallen to 878, while the number of sick and infirm had increased to 511, of whom 213 were actually sick. During the year 1874, 1,127 patients were treated in hospital, of which number, 723 were discharged cured, 413 discharged relieved, 184 died in hospital, 85 in the ordinary wards, and 8 in the ordinary wards, total 275; leaving 511 under treatment.

Dr. Wright, in a series of carefully compiled tables, gives a complete analysis of the cases he has treated. Our space will only permit us to quote the summary, and from this we learn that, of constitutional diseases there were, 341; disorders of the thoracic organs, 590; disorders of the abdominal organs, 155; disorders of the genito-urinary system, 51; wounds, lacerations, and other injuries, 71; other diseases, 274; nervous and degenerative diseases of the brain, 51; of the senses, 29; of the head and neck, 35; other injuries, 229; disorders of the genito-urinary organs, 35; skin-diseases, 200; diseases of the eye, 2; pregnancy and parturition, 74.

It will be seen from these statistics, that the Barnhill poorhouse is nought else than a huge infirmary. Let us note what are the arrangements to be made here for the purpose of the parochial authorities to deal with this mass of diseased humanity.

The poorhouse is built on the summit of a rising ground, but many

* Report by Medical Officer, Glasgow, to House Committee on Hospital Arrangements. George Watson, Printer, 38 and 40, Ingleburn Street, Glasgow.

of the wards and passages are on different ground levels; and, as the subsoil is a tenacious clay, and the drainage imperfect, many of the apartments used for the sick and infirm are necessarily damp—the day nursery for children particularly so. The female hospital wards, ten in number, have an average cubic space of 531 feet; while in the eight wards on the male side, the cubic space averages 596 feet—in one ward sinking so low as 353 feet.

The female infirm wards, like the sick, being day and night wards, average 535 feet, and the male infirm wards 647 feet. The atmosphere of these wards, which must be always more or less impure from overcrowding, is frequently farther deteriorated by the proximity of the St. Rollox chemical works; and when the wind blows from the south-west, the pungent taste and odour therefrom are readily recognisable. Four wards are specially to be noted; ward 65, containing nine beds, the cubic space per bed being only 487 feet, has been selected for female phthisical patients, because it can be ventilated without draught; while 519 feet only are allowable on the opposite side for males. In the children's sick ward, only 497 feet are allowed; the hygienic condition of this ward, as well as of the lying-in ward with only 502 feet, can be readily imagined. The male and female skin-disease wards have respectively 353 and 358 cubic feet.

Again, it would appear that the wards are so crowded that not unfrequently sick children have to sleep two in a bed; that no separate accommodation exists for the treatment of cases of venereal disease, of which there are a considerable number, these being mixed up with other patients; and it not unfrequently happens that persons admitted with one form of skin-disease contract another, the want of space constantly cramping the classification of patients, they having to be placed wherever room can be found for them. The supply of baths and hot water is very defective. There are only eight baths altogether, and of these two are out of order; and, from the bad supply of hot water, it not unfrequently happens that when baths have been ordered they have not been given. The supply of drinking water is faulty, the taps being placed in the water-closets. It appears, moreover, on the male side, each water-closet serves for $23\frac{3}{4}$ patients, and on the female for $29\frac{1}{2}$. Can it then be a matter of surprise that they constantly emit a foul smell, or that there should have been 28 cases of erysipelas and 96 of fever, in all 124, or $6\frac{1}{2}$ per cent. of the cases treated? The only wonder to our mind is, that the inmates have not been decimated thereby, for it is well known that these two diseases are, in most instances, distinctly traceable to sewer-gases. *When will the so-called guardians of the poor discover that three-fourths of all our pauperism is traceable to sickness, and that it is the falsest of all economies to stint the means and appliances for the prevention and cure of disease?*

The nursing staff consists of two paid nurses, of whom one was, previously to her appointment, an ordinary inmate without any prior education; and yet these two women have to superintend the nursing of from 260 to 330 persons.

Having given a description of the house and the diseases he has had to treat, Dr. Wright proceeds to suggest what should be done to mitigate or abolish the evils he complains of. He advises: (1) That a separate workhouse hospital should be built, and that it should be placed under the sole control of the medical officer; (2) That paid nurses in the proportion of one to every 23 or 28 patients in hospital wards, and one to every 36 or 40 patients in the infirm wards, should be appointed; (3) That the opportunities afforded by the treatment of this great and varied aggregation of diseases should be utilised for educational purposes by the admission of students for clinical instruction. A similar suggestion was made at the time when the Metropolitan Poor Act was introduced, but it was stifled—so at least has been alleged—by some hospital physicians who managed to get the ear of Mr. Gathorne Hardy.

There are many other points relating to dietaries, the classification of disease, etc., to which we would gladly refer; but our space is exhausted, and we must conclude by expressing the hope that Dr. Wright may not have to suffer for having so completely exposed the sanitary and other defects of Barnhill Poorhouse Hospital; a fate which has befallen other workhouse surgeons who have dared to become Poor-law medical reformers. But this has been in England; in Scotland we look for better things.

MEDICAL OFFICERS WITHOUT VITAL STATISTICS.

THE late Dr. Sarvis, the Medical Officer of Health for Bethnal Green, issued, just prior to his death, which took place suddenly in his surgery on the 4th instant, his nineteenth annual report of the vital statistics and sanitary proceedings of that parish for the last twelve months. In opening the same, he remarks at considerable length on the following subject. He says:

"I am sorry that it should devolve upon me, at the outset of my

task, to have to state that the compilation of this report has been effected under difficulties such as have not been encountered in former years, in consequence of not receiving returns which were previously furnished weekly to the medical officers of health of the various parishes and districts within the metropolitan area. The documents in question contained information of a nature which rendered it highly desirable that they should be supplied with promptitude and regularity to all medical officers of health appointed under the Metropolitan Local Management Act, as they set forth the number of children born in each place, and showed the relative proportions of the sexes in these additions to the population. They also afforded particulars of every death occurring within the limits to which they severally related, specifying in each case the sex and age of the deceased person, the address where the event took place, and the cause from which it resulted."

Dr. Sarvis then proceeds to describe the mode in which the registrars of the four subdistricts of the parish submit their reports, which, he says, are forwarded weekly to the Registrar-General at Somerset House. There they are copied into books kept for the purpose, and thus is formed the basis of the weekly returns which appear in the daily newspapers. Until the passing of the last Act, it had been the practice of the Registrar-General, after copying the reports of the sub-district registrars, to enclose them, together with a copy of the printed return issued weekly by himself, to the medical officer of health for the parish or district to which they are respectively related. By this means, attention was at once drawn to any outbreak of zymotic disease, and the medical officers were thus enabled to inspect the houses, and take the necessary measures to prevent the spread of the epidemic. He need hardly remark upon the disastrous results that might possibly follow from the abrupt termination of such an arrangement; but he thought it a matter for congratulation that, so far, no evil consequences have been experienced. It was necessary, in order to fully appreciate the value of the information conveyed in the returns alluded to, to bear in mind that, although the books of the medical officers in the service of the guardians were always open to inspection, yet there were large numbers of cases of zymotic disease that were attended by private practitioners, and that these were not brought under the notice of the sanitary authority until the death of the patient took place and was registered. He was quite at a loss to conceive why an Act of Parliament was passed to discontinue the supply of these returns, which, after they were copied, could be of no value to the Registrar-General; and, considering that the plan of distributing them to the persons whom they concerned in the manner herein described had been in operation for eighteen years, it was difficult to understand why such an alteration in the law should have been made.

Dr. Sarvis winds up by stating that the law provides that the vestries should pay the local registrars for what information is required at the rate of twopence an entry; and some parishes have adopted that course. Had this been done in Bethnal Green during the past twelve months, the outlay incurred would have been £26 3s. 8d., which would have been divided amongst the four district registrars. This was not a large sum to expend in a matter where life was concerned; but he earnestly hoped that the old course would again be adopted.

The number of persons who succumbed to zymotic disease during the past twelve months in the parish of Bethnal Green was 573, being a decrease of 64 on the number occurring the preceding year. The deaths during the year numbered 3,142; and the annual rate of mortality was 24.7 per 1,000, 1 death in 5.6 being attributable to zymotic disease. The births during the year were 5,152.

DUTIES OF REGISTRARS.

SIR,—I think the practice of English registrars not to record the name of the putative father of an illegitimate child is legal, prudent, and just. The legal father of a child is the husband of the mother; if she have no husband, the child has no legal father; it is illegitimate. It is most just to omit the name of the putative father, because it has not been legally proved, and may be unknown to the informant, as it was in the case reported at page 651, where the informant was not the mother, but the grandmother of the child. That this omission is most prudent is shown by that case, which, however decided, must cause the registrar cost, trouble, and anxiety.

The seventh section of the English Registration Act of 1874 expressly directs that the registrar shall not register the name of any person as the father of an illegitimate child, unless at the joint request of the mother and of the person acknowledging himself to be the father, both of whom shall sign the register.

I am, etc.,

P. H. HOLLAND.

London, November 22nd, 1875.

POOR-LAW MEDICAL APPOINTMENTS.

BROWN, Joseph L'Oste, L.R.C.P., appointed Medical Officer for the Sheriffhales District of the Shifnal Union, Salop, 1875; J. E. Mayer, M.D., resigned.

COLE, Richard M., L.R.C.P., appointed Medical Officer to the Gloucester Union Workhouse, 1875; A. D. Cookson, M.R.C.S. Eng., resigned.

CROSSLIE, Francis C., M.D., appointed Medical Officer, Public Vaccinator, and Registrar of Births and Deaths for the Newry No. 2 Dispensary District; also, Sanitary Medical Officer for the same district.

DEANS, John, M.R.C.S. Eng., reappointed Medical Officer for the Coldridge District of the Crediton Union.

DEVANY, Patrick C., L.R.C.P. Ed., appointed Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the No. 2 Division of the Sligo Dispensary District, *vice* James Tucker, M.D., deceased.

HARRISON, Thomas W., L.R.C.P. Ed., appointed Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Doneraile Dispensary District of the Mallow Union, county Cork, 1875; R. Keasler, M.D., resigned.

HILL, Philip Edward, M.R.C.S. Eng., appointed Medical Officer and Public Vaccinator for the Crickhowell District of the Crickhowell Union, *vice* Evan Parry, M.R.C.S. Eng., resigned.

NORTH, John Cunningham, M.B., appointed Medical Officer *pro tem* to the Brecknock Union Workhouse.

TURNOUR, Henry Edward, M.D., appointed Medical Officer and Public Vaccinator for the Tealby District of the Caistor Union, *vice* R. Read, M.D., resigned.

VALENTINE, Edmund W., M.R.C.S. Eng., appointed Medical Officer for the Second Division of the Shepton Mallet Union.

WALKER, Thomas O., M.R.C.S. Eng., appointed Medical Officer and Public Vaccinator for the Crick District of the Kings Lynn Union.

YOUNG, Christopher, M.D., appointed Medical Officer and Public Vaccinator for the Yarm District of the Stokesley Union, Yorkshire.

MILITARY AND NAVAL MEDICAL SERVICES.

LOSSES OF STORES AT ALDERSHOT.

WE understand that a court of inquiry is now sitting at Aldershot to investigate important points connected with certain recent losses of stores. It will be within the recollection of our readers that a circular issued shortly after the famous warrant of March 1873 placed the responsibility for hospital stores and equipment directly on the senior medical officer in charge, and that we took occasion to protest against an arrangement which could not fail to cause much unpopularity and annoyance. Although the plan has worked with much friction, things have only come to a crisis some little time ago, when very heavy claims were made against the surgeons in charge of the first and second station hospitals, on account of their responsibility in these matters. Considering that in one case the amount of damages exceeded £80, we cannot feel surprised that the victim did not hasten to satisfy the official demands, and that the matter was referred for the decision of his superiors. This course of action has resulted in the appointment of a mixed board, in whose composition the medical department has every confidence, and whose verdict will be awaited with the intense anxiety which only those can feel whose future prospects may be most seriously affected by their judicial summing up. In the meantime, however, we can hardly be accused of contempt of court if we point out in a few words the folly and injustice of taking a medical man from his own proper professional duties, and making him a mere storekeeper, with a financial liability which only those properly trained for that kind of work should hold.

The senior surgeon in charge of a station military hospital is now entirely removed from all care of the sick; instead of being a consultant on whose opinion and advice his junior brethren may rely in case of need, he is nothing more than a head clerk busily occupied in stock-taking and the superintendence of official returns. At a place like Aldershot, with its scattered huts and deficient storage, his anxieties must be very great, and the discomfort of his position correspondingly irksome. Principal medical officers are apt to perpetuate this vicious system by devoting their inspection to matters of petty detail rather than to professional matters, and, instead of being a centre of scientific progress, his office is too often devoted to nothing higher than red tape and routine. We cannot conceive anything better calculated to crush out all professional zeal and interest than those dry and unprofitable duties from which the Right Honourable Sidney Herbert emancipated the department many years ago. In the memorable words of the report which the committee on the Purveying Department sent in to that most able Secretary at War:—"In doing this, we have liberated medical officers from numerous matters of detail formerly within their province, although quite alien to their professional duties." We shall conclude these few remarks, hoping that we may be able to congratulate our army brethren ere long on some definite termination to their present anxieties.

ARMY MEDICAL APPOINTMENTS.

BOILEAU, Staff-Surgeon John Peter, B.A., appointed Medical Officer 29th Regiment, *vice* Surgeon-Major Meade, posted to 2nd Brigade Dépôt, Carlisle.

NAVAL MEDICAL APPOINTMENTS.

ADAMS, Fleet Surgeon John S. Y., to the *Hercules*, to be appointed to the *Pallas*, when re-commissioned.

MCADAM, Surgeon John A., to the *Hercules*, to be appointed to the *Pallas*, when re-commissioned.

MESSER, Fleet Surgeon John C., M.D., to the *Undershaft*, for the *London*.

OBITUARY.

WILLIAM CROSS, F.R.C.S.E.

THE death of Mr. Cross, which took place early in the morning of October 26th, is greatly lamented at Clifton, where he had spent his whole life of sixty-five years, and had been in active and extensive practice for half of that time. William Cross was apprenticed to his relative Mr. Charles Smerdon, that fine specimen of the old English surgeon-apothecary, who, having attained an almost patriarchal age, died at Clifton but a few years ago; and, after spending some time at St. Bartholomew's (where he made many lasting friendships), and obtaining his diploma at the College and Hall, he returned to Clifton, where he subsequently became a partner of the firm of Smerdon, Burroughs and Cross. Ultimately, after Mr. Smerdon's retirement, Mr. Cross carried on practice alone with great credit and success. In 1852, he was honoured with the fellowship of the College of Surgeons. For many years, he enjoyed the friendship and confidence of the late Dr. Symonds, who was then the leading physician in the West of England. His kindly and benevolent nature, his genial temper and hearty manner, his industry, which made him a student and a reader as well as a practical worker to the very end of his life; his manual dexterity and familiarity with all the details of practice—made him a general favourite, and were rewarded with many sincere friendships, and an unusually extensive clientry among the upper classes of Clifton. He died suddenly, after having made, as it appeared, considerable progress towards recovery from an illness of several weeks' duration, which had begun with thrombosis of the veins of the lower extremity. Two sons and two daughters survive him.

EDWARD SCOTT JONES, L.R.C.P. ED.

THIS young and promising member of our profession has died at the early age of thirty-one, from an attack of typhoid fever, contracted in the discharge of his duties, on Wednesday, November 17th. Mr. Jones was the son of Mr. William Jones, surgeon, of Weston-super-Mare. After receiving his education at Crewkerne, he entered as a student at the Bristol School of Medicine; and, in 1861, became M.R.C.S. Eng. and L.R.C.P. Ed. Shortly afterwards, he was appointed as the first house-surgeon to the Weston-super-Mare Hospital, which office he filled for five years with universal satisfaction to all. At the termination of his office, he began practice in Weston on his own account; and obtained the greatest esteem, love, and regard for his fellow-townsmen, and from all with whom he was associated, either in his professional pursuits or in the everyday duties of life. At his funeral, the inhabitants closed their shops and attended in a large body at the cemetery. Mr. Jones had been married but little more than a year, and leaves a young widow and twin daughters.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—Second M.P. Examination, 1875. Examination for Honours.—Medicine.

First Class.

Batterbury, George Henry (Scholarship and Gold Medal), King's College
Verco, Joseph Cooke (Gold Medal), St. Bartholomew's Hospital
Cretin, Eugène, St. Bartholomew's Hospital

Second Class.

Hetley, Henry, Guy's Hospital
Garlick, George, University College
Moore, George Edward, King's College

Third Class.

Hobson, Lewis John, University College
Voelcker, George Henry, University College

Obstetric Medicine.

First Class.

Smith Herbert Alder (Scholarship and Gold Medal), St. Bartholomew's Hospital
Batterbury, George Henry (Gold Medal), King's College
Verco, Joseph Cooke, St. Bartholomew's Hospital

Second Class.

Garlick George, University College
 Buchanan, Arthur, Guy's Hospital
 Hobson, Lewis John, University College
 Hullard, Jean Arthur, B.Sc., University College

Third Class.

Hetley, Henry, Guy's Hospital
 Jameson, Leander Starr, University College
 Voelcker, George Henry, University College

Forensic Medicine.

First Class.

Verco, Joseph Cooke (Scholarship and Gold Medal), St. Bartholomew's Hospital
 Jameson, Leander Starr (Gold Medal), University College
 Hullard, Jean Arthur, B.Sc., University College
 Voelcker, George Henry, University College
 Crétin, Eugène, St. Bartholomew's Hospital
 Hetley, Henry, Guy's Hospital

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on November 18th.

Blackston, A. A., L.S.A., Wallington, Surrey (University College)
 Carcenac, Edward, Mauritius (St. Bartholomew's)
 Cary, Adrian, Guernsey (Guy's)
 Cooper, H. D., L.S.A., Bengal (University College)
 Parker, F. W., Peckham (St. Thomas's)
 Dobbie, R. J. A., L.S.A., Buleigh Salterton, Devon (London)
 Don, A. G., Hammer-nith (University College)
 Gairdner, John, Maidenhead (University College)
 Goofrey, B. G., Clapham (University College)
 Harmar, J. R., L.S.A., Birmingham (Birmingham School)
 Hopgood, W. C., L.R.C.P.Ed. & L.S.A., Chipping Norton (University Coll.)
 Jackson, P. J., L.S.A., Merton, Surrey (Guy's)
 Knight, J. T., L.S.A., Sandiacre, Derbyshire (Guy's)
 Lewis, J. I., L.S.A., Milborne Port, Somerset (Guy's)
 Lloyd, J. H., Milner Street, S.W. (St. George's)
 Mathias, James, L.S.A., Cardigan (St. Bartholomew's)
 Price, H. E., Stamford Hill (London)
 Shann, Frederick, B.A.Cantab., Brompton (St. George's)
 Sherrin, F. M., Garsford Street, Camden Road (University College)
 Sledall, T. W., Pontypridd (Liverpool School)
 Smith, S. M., Surbiton, Surrey (St. Bartholomew's)
 Tredinnick, Ernest, Camborne, Cornwall (St. Thomas's)
 Twining, F. T., B.A. & M.B.Cantab., Southport, Lancashire (St. Thomas's)
 Ward, Charles, Greenstreet, Kent (London)

Thirteen candidates out of the eighty examined having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months.

The oral part of the first examination for the Fellowship was commenced on Saturday last, when the following gentlemen passed; and, when eligible, will be admitted to the final examination.

Messrs. Edward Barton Gardner, L.S.A., diploma of membership dated November 12th, 1861, of St. Thomas's Hospital; William Leweston Baker, L.R.C.P.Lond., November 17th, 1863, of St. George's Hospital; James William Smith, L.R.C.P.Lond., November 15th, 1864, of Guy's Hospital; George Jackson, L.R.C.P.Lond. and L.S.A., November 15th, 1864, of University College; Frank Buller, M.D., January 28th, 1870, of the Toronto and St. Thomas's Hospitals; Arthur William Prichard, L.S.A., July 21st, 1874, of the Bristol School; Thomas Frederick Chavasse, passed primary membership April 8th, 1873, of the Edinburgh and Birmingham Schools; and John Lewis Jaquet, primary membership April 15th, 1873, of the Westminster Hospital.

Of eighty candidates for the diploma of membership of the College, thirteen were rejected; four were approved in medicine, but referred in surgery; three were referred in medicine, but approved in surgery; six, who only went in for surgery, were approved, and, when qualified in medicine, will be admitted members of the College, as were fifteen gentlemen who had passed in surgery at previous meetings of the Court of Examiners; and one candidate, examined under the old regulations, was referred to a written examination. The following is an analysis of the medical qualifications possessed by the candidates. There were fourteen who held the L.S.A.; two, M.B.Edin.; two, L.K.Q.C.P.I.; one, L.R.C.P.Edin. and L.S.A.Lond.; one, L.R.C.P.Lond.; one, M.B.Cantab.; and one, M.B.Aberd. Forty-seven candidates were examined in medicine.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, November 18th, 1875.

Blackston, Arthur Alexander, Wallington, Surrey
 Harmar, James Raffles, N-whall Street, Birmingham
 Gathergood, Benjamin William, Terrington St. John's, King's Lynn
 Mapes, Reginald, Spalding, Lincolnshire
 Pilkington, Henry, Liverpool
 Williamson, George Edward, North Shields

The following gentlemen also on the same day passed their primary professional examination.

Chadwick, John, Manchester Infirmary

Macintire, John Henry Lee, Middlesex Hospital
 Roberts, Gordon Money, Guy's Hospital
 Sidebotham, George William, Manchester Hospital

MEDICAL VACANCIES.

The following vacancies are announced:—

- AMERSHAM UNION—Medical Officer. Salary, £70 per annum, and extra fees. Applications on or before December 6th.
 ARDWICK AND ANCOATS DISPENSARY, Manchester—Resident House-Surgeon.
 BERKS COUNTY ASYLUM, Moulsoford—Assistant Medical Officer. Salary, £80 per annum, with board, lodging, and washing.
 BIRMINGHAM AND MIDLAND EYE HOSPITAL—Dispenser. Salary, £70 per annum. Applications before the 6th December.
 BOOTLE BOROUGH HOSPITAL—House-Surgeon. Salary, £80 per annum, with board, furnished apartments, and washing. Applications to the Honorary Secretary.
 CARMARTHEN UNION—Medical Officer.
 CHIPPENHAM UNION—District Medical Officer, Public Vaccinator, and Medical Officer of Health. Salary, £18:3:4 per annum as Medical Officer, and £17:0:10 as Medical Officer of Health, in addition to extra fees. Applications on or before December 10th.
 CHORLTON-ON-MEDLOCK, RUSHOLME, and MOSS SIDE DISPENSARY, Manchester—House-Surgeon.
 DENBIGHSHIRE INFIRMARY—House-Surgeon. Salary, £85 per annum, with board, washing, and residence.
 DOVER HOSPITAL and DISPENSARY—Resident Medical Officer. Applications on or before the 30th instant.
 DUMFRIES and GALLOWAY ROYAL INFIRMARY—Assistant House-Surgeon. Board and washing. No salary. Applications to the Treasurer.
 EAST SUFFOLK and IPSWICH HOSPITAL—House-Surgeon. Applications on or before December 8th.
 GREAT NORTHERN HOSPITAL, Caledonian Road—Surgeon. Applications on or before December 9th.
 HAMBLEDON UNION, Surrey—Medical Officer. Salary, £53 per annum, with extra fees. Applications on or before December 15th.
 HOSPITAL FOR THE INSANE, Barnwood, near Gloucester—Assistant Medical Officer. Salary, £100 per annum, increasing £10 annually to £120, with board (exclusive of wine), lodging, and washing.
 HUDDERSFIELD INFIRMARY—Physician.
 LIVERPOOL INFIRMARY FOR CHILDREN—House-Surgeon.
 MOFFAT HYDROPATHIC ESTABLISHMENT—Medical Man to take charge. Applications to Messrs. Bruce and Kerr, W.S., Edinburgh.
 PARISH OF LISMORE AND APPIN, Lettermore—Medical Officer. Salary, £100 per annum. Applications to the Rev. D. Dewar, Manse, Appin, Argyll.
 REDDITCH and DISTRICT MEDICAL AID ASSOCIATION—Medical Officer. Salary, £200 per annum, extra fees, and unfurnished house. Drugs, cab hire, etc., found. Applications on or before December 9th.
 ROTHERHAM HOSPITAL—Resident House-Surgeon. Salary, £120 per annum, with board and furnished apartments. Applications on or before December 23rd.
 ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields, E.C.—House-Surgeon. Salary, £50 per annum, with board and residence. Applications on or before December 6th.
 THARSI MINES, Province of Huelva, Spain—Medical Practitioner. Salary, £250 per annum. Applications to the Secretary, 136, West George Street, Glasgow.
 TONGUE and FARR, District of, County of Sutherland—Medical Officer. Salary, £150 per annum, and house.
 TRINITY COLLEGE, Dublin—Professor of Botany. Applications on or before January 22nd, 1876.
 WELLS UNION—Medical Officer. Salary, £80 per annum, and extra fees. Applications on or before December 7th.
 WESTMINSTER HOSPITAL—Resident Obstetric Assistant. Applications by December 1st.
 WORKSOP UNION—Medical Officer and Public Vaccinator. Applications on or before December 7th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

- BEATTY, Joseph, F.R.C.S.I., appointed Surgeon to the Rathdown Hospital and Dispensary, Monkstown, co. Dublin, *vice* William Plant, M.D., J.P., deceased.
 *BUCHANAN, Walter, M.R.C.S.Eng., appointed Surgeon to the Chatham Division of the Kent County Constabulary.
 DUDLEY, William L., M.D., appointed Physician to the City Dispensary, *vice* J. Middleton, M.R.C.P.Ed., resigned.
 HAMIL, J. W., M.D., appointed Resident Medical Officer to the Worksop General Dispensary.
 *SHEWEN, Alfred, M.D., appointed Assistant Physician to the Metropolitan Free Hospital.
 *THOMSON, W. A., L.K.Q.C.P., appointed Second Assistant Medical Officer to the Brookwood Asylum.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTH.

- BOGGS.—On the 21st instant, at Paris, the wife of Alex. Boggs, M.D., late of H.M.'s Indian Army, of a son.

MARRIAGES.

- FREW—MCLELLAN.—At Galston, Ayrshire, on the 16th instant, by the Rev. Thos. Mathewson, assisted by the Rev. R. Hislop, Kilmarnock, William Frew, M.B., C.M., Newmilns, to Sarah, second daughter of J. McLellan, Esq.
 MCKANE—WATFORD.—At Byers' Green Parsh Church, on the 9th instant, by license, by the Rev. Dr. Hooppell, rector of the parsh, Dr. G. O. McKane, to Catherine, youngest daughter of Mr. Watford, Byers' Green.

OPERATION DAYS AT THE HOSPITALS.

MONDAY Metropolitan Free, 2 P.M. St. Mark's, 7 A.M. and 2 P.M. Royal London Ophthalmic, 11 A.M. - Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY Guy's, 1.20 P.M. - Westminster, 2 P.M. - Royal London Ophthalmic, 11 A.M. - Royal Westminster Ophthalmic, 1.30 P.M. - West London, 3 P.M. - National Orthopaedic, 2 P.M.
WEDNESDAY . . . St. Bartholomew's, 1.30 P.M. - St. Mary's, 1.30 P.M. - Middlesex, 1 P.M. - University College, 2 P.M. - St. Thomas's, 1.30 P.M. - London, 2 P.M. - Royal London Ophthalmic, 11 A.M. - Great Northern, 2 P.M. - Samaritan Free Hospital for Women and Children, 2.30 P.M. - Cancer Hospital, Brompton, 3 P.M. - King's College, 2 P.M. - Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAY . . . St. George's, 1 P.M. - Central London Ophthalmic, 1 P.M. - Royal Orthopaedic, 2 P.M. - Royal London Ophthalmic, 11 A.M. - Hospital for Diseases of the Throat, 2 P.M. - Royal Westminster Ophthalmic, 1.30 P.M. - Hospital for Women, 2 P.M. - St. Thomas's (Ophthalmic Department), 3 P.M.
FRIDAY Royal Westminster Ophthalmic, 1.30 P.M. - Royal London Ophthalmic, 11 A.M. - Central London Ophthalmic, 2 P.M. - Royal South London Ophthalmic, 2 P.M. - Guy's, 1.30 P.M.
SATURDAY . . . St. Bartholomew's, 1.30 P.M. - King's College, 1.30 P.M. - Charing Cross, 2 P.M. - Royal London Ophthalmic, 11 A.M. - East London Hospital for Children, 2 P.M. - Royal Westminster Ophthalmic, 1.30 P.M. - St. Thomas's, 9.30 A.M. and 1.30 P.M. - Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY - Royal Microscopical Society, 8 P.M. Professor Rupert Jones, "Remarks on the Foraminifera, with special reference to their variability of Form;" illustrated by the Crustellians" - Obstetrical Society of London, 8 P.M. Dr. Heywood Smith, "Notes of a Case of Ruptured Vagina during Labour; with Recovery"; Dr. Wiltshire, "Spontaneous Rupture of the Vagina; Recovery"; Dr. Routh, "Case of Extrauterine Fertilid successfully treated by Gastrotomy"; Dr. John Williams, "On the Mechanical Action of Pessaries"; Dr. Oswald, "On Casarean Section", and other communications.
THURSDAY - Harveian Society of London, 8 P.M. Dr. Sibson, F.R.S., Harveian Lectures "On Bright's Disease and its Treatment, considered mainly in relation with Arterial Tension from Blood Contamination".

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.
PUBLIC HEALTH DEPARTMENT. - We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with Duplicate Copies.
AUTHORS desiring reprints of their articles published in the JOURNAL are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.
CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names - of course, not necessarily for publication.
WE CANNOT UNDERTAKE to RETURN MANUSCRIPTS NOT USED.
COMMUNICATIONS respecting editorial matters, should be addressed to the Editor: those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

UPPINGHAM SCHOOL.

We are requested by Mr. Haviland, who is investigating the recent outbreak of enteric fever at the Uppingham School, to say that he will be much assisted in his inquiries if the medical attendants upon boys who have fallen ill after leaving that school, will kindly favour him with notes of the facts of illness, and particularly of the dates of the commencement of illness. Letters should be addressed to him at Northampton.

A DUBLIN CORRESPONDENT. - We cannot but regard the frequent outbreaks of irritable disaffection of our contemporary as the highest compliment which can be paid to the value of this part of the JOURNAL, and to the ability of our correspondents. The number of our subscribers in Ireland is steadily increasing.

BRANCH ORGANISATION.

T. C. (Aberdeen). - The Branches have each an annual president and a "bureau" of annual officers. The method of organisation of district Branches is a matter for the consideration of each Branch. The presidents of each district meeting may be elected annually, or at each meeting, or just as is thought best. Both practices, we believe, exist. In some Branches and districts a set subject for discussion is arranged, and speakers send in their names beforehand. It generally provides a good debate.

THE printed paper which Dr. Birkbeck Nevins forwards, "On the Latest Government Statement as to the Influence of the Contagious Diseases Acts", shall have our early attention.

IGNORANT MIDWIVES.

T. W. (South Shields) in a letter (of which it is probably not intended that we should publish the text) mentions two cases in his practice, in one of which an ignorant midwife had excised the womb, and showed it to him on a plate, with the observation that "she had had a good deal of trouble to get it away"; in the other, the womb was "completely turned inside out". We hope there was an inquest in the first case. Such cases plead very strongly for the better education and regulation of midwives.

NOTICE TO ADVERTISERS. - Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than Thursday, twelve o'clock.

THE COMPOUND STETHOSCOPE.

SIR, - In the BRITISH MEDICAL JOURNAL of this date appears a letter from Messrs. Perry and Co. of Bristol, relative to a stethoscope invented by Dr. Spencer of that town, and made by them, which is called the "compound" stethoscope. They seem to have discovered some similarity between my double stethoscope (a description of which you have published to appear in the JOURNAL of the previous week) and theirs, and take a great deal of trouble to explain that their instrument produced mine. Which was a very curious and rather to the point, as a matter of considerable doubt, but must be of very little importance, as the two instruments are in practically entirely different forms, except in such points as must be common to all binaural or differential stethoscopes.

I have within the last few days seen Dr. Spencer's "compound" stethoscope for the first time, and am at pains to inquire how any one could have a resemblance between it and mine. The tubes in my instrument are, as I describe them, plain and equal in calibre from beginning to end; those of the other are each in three portions, of which one is metal, and two of rubber tubing of different thicknesses. It must be granted that, with such variety of tubing, an equality of calibre is difficult, if not impossible, to secure, while in other respects the instrument is, in my opinion, so complex a contrivance, that its being manufactured with uniform and lasting efficiency.

The simplicity which characterises my "head-sprung stethoscope", while insuring greater efficiency, permits its being produced at much less cost; and the head-sprung arrangement of the different parts are points, for which, by and by dispute. The only true estimate of the respective merits of these double stethoscopes will be elicited after they have stood the test of time and experience. - YOURS TRULY, R. HARTY HILLIARD, M.D.

5, Belgrave Terrace, Upper Holloway, N., Nov. 26th, 1875.

A STUDENT is referred to our advertisement columns.

THE WELLS AS A THERAPEUTIC MEANS.

SIR, - In your abstract of Mr. Jolly's paper on the above, in the JOURNAL of November 20th, there is a passage, which, as implying the great rarity of the case referred to, I may be allowed to quote in full. "M. Jolly relates that he saw, in 1827, in the St. Louis Hospital, a man who had suffered for years from this disease (epilepsy), and who, as yet well, throw off his attacks. It was enough for him, to the great astonishment of the pupils who witnessed the fact, to make the muscular apparatus of mastication and deglutition undergo voluntary exercise, by introducing solid food into his mouth as soon as he had a premonition of the return of the paroxysms." At the Royal Infirmary Dispensary in Glasgow, a somewhat similar case came under my notice; and, as I made a hurried note of it at the time, I shall simply give you this as it stands.

February 5th, 1875. P. L., aged 47. - If the patient want food for more than two hours, he is seized with a fit, which, from the description of a friend who is with him, may be considered epileptic. He is certainly insensible during the fit, for he has frequently injured himself. Both patient and friend distinctly state that an attack can always be prevented by taking food; and if some tea be poured down his throat, even when in the fit, he almost immediately recovers. I should add to this, that I remember that the friend referred to was a most intelligent man - being, in fact, the manager of the work in which the patient was employed; and, as he had frequently seen the patient in the attacks, his account of the case can be depended on. There is this, however, to be noted further: Dr. Scott Orr informs me that the patient was admitted to one of his wards shortly afterwards, and in a day or two became insane, and had to be removed. - Yours very truly, W. ANGLSON.

Glasgow, November 22nd, 1875.

ALPHA. 1. No. 2. Yes. 3. Yes.

ROYAL COLLEGE OF SURGEONS.

THE following were the questions submitted to the candidates at the written examination for the diploma of membership of the Royal College of Surgeons on Friday and Saturday last. Surgery. - Candidates were required to answer at least four (including one of the first two) out of the six questions. 1. Describe the dissection required to expose the right common carotid artery. On what part would you place a ligature? 2. Mention the structures divided in a circular amputation through the middle of the arm. 3. Describe the symptoms and treatment of delirium tremens following injuries. 4. What are the microscopic appearances presented by articular cartilage when undergoing the changes described as "absorption"? 5. Give the pathology, diagnosis, and treatment of psoas abscess. 6. What are the symptoms of a complete transverse laceration of the urethra in the perineum? How would you treat the injury? and what would be the most probable results? Medicine. - 1. Describe a typical case of typhoid fever, with its treatment. For what other diseases might typhoid fever be mistaken? and how would you distinguish between them? 2. Mention the chief morbid changes to which the valves of the heart are liable. State the effects produced on the walls and cavities of the heart by these affections; and give the leading signs by which they may be recognised during life. 3. Indicate the medicinal qualities of the following preparations, and the class of cases in which they are used, together with the doses: ext. ergotæ liquidum; tr. digitalis; elaterium; zinci sulphas; acidum gallicum. extractum belladonnæ; plumbi acetas; hydrargyri perchloridum; liquor arsenicalis.

At the half-yearly examination of candidates for the Fellowship on November 19th, the following questions were put to candidates for the primary or anatomical and physiological examination, all of which were required to be answered. 1. Describe the influence which the function of respiration, including the respiratory movements, has upon the circulation of the blood. 2. State the evidence in support of the current views concerning the functions of the fifth cranial nerve. 3. Describe the course and relations of the arteries which enter the cranial cavity anterior to a transverse line drawn in front of the foramen magnum, limiting the description to the interior of the skull. 4. In a transverse section of the neck through the fourth cervical vertebra, name the parts seen in their order from before backwards.

QUESTIONS FOR THE ARMY MEDICAL DEPARTMENT.

T. H. J. - The examination questions for the Army India Service and Navy are the same, and will be found printed every year in the Appendix of the Statistical and Sanitary Report, presented every year by the Director-General to Parliament, which is often called the Departmental Blue-book. It may be procured at Hansard's, Great Queen Street, W.C.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

APPRENTICESHIP.

SIR,—Allow a young medical student to make a few remarks about medical apprenticeships. I fully agree with your correspondent "S. T.," as I think two years in a medical establishment of some sort will give a student such a practical knowledge of some parts of his profession, that he will find in after life that he is the gainer by that knowledge. I think the majority of medical students of the present day go in for a mere superficial knowledge of materia medica and pharmacy—as much as will pull them through their examinations; but, when they are qualified, they find their mistake; when, perhaps, they are not able to write a proper prescription, and, when ordering a tonic mixture for a patient, they give tinctura cinchonæ composita with ferrî perchloridum, or some other equally unpractical combination. I think the medical men thirty or forty years ago were by far better masters of their profession than our newly fledged two years' making doctors of the present day.—I am, yours,

ONE WHO HAS SERVED HIS TIME TO AN APOTHECARY.

AN EX-PROFESSOR.—Prior to 1800, it was customary to give the College medal to each professor on the conclusion of his course of lectures. Originally, the medal was of silver, but no record can be found of the change to the more precious metal. The last to receive it as such was Professor James Wilson, as appears from the following record. "Court of Assistants, July 3rd, 1800.—Resolved, that the usual gold medal be presented to Mr. James Wilson, the late professor of anatomy, for his services during the past year." They are now rewarded with special honorariums.

MORTUARIES IN THE METROPOLIS.

SIR,—As I am desirous of making out a complete case for legislative action on the question of the establishment of mortuaries in the metropolis, at the forthcoming deputation of the Strand Board of Works to the President of the Local Government Board, will you permit me to request the medical officers of health, Poor-law medical officers, and others, to forward me any information they possess as to the evils that arise from the want of such accommodation? I am, your obedient servant,

JOSPH ROGERS.

33, Dean Street, Soho, November 22nd, 1875.

IDIOLIC MEDICINE.—A number of curious analogies, illustrating the parallelism of pathological phenomena with metrical (harmonic) laws, have, it seems, been collected by Dr. Samuel W. Francis, in a late essay, entitled "Spanning in Therapeutics, or the Metrical Treatment of Disease." He notes the similarity of pulse-tracings to metrical marks; and believes that not only may diseases be classified by the rules of prosody, but that remedies may be administered by the same system. He inquires: "If there are such affections as choriambic convulsions, dactylic spasms, or anapestic fevers, should there not be iambic doses and trochaic remedies." *Cyclopaedia of Practical Medicine and Surgery*, p. 1.

DR. BODDY'S CASE OF DEATH AFTER INTRAMETERINE INJECTION OF PERCHLORIDE OF IRON.

SIR,—The case of death after injection of a solution of perchloride of iron into the uterus to restrain *post partum* hæmorrhage, recently published by Mr. H. W. Boddy, has given rise to several comments on the subject; but, so far as I can see, to no satisfactory explanation of the cause of death. It is seldom that a so-called remedial agent proves so directly more deadly than the disease or danger it was intended to alleviate or control, as in this instance. It is, therefore, a subject which ought, if possible, to be satisfactorily accounted for at the earliest opportunity; and it is much to be regretted that no *post mortem* examination of the body was in this case obtained. In the absence of such an examination, we are compelled to form our opinions from the condition of the uterus previous to the injection, its condition and the general symptoms afterwards, and the known action of the agent used; and upon these data, I venture to think that the death in this case was due to embolism of the pulmonary artery from coagulation of the blood, caused by the admission of the injected fluid into the general circulation through the uterine veins. In the first place, the condition of the uterus previous to the injection was one of flaccidity; the mouths of the uterine veins were, therefore, patulous; the solution was doubtless sent up with some force, perhaps exactly into the surface upon which these venous mouths opened, possibly injected into them. Whether this was the case or not, on firm contraction of the uterus, which took place quickly, a portion of the injected solution would very probably be forced along the veins, the natural outlet, the "os uteri" being occupied by the injection-tube, around which, we are told, it was firmly contracted. If this be allowed, then the result, death from "sudden asphyxia" is easily accounted for, from the well known coagulative action of perchloride of iron upon blood, causing embolism of the pulmonary artery.—I am, etc.,

J. HIGHAM HILL, F.R.C.S.,
Medical Officer St. Pancras Workhouse.

MR. F. LE TALL (Woodhouse).—The fee for attendance before a magistrate to give evidence in cases of misdemeanour does not exceed half a guinea; unless the witness resides two miles beyond the city, borough, or parish, in which the examination is held, when a sum not exceeding one guinea is allowed. Mileage is paid at a rate not exceeding threepence per mile.

SHAM DEGREES AND DIPLOMAS.

GENERAL SCHENCK, the American Minister, calls the attention of the public to a systematic fraud, the perpetrators of which should, if possible, be punished. Ascertaining that persons have been engaged in this country in selling degrees or diplomas purporting to be conferred by certain American colleges and universities, General Schenck has made the imposture a subject of correspondence with the United States Government. Inquiry has been especially made in relation to the "Philadelphia University of Medicine and Surgery," and the "Livingstone University of America," of which there are professed agencies in London and elsewhere. There are no such institutions known in the States of Pennsylvania or New Jersey, nor are their Acts of Incorporation in existence. The charter of an institution by the corporate name of the "Philadelphia University, or American College of Medicine," was revoked in 1872, for the issue and sale of diplomas to persons not qualified to receive the same.

F.R.C.S. EXAM. (St. Thomas's Hospital).—Dr. Charles Edward Saunders, of Lower Seymour Street, Portman Square, is not, as stated in the *Medical Directory*, a "F. R. C. S. Eng., 1874"; neither is Dr. Alexander Marsden of Lincoln's Inn Fields, who made a similar return a year or two ago, entitled to the distinction. On these matters you should address yourself to the secretary of the College of Surgeons.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W. C., and not to the Editor.

THE TWO SYSTEMS OF EDUCATION.

SIR,—It is now more than a year ago since I read in the JOURNAL, published on July 25th, 1874, of a discussion taking place in the General Medical Council with reference to class examinations, compulsory attendance at lectures, the advisability of extending the tutorial system, etc.; and I certainly did not think that the evils of the present state of things were laid bare as they should be. The fact that a large number of students have a tutor, entirely unconnected with the hospital and college at which they are supposed to be imbibing knowledge derived from lectures, shows that, as a rule, students do not place reliance on lectures, but trust much more to tutors and to private study for their theoretical knowledge. Many of them, I am persuaded, regard the money spent for the so-called privilege of attendance on lectures, as simply the fee for the signature of their cards, and in every other light as so much waste of cash. Attendance is the irksome condition necessary to procure the said signature, and is the bane and obstacle to thorough self-application to study for any period during the day beyond an hour or two, and is the provoking incentive to sleep and drowsiness, in stead of to mental activity, at night. For myself, I chanced to be entered at a London College, where attendance at lectures was compulsory, in order to obtain the professors' signatures to my cards. I attended nearly the total number of the lectures of those professors, from whose teaching I derived profit; but regarded the compulsory attendance at the discourses of those from whom I learnt nothing with the utmost abhorrence. I wish now I had only thought once or twice of demanding the return of the sum paid for a course of worthless lectures. I might have expended it much more profitably elsewhere; but it is experience which teaches these things. *Apropos* of the entrance of students at the medical schools, I would strongly advise that no student should pay a large sum down on entrance for the purpose of admitting him to a set course of lectures for three or four years at any one school in particular; but rather let him pay for one course of lectures in the subjects he has first to study; and let him do this if possible, at a school where attendance is not compulsory, and where he is not required to pay in advance. The withholding of the signature of the lecturer to the card of attendance would be sufficient guarantee for the payment; and then, if the lecturers instruct him, let him take out such courses afterwards as may be necessary. By adopting this plan, he will be able, if he find he does not learn at one school, to go to another. What is the present system of teaching pursued at most of the medical schools in England? 1. We have a number of lecturers undertaking to deliver a certain number of lectures on definite subjects, at certain times of the year, for certain fixed stipends; the amount of the stipend given to each lecturer being constant, and irrespective of the number of students attending his class, and also irrespective of the success of the students whom he is supposed to instruct. 2. The present system requires, for the most part, that a student, on entering his name at a medical school, shall pay in advance a considerable sum of money, as an equivalent for instruction, which it is stipulated will be imparted to him in the shape of lectures. He thus makes a bargain in the dark; and the medical schools, by requiring payment in advance for the lectures he is to receive, prevent his taking advantage of the time when he discovers that he has paid a great deal for nothing.

The system of giving a regular and fixed stipend to each lecturer is, I would respectfully maintain, anything but calculated to stimulate them to teach well, and is very likely to foster carelessness. On the other hand, it helps to deter the student from obtaining redress against bad teaching; for he knows that, if he stay away from the lectures, he will in no degree damage the lecturer; but, on the contrary, if compulsory attendance be the order of the day, he will make his own part of the bargain much the worse, for he will lose the signature to his cards.

Compulsory attendance, then, when enforced under every condition, is bad; and I think it is so, also, under any circumstances. Now, suppose that a lecturer is conscientious, and that he is an admirable teacher; but that he has a number of lazy or indolent students in his class. Why should these men be made to attend under the supposition that they can be made to learn, if they have determined not to do so. Are they not old enough, as a rule, to know their own interests? At any rate, they do not merit the treatment of boys. Why should a lecturer "saddle" himself with the responsibility, which I would humbly maintain belongs to the student himself, and to the examiners at any board before which he may present himself for examination for a degree, diploma, or license—viz., the responsibility of coming out into the world as a man thoroughly competent to practise, if not adorn, his profession? A man's knowledge should not be judged of by the number of courses or sessions of lectures he has attended; but by the results of his study, irrespective of the manner in which his knowledge may have been acquired.

Class-examinations at the schools seem to be attended with good; but the subjects of examination should be appointed at such sufficient time previously as shall allow thorough preparation in them; and men should be allowed to prepare as they will. Attendance upon a certain number of class-examinations held in this manner might be made compulsory, in order to obtain a certificate of fitness (from a lecturer in the particular subject) for presentation for examination at either of the qualifying colleges; but I think that the thralldom of the student should not extend further. Certificates of this sort might take the place of those very questionable cards of attendance. It is certainly to the student's interest to work; and if he have not the sense to see that it is so, why use compulsion? Never-dowells and drones are not wanted in our profession; we have already enough and to spare; and, moreover, medicine would reap dignity and advantage from their exclusion.

A system of class-examinations, thorough and searching, written and *visû voce*, on one day of each week or fortnightly, together with the institution of a good staff of tutors, chosen for their ability and on account of the success of their pupils, would, I believe, lead to admirable results. Each student should be at liberty to choose and change his tutor as often as he may think fit; and the tutors' fees should not be too exorbitant. The wandering about of men from class to class might be obviated by the tutor allowing each pupil a certain number of lectures free, to enable him to judge of their suitability to his wants; and, on the expiration of that probation time, requiring the payment of his fee. By these means, a student would learn self-government, his own personal responsibility, his own capabilities. He would gain confidence in himself, would find out his failings, and those worth anything would learn to delight in the acquisition of knowledge. A teacher should instruct and ask questions of his pupils, in order to test the results

of his instruction. A student should learn, and, if necessary, ask questions of his teacher, in order to clear his views on any matter about which he may feel uncertain. These conditions seem much more likely to be fulfilled by the system just now advocated than by any other. As to the correction of incorrigible idlers, tutors should have the option of removing or refusing pupils; and as most tutors, for their own credit, would refuse a known mental larder or an idler, they would have in their hands a considerable weapon of chastisement.

One more word as to the class-examinations. If, a few days after each examination had taken place, a list were made of the names of those who had attended it, and they were arranged in order of merit according to the number of marks each had gained, healthy emulation might form a useful adjunct to the system of teaching, particularly if it were known that the tutor would withhold a certificate of fitness from all who did not attain a certain number of marks. For motion, I know from experience, is at public schools a considerable inducement to work.

Having derived great benefit from having a tutor when I was studying in London, I commend these lengthened and, I am afraid, rather rambling remarks to all whom they may concern; and have the honour to be, sir, your obedient servant,

A GRADUATE IN MEDICINE.

DR. MALCOLM.—The skin of the cow from which the first vaccine matter was taken by Jenner was presented to St. George's Hospital in 1851, by Colonel Jenner, where, we believe, it may be seen in the museum. The discoverer of vaccination prized it highly, and was always pleased in showing it to his friends and visitors.

POISONING BY CARBOLIC ACID.

SIR, The case of accidental poisoning by carbolic acid related in the last number of the JOURNAL, leads me to speak of a similar one which lately came under my observation, and in which a life was lost simply through the want of a distinctive poison-bottle containing the liquid. The carbolic acid, in this instance, was obtained, for disinfecting purposes, in a soda-water bottle, to which was attached a poison label, coloured red. In the house was another bottle of the same sort, containing soda water (or soda water and brandy), and labelled a cordingly, with a red label also. The latter was for the use of a patient suffering from diarrhoea (and also from mental excitement); and the mistake which he made, of taking a draught from the disinfectant bottle, is not at all surprising considering the resemblance both of bottles and labels. Death occurred within half an hour. I do not see that any fault can be found with the vendor of the acid; but the occurrence is a very practical illustration of the necessity of manufacturers issuing such articles for retail trade only in easily distinguished bottles.

It is not my intention to discuss the general question whether or not it should be compulsory to use a poison-bottle for all poisons, solid and liquid—laudanum, oxalic acid, etc.; but I may mention a case in which such a precaution would have been the means of saving a life. A woman obtained from a druggist a quantity of muriate of morphia for her own use, and, at the same time, a seidlitz-powder for a child. She told a neighbour to give the powder to the child; but the neighbour, not knowing anything about the appearance of seidlitz-powders, gave the morphia instead; and the result was the death of the child. Both articles were properly labelled; but had the morphia been put up in a bottle of peculiar shape and colour, the distinction would have been so obvious as hardly to admit of the error which occurred.—I am, sir, yours truly,

JOHN C. McVAIL, M.D.

Kilmarnock, November 9th, 1875.

CÆSAREAN SECTION.

THE Pall Mall Gazette has the following, which seems to require further explanation:—An extraordinary piece of conduct on the part of a priest was disclosed at a coroner's inquest held at Manchester. A young woman named Connelly, the wife of a labourer, who had been ill, but it was thought not seriously, died suddenly while her husband was at work. Mr. Brendon, a Roman Catholic priest, having heard that the woman was near her confinement, induced Mr. Frank Holmes, a surgeon, to perform the Cæsaræan operation, in order that the child might, if alive, be baptised. According to the evidence, of another surgeon, who made an examination of the body at the request of the coroner, the operation had been unskillfully performed. The coroner said that the Rev. Mr. Brendon had no authority to order the surgical examination of the deceased, that power being vested only in her friends, the coroner, or the Home Secretary. The jury returned a verdict of "Sudden death from natural causes," and unanimously expressed their disapprobation of the conduct of Mr. Holmes and of the Rev. Mr. Brendon, who had authorised the operation to be performed without the consent of the woman's husband.

MEDICAL PRACTICE IN AMERICA.

SIR, In your issue of October 9th, "An M.D. of the New York College of Physicians and Surgeons" undertakes to correct my former statement as to the status of medical practitioners in America. What sort of regularity this gentleman imputes to "a regular graduate from some regular school of medicine, no matter whether allopathic or otherwise," I fail to comprehend; but I can vouch for the fact that very many practitioners whose position is unquestioned by law are decidedly "otherwise." Not only are homœopathic and "eclectic" colleges chartered to confer the degree of M.D., but the same power is exercised in New York by "a hygeo-therapeutic college," which abjures therapeutics *in toto*, save as regards hydropathy and vegetarianism. The New York Board of Health has ineffectually tried to break up the business of sundry advertising abortionists and baby-farmers; but in the absence of any definition of what constitutes "regular" practice, no further prosecution is possible, and scores of irregular practitioners (without even an "otherwise" qualification) openly ply their charlatrany un molested.

A considerably longer professional experience in New York than that of your correspondent may entitle me to speak quite as positively as he on a matter which is notorious, and of which the evidence should have been familiar to him as a sanitary inspector (he forgets the title of his own official position). An act of state legislature was passed in New York in 1873, decreeing that every medical practitioner must have either a diploma from some chartered school, or a license from the censors of a medical society; but, in the first place, there were no means of ascertaining the genuineness of diplomas purporting to have been granted in other states or in foreign countries; in the second place, diplomas from irregular schools had to be recognised; and, in the third place, irregular "medical societies" acted under the letter of the law in granting licenses to all comers; so that the enactment in question had the practical result of legalising an immense amount of ignorant quackery. Beyond the multitude thus practising under the ægis of irregular diplomas or still more irregular "licenses," there are scores of self-dubbed "Professors," "Drs.," and "M.D.s" plundering the public without stint; several of them having set up obtrusive establishments under high-sounding titles—e.g., the "New York Medical University," in flattering allusion to my Alma

Mater the University of the City of New York. Numerous similar instances ought to be within the ken of your correspondent; and a glance at the advertising columns of the *New York Herald* will show him how successful have been the prosecutions by the Board of Health in suppressing even the criminal abortionists.

I am, etc., AN AMERICAN M.D.

GALVANISM IN POST PARTUM HÆMORRHAGE.

SIR,—In answer to A BIRNY PRACTITIONER'S request in the JOURNAL of October 9th, I beg to say that I think very highly of electricity as a remedy for *post partum* hæmorrhage. I either place the positive pole of an electro-magnetic battery at the nape of the neck or the lumbar spine; or, I think, the best place, in the anterior-inferior triangle of the neck, above the clavicle, and the negative pole (sponge-conductors) over the uterine region; and invariably, in my hands, satisfactory uterine contraction followed; first ascertaining that the uterus is clear of clots, etc., is advisable. I have used voltaic electricity also with success, but I prefer the induced current. My last case was very satisfactory. I delivered with the forceps in the evening; next morning I was sent for, as the woman had smart hæmorrhage. I cleared the uterus, and applied a faradaic current. Contraction of the uterus instantly followed, and the woman said, "Oh, sir, I feel tightening and bracing up finely"; and I felt the uterus in a firm contracted state. She recovered.—Yours, etc.,

W. H. SANDHAM.

Camden Quay, Cork, November 1875.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Hastings and St. Leonard's News; The Belfast News-Letter; The Sheffield Daily Telegraph; The Chester Guardian and Record; The Hereford Times; The Bristol Daily Post; The Evening News; The Sheffield Post; The Metropolitan; The Blyth Weekly News; The Edinburgh Daily Review; The Glasgow Herald; The Western Daily Press; The Merthyr Telegraph; The Leighton Buzzard Observer; The Bristol Daily Times and Mirror; The Derby and Chesterfield Reporter; The Lincolnshire Herald; The Sunderland Daily Echo; The Co-operative and Financial Review; The South Wales Daily News; The Macclesfield Courier; The Melbourne Argus; The Southampton Times and Hampshire Express; The Jarrow Express; The Birmingham Daily Post; The League Journal; The Sheffield and Rotherham Independent; The Derbyshire High Peak News; The Liverpool Daily Courer; The National Food and Fuel Reformer; The Worcester Herald; The Norfolk News; The Worcester Chronicle; The North British Daily Mail; The Social Science Review; The Carlisle Express; The Sussex Daily News; The Royal Leamington Spa Courier; The Bethnal Green Times; The South London Press; The Hampshire Advertiser; The Worcestershire Advertiser; The Newcastle Weekly Chronicle; The Worcester Journal; The Holart Town Mercury; The Weekly Times; The Mid-Weekly Hampshire Independent; The North British Mail; The Western Mail; The Redruth Times; The Indian Statesman; The Birmingham Morning News; The Cork Constitution; The Sunday Times; The Naval and Military Gazette; The Broad Arrow; The Thanet Advertiser; The Brewers' Guardian; The Northern Daily Express; The Chemist and Druggist; The Weston super Mare Gazette and Somersetshire Advertiser; The Globe; etc.

* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. Jonathan Hutchinson, London; Dr. G. H. B. Macleod, Glasgow; Dr. A. S. Taylor, London; R. S.; Mr. Shaen, London; Mr. S. H. Cartwright, London; Dr. Crockatt, Bridge of Allan; Dr. Strange, Worcester; Dr. Churchill, Tyrone; Mr. F. T. Le Tall, Sheffield; Mr. D. Davies, Bristol; Mr. A. B. R. Myers, London; Dr. G. M. Humphry, Cambridge; Dr. Carpenter, Croydon; Mr. George Meadows, Hastings; Mr. C. Ashenden, Hastings; M.R.C.S. Eng.; Dr. Farquharson, London; Mr. Sewill, London; Mr. T. Bell, Uppingham; A Member; The Secretary of the Harveian Society; Dr. Joseph Rogers, London; Dr. Braidwood, Birkenhead; Mr. W. Fairlie Clarke, London; The Secretary of the Royal Microscopical Society; Dr. J. Milner Fothergill, London; The Secretary of Apothecaries' Hall; Dr. Edis, London; The Registrar-General of England; Dr. Moore, Dublin; Our Paris Correspondent; The Registrar-General of Ireland; Mr. W. W. Reeves, London; Mr. John Craigie, Lyme Regis; Mr. H. Chumley, Belfast; Mr. Lindsay, Edinburgh; Mr. P. H. Holland, London; Dr. Harvey Hilliard, London; Mr. Draper, York; Dr. Styrax, Shrewsbury; Dr. McKendrick, Edinburgh; Mr. Macnamara, Dublin; Dr. Hardwicke, London; Mr. Clode, London; Mr. Nelson Hardy, London; Mr. J. L. Collision Morley, Eastbourne; Dr. Galton, Anerley; Our Edinburgh Correspondent; Over Particular; Dr. Wardell, Tunbridge Wells; Mr. Walter Buchanan, Chatham; Dr. Tilt, London; Dr. Brown, Rochester; The Secretary of the Obstetrical Society; Mr. E. C. Board, Clifton; Mr. Balmanno Squire, London; Mr. E. Nettleship, London; Mr. George Parsons, Windermere; Dr. Cole, Bath; Dr. Alfred Shewen, London; Mr. Isaac Latimer, Plymouth; Mr. Harrison, Dartmoor; Alpha; Mr. Thomas Young, South Shields; Dr. Wiltshire, London; Mr. Spurway, Paignton; T. C., Aberdeen; Our Dublin Correspondent; Mr. Solomon, Birmingham; Dr. John Duncan, Edinburgh; Mr. G. Critchett, London; Dr. Cass-Is, Glasgow; Dr. W. S. Playfair, London; Dr. R. P. Cotton, London; Sir James Paget, London; Mr. A. Sothey, Eton; Dr. A. P. Stewart, London; Dr. Radclyffe Hall, Torquay; Mr. Mordill, London; Mr. Joseph Beatty, Dublin; Mr. G. Lawson, London; Dr. Sanders, Edinburgh; Dr. C. J. Hare, London; Dr. W. Farr, London; Mr. R. C. Lucas, London; Dr. Dowse, Highgate; Dr. W. H. Day, London; Dr. Clouston, Edinburgh; Dr. Grainger Stewart, Edinburgh; Dr. J. Sinclair Coghill, Edinburgh; Dr. Wilson Fox, London; Mr. Barwell, London; Mr. Edward Delany, London; Mr. Francis Mason, London; Sir Wm. Gull, London; Dr. J. Andrew, London; Dr. P. Pye-Smith, London; Dr. Begbie, Edinburgh; Mr. Spence, Edinburgh; Dr. J. P. Bramwell, Perth; Dr. A. D. Davidson, Aberdeen; Dr. Buchanan Baxter, London; Dr. J. Halliday Croom, Edinburgh; Sir G. Burrows, Bart., London; Mr. Christopher Heath, London; Dr. G. Buchanan, Glasgow; Dr. Brokenridge, Edinburgh; Mr. Annandale, Edinburgh; Dr. Batty Tukey, Edinburgh; Dr. J. Cumming, Edinburgh; Dr. Rutherford, Edinburgh; Dr. McCall Anderson, Glasgow; etc.

REMARKS

ON

ONE OF THE CAUSES OF DEATH DURING THE
EXTRACTION OF TEETH UNDER
CHLOROFORM.

By T. LAUDER BRUNTON, M.D., F.R.S.,

Assistant-Physician and Lecturer on Materia Medica and Therapeutics at
St. Bartholomew's Hospital.

In a clinical lecture delivered by the late Professor Syme, several years ago, he made the somewhat remarkable statement that, notwithstanding his constant use of chloroform for many years, he had never had a death from it occur in his practice. The reasons he gave for this success were two. "First," said he, "we always use good chloroform; and, second, we always give plenty of it." Now, others besides Professor Syme have used good chloroform—have used, indeed, chloroform by the same makers, and altogether undistinguishable from that employed by him; and yet they have had to deplore the occurrence of deaths during its administration. This fact of itself is sufficient to show that the second reason given by Professor Syme for his success is of great importance; and that, in administering chloroform, it is just as necessary to give plenty of it as to use only the best quality. It is, indeed, very extraordinary to see how timidity in the use of chloroform seems to be associated with a more than ordinary fatality; and how the careless—one would say almost reckless—employment of it is frequently unattended with any inconvenience. In Snow's work on *Chloroform*, p. 151, the following passage occurs. "In Guy's Hospital and St. Thomas's, the medical officers had a strong objection to narcotism by inhalation for the first two or three years after the practice was introduced, and chloroform was used much less generally in these institutions than in any other of the hospitals of London; yet it was precisely in these two hospitals that two deaths from chloroform occurred before any such accident had happened in any other hospital in this metropolis." Dr. Snow seems inclined to attribute both of these deaths to the administration of chloroform; but a careful consideration of them may lead us to another conclusion. Before attempting to analyse these cases, however, I wish to recall to the memory of some here an anecdote regarding the introduction of chloroform into the Edinburgh Infirmary, which Mr. Syme was accustomed to relate in his clinical course. One of the surgeons of the Infirmary, I believe the late Professor Miller, had agreed to Sir James Simpson's request to perform, for the first time, an operation under chloroform. Everything had been prepared, and the tray containing the instruments and bottle of chloroform was being conveyed into the operating theatre, when the bearer stumbled and fell, and the whole contents of the bottle were irretrievably lost. There was no time to get more chloroform, and the operation was performed without it. The patient died on the table. Had chloroform been administered, the death would have been put down to the anæsthetic, and not to the operation; and, in all probability, not another drop would ever have been used.

This case shows us—and it is only one of many—that deaths used to occur from shock during operations before the introduction of chloroform, but they were then put down to their true cause; whereas, since its introduction, one hears little or nothing of death from shock, and much of death from chloroform. Another circumstance which is well worthy of notice, and which ought to be borne in mind, is the frequency with which the remark occurs in the descriptions of these so-called deaths from chloroform, that a fatal result was all the more extraordinary and unexpected because the quantity of chloroform administered had been exceedingly small. Mr. Syme would have said that, instead of being extraordinary, it was the very thing to expect; and if, like him, the operators had given plenty of chloroform, their patients would not have died.

And now let us look at the first two cases of death under chloroform—I will not say from chloroform—in these two London hospitals, where such a dislike to the anæsthetic was felt.

John Shorter, aged 48, a porter, known to Mr. Solly for some time as a very active messenger, of intemperate habits, but apparently in perfect health, was admitted into George's Ward, under Mr. Solly, on the 9th October, 1849, suffering from onychia of the left great toe, which had existed some time. It was determined to remove the nail, the man having decided, before entering the hospital, on taking chloroform.

On Wednesday, October 10th, at a quarter before 2 P.M., he began to inhale the chloroform, with one drachm in the inhaler. It had no visible effect for about two minutes; it then excited him, and the instrument was removed from the mouth, and about ten drops more were added; he then almost immediately became insensible; the chloroform was taken away, and the nail removed. He continued insensible; and, his face becoming dark, the pulse small, quick, but regular, respiration laborious, his neckerchief was removed, and the chest exposed to fresh air from a window near to the bed; cold water was dashed in his face, the chest rubbed, and ammonia applied to his nose. After struggling for about a minute, he became still, the skin cold, pulse scarcely perceptible, and soon ceased to be felt at the wrist; respiration became slow at intervals, but continued a few seconds after the cessation of the pulse.

The subject of the second case was Alexander Scott, aged 34, a police constable, who died in Guy's Hospital in June 1850, whilst undergoing an operation for the removal of a portion of the right hand. Mr. Cock, the operator, said that he was certain there was no disease about the patient. He described the accident as follows. The ordinary machine was used; and, as it had not the effect, witness directed that a napkin should be folded into the shape of a cone, which was applied with chloroform. The removal of a portion of the bone occupied one minute and a half; but, before it was completed, the blood, which was gushing out, suddenly stopped, when witness directed Mr. Lacy to feel the pulse of the deceased, and they found that the deceased had expired.

The sudden stoppage of the hæmorrhage shows that, in this case, as in others, the action of the heart was suddenly arrested. The first attempt to cause insensibility failed in this as in some other cases.

Let us take yet another case, the second one ever recorded of death under chloroform. The patient, a healthy woman, thirty-five years of age, was taking chloroform in order to have several teeth extracted. The following account of what occurred was given by two female friends of hers who were present at the operation. "The respiratory movements appeared to be free; chest heaving. Whilst inhaling, the face became pale. At the expiration of about one minute, the instruments were applied, and four roots of teeth were extracted. The patient groaned, and manifested what they regarded as evidences of pain, while the teeth were being extracted, although she did not speak, or exhibit any other sign of consciousness. As the last root came out, which was about two minutes from the beginning of the inhalation, the patient's head turned to one side, the arms became slightly rigid, and the body drawn somewhat backwards, with a tendency to slide out of the operating chair. At this instant, Mrs. Pearson states, she placed her finger upon the patient's pulse, observed it was feeble, and immediately ceased to beat. The face, which was previously pale, now became livid, as did also the finger-nails; and the lower jaw dropped, and the tongue projected a little at one corner of the mouth, and the arms were perfectly relaxed. The females regarded her as being then quite dead."

In two of these cases, death occurred after the inhalation of chloroform had been discontinued; and in the third, the chloroform seemed to have no bad effects until the operation was begun. In all of them, the death followed the operation, and must, I think, be attributed to the shock caused by it. But what is shock? and is there more than one kind of it? for the symptoms were not the same in all these cases. In two of them, the heart seemed to stop suddenly; while, in the third, it failed gradually, although it ceased before the movements of breathing; and the death must therefore be attributed rather to arrest of the circulation than of the respiration. The circulation is kept up in the body by the heart constantly pumping the blood out of the veins into the arteries. Whenever the heart stops pumping, or whenever it gets no blood to pump, the circulation will stop. It does not matter how much blood is in the vena cava or right auricle waiting to be sent into the arteries, if the heart be not beating; nor is the case a whit better when a wound in the jugular has drained away all the blood, so that no efforts of the heart, however numerous and however vigorous, can send a drop of blood into the aorta.

It must be recollected that blood is only useful to the tissues when it is in the arteries, just as water is only available for household purposes while it is in the cistern or supply-pipes. Once the water gets into the sewer, it is of no more use, unless it can be filtered and again pumped back into the cistern; and once the blood has got into the veins, it is no more use unless it can be purified by the lungs and pumped back into the aorta, from which it may once again pass to nourish the tissues. The only difference between blood still in the veins and blood which has run out of them into a basin, is that, when in the basin, it cannot get to the heart, and be pumped by it into the arteries; while, so long as it is in the veins, it generally reaches the heart readily. But

Although it generally does reach the heart easily, it does not always do so. Sometimes it accumulates in the veins of the abdomen, and never reaches the auricle; so that it might just as well be in a basin for any use it is to the heart or body. This was shown by Professor Goltz of Strasburg by a remarkable experiment. After exposing the heart of a frog, he noticed that it beat regularly, and at each beat sent a quantity of blood into the aorta, again becoming full of blood in the interval between the pulsations. The frog's heart is partially transparent; so that it is easy to see by its colour when it is empty and when it contains blood. He now struck the frog's intestines pretty hard, and found that the heart stopped. The irritation produced by the blow had been conducted up to the medulla oblongata; and, being reflected down the vagus nerves to the heart, had stopped it. After a little while, the heart seemed to recover, and began to pulsate again. But there was a very remarkable difference between its appearance now and its appearance before the blow had been given. Instead of becoming filled with blood during each diastole, and assuming a deep red colour in consequence, it remained quite pale and empty; and, although it contracted vigorously, the circulation stopped, for the heart had no blood to propel. On looking at the vena cava, Goltz found the cause of this phenomenon. The frog was hanging with its legs downwards, and the vena cava was not full up to the level of the heart. Usually the vena cava and veins of the intestines are kept in a state of semicontraction or tone by the vaso-motor nerves, but now they had become completely relaxed; so that the blood which usually would have filled them completely up to the heart was not sufficient, and so they were only about half full. On laying the frog in a horizontal position, the blood ran towards the heart. It was thus evident that the blow on the intestines had done something more than stop the heart. It had also stopped the usual action of the vaso-motor centre; so that the veins, instead of remaining in a state of tonic contraction, became widely dilated. And, be it noticed, this dilatation of the veins in Goltz's experiments was more permanent than the stoppage of the heart, and continued after the cardiac pulsations had recommenced. But all frogs are not alike; for sometimes a blow on the intestines will stop the heart without having much effect on the veins; and sometimes it will cause the veins to dilate, and will not stop the heart, although very often, as I have already said, it will do both. The same effects seem to follow blows on the abdomen in man and in the frog, but with this difference: in the frog, the heart may stop for some time, and again go on without much injury to the animal; in man, the stoppage of the heart produces death in not many seconds. A good example of this is to be found in Sir Astley Cooper's *Lectures on Surgery*; where he relates that a healthy labourer belonging to the India House was attempting to lift a heavy weight, when another labourer came up and said, "Stand on one side; let an abler man try". At the same time, he gave the former a slight blow on the region of the stomach, when the poor fellow immediately dropped down and expired. On examination of his body, there was not any mark of violence discovered. Here, no doubt, the blow in the abdomen stopped the man's heart, just as it does in the frog; and death occurred before the organ had time to recover from the shock. In another case, described by Professor Fischer, a young man was struck in the abdomen by a carriage-pole; and, after the accident, lay pale and motionless, with a feeble pulse, empty arteries, deep sighing respirations, and a livid tinge on his hands and lips. In this instance, the heart had either not been stopped at all, or had speedily recovered itself; but the abdominal veins had been so dilated that all the blood in the body could hardly fill them sufficiently to leave a dribble over for the general circulation, although a little still did trickle into the heart so long as the patient remained in the recumbent posture.

We have, then, two forms of shock, according as the injury produces its effect chiefly in the heart or chiefly in the vessels. But it is not merely blows on the abdomen which have the power of producing shock; irritation of other parts can do so likewise; and this seems to be peculiarly the case with regard to bones. Thus Pirogoff records two cases in which death occurred during operations before the introduction of chloroform. In both, the pain and loss of blood during the operation was only a little greater than usual; yet in both, *immediately after* the bone had been sawn through, the face became pale, the eyes staring, the pupils dilated, a peculiar rigidity of the body occurred, and death immediately took place.

The symptoms in these cases of Pirogoff's are almost exactly the same as those of Mr. Cock's case I have already described; but Pirogoff's deaths were put down to the operation, because no chloroform had been given; while the death in Cock's case was ascribed to the anæsthetic, because some chloroform had been administered; although, on account of the operator's unwillingness to give it at all, the quantity was probably very small.

In all three, it is evident that the heart stopped suddenly; and this in itself was sufficient to cause death, though it is highly probable that dilatation of the abdominal vessels also occurred.

In Mr. Solly's case, the dilatation of the abdominal vessels seems to have been the chief cause of death; for the pulse became gradually, though rapidly, weaker and weaker, and then stopped altogether, just as we would expect it to do if the heart suddenly ceased to be supplied with blood.

In the third case I have described, probably the heart was chiefly affected; for, just as the fourth stump of a tooth was removed, the pulse was felt to be exceedingly weak, and almost immediately afterwards became imperceptible.

Stoppage of the heart's action, then, being of such importance as a cause of death, we must now inquire how it is produced. The heart is kept pulsating rhythmically by the motor ganglia which it contains within itself, and will continue to pulsate for some time after its complete removal from the body. But though it thus shows its power to contract independently of the central nervous system, it is, nevertheless, influenced to a great extent by the nerve-centres within the cranium. It would never do to have the heart acting without reference to the wants of the system, and pumping blood vigorously into the arteries when the pressure within them was already too great, or acting slowly and feebly when the limbs were engaged in severe work, and wanted an abundant supply of blood to enable them to perform it. There are, therefore, nerves, some accelerating and others retarding the heart, which pass to it from the medulla oblongata, and, acting as the spur and reins of a rider do upon his horse, regulate its beats in accordance with the wants of the system. The retarding fibres are contained in the vagus nerve; and, when this nerve is irritated strongly, the heart will either stop immediately in diastole, or will beat very slowly and more feebly. Nor is it only by direct irritation of the vagus that this result can be attained. Just as irritation of a sensory nerve sets motor nerves in action, and produces various muscular movements by reflex action through the spinal cord, so may irritation of a sensory nerve set the vagus in action and produce stoppage of the heart, by acting reflexly through the medulla oblongata. A good many sensory nerves can do this; but there is one which possesses the power in an especial degree. The roots of the fifth nerve are anatomically closely connected with those of the vagus; reflex stoppage of the heart is produced more readily by irritation of the fifth than of any other nerve. In many rabbits, the heart can be instantaneously stopped by irritating the nasal branches of this nerve by a pungent vapour, such as ammonia, held before the nose. In every rabbit, or almost every rabbit, indeed, we can stop the heart by a pungent vapour applied to the nose; but we do not always do it in the reflex manner I have just described. The animal always closes its nostrils to prevent the entrance of the vapour, and keeps them closed so long, that the carbonic acid accumulating in the blood begins to act on the vagus and stop the heart. But this only occurs after the vapour has been held before the nose for some time; while the reflex stoppage which I have just mentioned takes place at once, almost simultaneously with the closure of the nostrils. This reflex stoppage has been shown by Hering and Kratschmer to be due to the irritation being conveyed along the nasal branches of the fifth nerve to the medulla, whence it is reflected along the vagus to the heart, and stops it.

Yet, notwithstanding the stoppage of the heart, the rabbit does not die; nor is it, indeed, any the worse. Why is this? Usually, when the heart is stopped, as, for example, when a ligature is put round the aorta, the blood all runs out of the arteries into the veins; and then, as I have said, it is useless for nutrition. But there is a nervous arrangement which prevents this when the heart stops, in consequence of an irritation applied to the fifth nerve. This nerve not only contains branches which are connected with the vagus and stop the heart or retard it; but it also has branches which go to the cerebral hemispheres, and there excite an action which passes down the vaso-motor nerves, causing the auricles to contract, and preventing the blood from running out of the arteries into the veins, except very slowly indeed; so that, as soon as the irritation stops, the circulation is ready to go on normally. But it is only when the cerebral hemispheres are in good working order that this occurs. When they are removed, or when their function is destroyed by chloroform, morphia, or chloral, irritation of a sensory nerve, such as the fifth, no longer has the same effect; and it then always, according to Cyon, lessens the pressure of blood in the arteries. As it is, the pressure of blood within the arteries which keeps up the flow within them, just as it is the pressure of water within the pipes supplying a town which keeps up the supply to the houses, we can readily see that the diminished pressure which occurs on the irritation of a sensory nerve after the cerebral hemispheres have been rendered useless by a small quantity of chloroform is a most serious

thing for the animal. But here it is a little chloroform which is a dangerous thing; and a full dose prevents any risk from this reflex stoppage of the heart. For the small dose acts on the cerebral hemispheres first, and destroys the reflex action, which contracts the vessels, while it leaves the ganglia at the base of the brain and the medulla unaffected, and thus allows the reflex stoppage of the heart to go on as usual. A full dose, on the other hand, affects not only the cerebral hemispheres, but the ganglia and medulla, and prevents any reflex action whatever on the heart. I have found that, when a full dose of chloroform has been given to a rabbit, one may hold either strong ammonia or glacial acetic acid before the nose, and not the slightest slowness in the beats of the heart can be observed. Sometimes, indeed, it has seemed to beat rather more quickly than before.

Now let us try to apply these observations on the lower animals; and, by them, try to explain the action of chloroform on man, and the danger of employing it in the extraction of teeth, as well as in other slight but painful operations. For it is precisely in these slight but painful operations—extraction of teeth and evulsion of nails—that death most frequently occurs; and it is just in them that little chloroform is given, because the administrator thinks: "Oh, the operation won't last above a few seconds; and it is no use giving the patient enough to keep him or her snoring for half an hour." We know perfectly well that many and many an one has teeth drawn under chloroform without any bad result; and we have already seen that every rabbit has not the same liability to reflex stoppage of the heart from irritation of its fifth nerve; but every now and then we meet with a peculiarly sensitive animal, and every now and again we meet with a case of death from the extraction of a tooth under chloroform.

If the nervous system in man be at all like that of the rabbit, the violent irritation of the fifth nerve caused by the extraction of a tooth will tend to stop the heart. But it will also cause contraction of the blood-vessels; and thus extraction of a tooth in the waking state is rarely attended with any serious consequences. But if the reflex action on the blood-vessels, which usually occurs in the cerebral hemispheres, be prevented by a small dose of chloroform, just enough, as in the case I have related, to abolish consciousness without preventing reflex action in the ganglia at the base of the brain, and if the heart of the individual be at the same time peculiarly sensitive to the impression made on the fifth nerve, it may be stopped, and the pressure of blood in the arteries may sink so low that it never rises again. But if, on the other hand, chloroform be given, as Professor Syme recommended, with a free hand, so as to produce total abolition of reflex action, no irritation of the fifth nerve by the extraction of any number of teeth will have any effect; the heart will pulsate as usual; and no danger is to be apprehended from this cause.

I do not at all mean to say that the administration of concentrated chloroform-vapour is free from danger—far from it; but the limits of my paper will not allow me to enter into this subject. All I can attempt to do is to direct attention to the observation of Professor Syme, whose acuteness and accuracy few will question; and to try to impress it, by showing the probable physiological reason why one ought always to induce perfect anaesthesia before beginning any operation under chloroform. At the same time, I would observe that, just as the circulation, which had ceased in the frog in Goltz's experiment so long as it hung vertically, went on again when the animal was laid in a horizontal position so that the blood found its way to the heart, so it may go on in man; and, therefore, the safest position for operations is the recumbent one.

The two rules, then, for preventing death during the extraction of teeth under chloroform are: put the patient thoroughly over, and lay him in a horizontal position.

CONGENITAL DISLOCATION OF THE KNEE-JOINT.—Drs. Porter and Richardson report (*Boston Medical and Surgical Journal*, September 16th) two cases in which the knee-joint was dislocated at birth, the displacement having occurred *in utero*, as was evident from the furrows above and below the joint, and the deposition of vernix caseosa in the angle of flexion. In one case, the leg was in a vertical position, the inner malleolus facing towards the umbilicus, and the foot strongly rotated outwards. In the other, the leg was in such an extreme state of tension as to amount to reversed flexion, being turned upward and forward on the thigh, so that the anterior surfaces of the leg and thigh touched each other, the sole of the foot looking directly towards the face of the child, the toes pointing backward, the heel forward. By gentle firm traction, the dislocation was in each case reduced; and the use of a splint in the more severe instance, and of a simple bandage in the other, sufficed to keep the bones *in situ*, and resulted in perfect cures.

ABSTRACT OF CLINICAL LECTURE ON PUNCTURE OF THE BLADDER *PER RECTUM*.

Delivered at the Westminster Hospital.

BY RICHARD DAVY, F.R.C.S.,
Surgeon and Lecturer on Anatomy at the Hospital.

GENTLEMEN,—This operation is a most valuable one for cases of retention of urine, where any physical obstruction prevents the introduction of a catheter into the bladder, after fair trial on the part of a competent surgeon. It was originally introduced into practice by Mr. Cock, consulting surgeon to Guy's Hospital; and his wide experience coincides with my own comparatively limited observation, that there is scarcely any surgical operation so devoid of danger as puncture *per rectum*. The necessary detail of the old operation is now demonstrated to you on this dead body; and the instruments are the same as generally used; viz., a solid trocar and cylindrical cannula, the latter being retained in the bladder by tapes.

In 1870, being impressed with the disadvantages of retaining for any length of time an unyielding tube *per rectum et vesicam*, I introduced the instrument (Fig. 1), in which the steel slotted cylinder is outside,

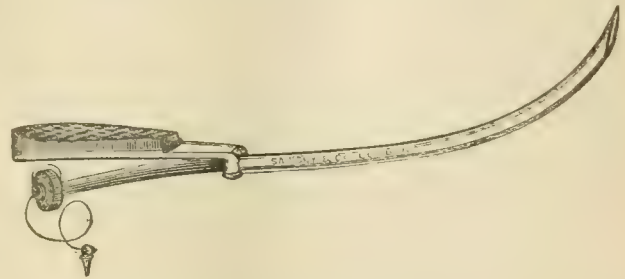


Fig. 1.

and acts as a perforator, carrying the elastic catheter as an inside passenger. Fig. 2 shows the catheter withdrawn, also the reduplication of the tip of the catheter, by means of which it is retained in the bladder. The patient is placed after the operation on a mattress having a circular hole corresponding to the buttocks; the end of the catheter falls through this hole, and conducts the urine into a receiving vessel on the floor below. Faeces also are thus passed without moving the patient.



Fig. 2.

I have yet further applied this principle of giving the urethra rest to those cases of obstinate perineal fistulae that are *not dependent* upon an obstructed urethra for their persistence. I am of opinion that a simple operation like puncture *per rectum* is more effectual and easy than periodic introductions of a catheter; the object being in both cases to avert the irritating urine from the damaged urethra and fistulae, especially so because in some cases men have not the power of retaining their urine; and it is impossible by the most skillful catheterisation to avoid some disturbance to the urethra, and some extravasation of urine over the exposed surface of it and the fistulae.

I have been in the habit of comparing the *rationale* of puncture *per rectum* in fistulous cases to the method pursued by workmen when repairing the damaged banks of a running stream. Their first object is to completely divert the stream from the seat of their repairs, so that one day's wash shall not outweigh one day's work; and this argument applies with double pathological force to the irritating urine as compared with the pure water. But a moment's reflection makes a surgeon see how inapplicable Cock's method would be for opening an empty bladder; and, at the risk of the charge of superfluity, I venture to bring you acquainted with a new instrument, and a new method of operating on this much operated on human perinæum. The instrument consists of a staff, on which slides a silver cylinder, and a remov-

able handle. (Fig. 3.) The silver tube runs from the bulge at the right end of the staff to the commencement of the curve on the left. The thin stem underneath the handle is for the attachment of a retentive catheter.



Fig. 3.

New Method of Operating.—First introduce the staff into the bladder; turn the tip of the staff towards the base of the bladder and rectum; feel for the point with the finger in the rectum, and carefully cut the recto-vesical tissues until you can pass the staff out at the anus. Next unscrew the handle and affix the stem of one of Napier's retentive catheters to the thin end of the staff; soap well the India-rubber; then, holding the silver tube firmly in one hand, draw the catheter (excepting its bell-shaped end) completely into the silver tube by withdrawing the staff at the anus. Lastly, draw back the silver tube and catheter through the urethra into the bladder; push in the catheter, and free the silver tube by also withdrawing it through the rectum out at the anus. The campanulate end of the catheter unfolds itself in the bladder, and its stem loosely hangs at the anus.

I will now briefly narrate two cases of perineal fistulæ that have been operated on by this method in the Westminster Hospital.

CASE I.—W. H., 35, M., slater, in 1859, fell on his perinæum across a door. Extravasation of urine resulted, and he was treated in the Yarmouth Hospital by free incisions. On leaving, the urine passed through a fistulous opening *in perinæo*.

In 1862, a surgeon, while attempting to pass an instrument, pushed the catheter into his rectum; after that, the patient thought operative procedures had better be discontinued.

In 1869, on rearing a heavy ladder, extravasation of urine recurred, and Mr. Teevan admitted him into the West London Hospital. Mr. Teevan on three occasions divided his stricture without any guide, and lastly, on account of the cartilaginous state of the parts, opened the urethra from the stricture to the bladder; No. 12 was tied in, and in five weeks he left.

In 1871, Mr. Barnard Holt split him, because two catheters had been broken and many bent in his urethra by surgeons.

On March 18th, 1873, he was admitted into Luke Ward. The perinæum was a mass of cicatrices and puckerings. There were five fistulæ, one cartilaginous, at the central point of the perinæum. He had complete incontinence of urine. At the point where the penis joins the scrotum was a urethral dilatation holding three and a half drachms of urine, not albuminous. No. 10 sound readily entered the bladder. The man's general condition was good, and his spirits plucky.

On March 25th, 1873, I performed the operation of opening his bladder by the new method. A retentive catheter, as shown in Fig. 2, was inserted, and kept in for six weeks. He most faithfully lay on his back on a circular air-cushion, urine and feces passing through the circular hole in the cushion. After six weeks of this endurance, four of the five fistulæ were firmly healed; the grand central perineal fistula was not. An urinal was easily adapted to this single outlet, and he left the hospital on June 6th, 1873, well satisfied with the result. The recto-vesical opening was completely closed.

CASE II.—E. P., 24, S., porter, was admitted into Luke Ward on July 24th, 1874. Five months previously, he had gonorrhœa; a month subsequently, a lump formed in the perinæum, and an urinary fistula resulted. The man was of strumous aspect. The urine was not albuminous. A No. 10 sound could be passed.—July 26th. I injected the fistulous course with compound tincture of iodine, but with no result.—August 21st, 1874. The same operation was performed, and the same treatment pursued as in Case I, until September 15th, 1874. The house-surgeon injected the fistulous track with tincture of iodine, which set up urinary infiltration, and the retentive catheter was withdrawn.

My colleague Mr. James Keene (who had charge of my beds during the autumn vacation) re-punctured his bladder *per rectum*, and watched the case with much assiduity; but the extravasation continued. On my return, October 5th, the patient's condition was critical, the inflammatory process extending up the abdominal wall to the umbilicus. As the urine freely came through a sloughy hole in his perinæum, I at once withdrew the catheter from his bladder. He was well supported with nutritious food, stimulants, and opium. On October 14th, his perinæum being very sloughy, I laid the parts freely open; he lost much blood during the operation, and died collapsed the same evening.

POST MORTEM EXAMINATION.—The friends only gave permission for the bladder to be examined. The perineal structures were a confused mass of sloughy shreds; there was recent lymph thrown out over the vesical peritoneum. The interior of the bladder was apparently healthy; the first puncture had completely healed; the second admitted but a small pin; the sloughy mass extended along the scrotum upwards over the whole of the abdominal wall below the umbilicus.

The conclusions arrived at from these two cases are the following.—**CASE I.** Puncture *per rectum* is insufficient *per se* to cause the obliteration of an intractable cartilaginous fistula, but affords the means of occluding lesser and more recent fistulæ *in perinæo*. A retentive soft catheter may be retained in the bladder for six weeks, and the wound made in the recto-vesical tissues will subsequently heal. **CASE II.** The injection of iodine through a fistulous track in the perinæum of a strumous patient is a dangerous practice; but the injury inflicted on the recto-vesical floor admits of complete repair after a retentive catheter has been twice maintained in the bladder of the same patient for three weeks.

From a careful consideration of both cases, I conclude that there is no evidence militating against a repetition of this operation as a *dernier ressort* in these miserable afflictions, and that it is our duty to lay such experimental facts before the surgical branch of our profession.

ON THE VALUE OF NITRIC ACID IN THE TREATMENT OF DISEASES OF THE NECK OF THE WOMB.

By EDWARD JOHN TILT, M.D.

DR. BRAITHWAITE'S high estimation of nitric acid as a caustic for diseases of the cervix will have due weight with me when I prepare another edition of my *Handbook*; but he will find it already stated there, "that the acid nitrate of mercury and the acid nitrate of silver owe their causticity to their free nitric acid, while the metals may give these preparations alternative properties that their free nitric acid does not possess". Récamier first used the acid nitrate of mercury. It was the principal caustic used by Lisfranc; and, in the beginning of his professional career, Dr. H. Bennet tried to ascertain its effects, as compared to nitric acid, in a certain number of similar cases, and he convinced himself that the acid nitrate of mercury was the better of the two. Dr. Braithwaite's fear of mercurialising the patient need not count for much; for, although I thought right to warn against this possibility, it has never occurred in my practice.

I quite understand the excellent results that Dr. Braithwaite has obtained from the use of nitric acid in a certain set of cases; but I think he is far too general in its recommendation, and that he undervalues nitrate of silver because it is so often used where it can do little or no good. Every practitioner has witnessed the good effects of this agent in morbid conditions of the fauces; and when the mucous membrane lining the cervix is alone inflamed, and *recently* so, there is no better remedy than the liquid or the solid nitrate of silver, and the patient should be cured in from three to six weeks. Occasionally, nitrate of silver causes slight bleeding of an uterine sore; but, judging from my practice, Dr. Braithwaite has exaggerated this occurrence; and then it is easy to have recourse to carbolic acid, or to tincture of iodine. Knowing that such cases can soon be cured by nitrate of silver—an agent which is easily applied, gives less pain than nitric acid, and can scarcely do harm—I still recommend its use to those who have little experience of uterine surgery; for, until they have acquired the habit of using nitric acid, they will find that it has an ugly tendency to run, and so increase the size of the sore to which it was applied, supposing they examine a week or ten days after its application.

In a second set of cases, it will generally appear from their history, that endocervicitis set in after a miscarriage or a confinement, and that it has already lasted several years; without, however, causing any marked damage to the substance of the cervix. Dr. Braithwaite's advice applies admirably to these cases; for their treatment by nitrate of silver is distressingly long, whereas it is singularly curtailed by one or two thorough applications of a strong acid.

I demur, however, to Dr. Braithwaite's recommendation to leave the patient without examination for a month, unless the os uteri be patulous, and the calibre of the cervical canal such as to render its contraction rather an advantage than otherwise. It often happens,

however, particularly in the unmarried, that the cervix will just allow the uterine sound to pass through a mucous membrane so diseased as not to be willing to get well unless it be touched with a strong acid. After applying the acid nitrate of mercury or nitric acid to the cervical canal in such cases, the practitioner had better examine the patient every week, and pass into the cervical canal a pencil laden with a solution of nitrate of silver, or, at the end of two or three months, he would have the annoyance to find that his treatment has induced cervical stricture.

A third and less numerous class of patients comprise women in whom long continued chronic cervicitis is accompanied by considerable hard hypertrophy of the cervix, inflammation of the mucous membrane having caused its surrounding tissues to become hypertrophied. Sometimes the enlargement of both the body and the neck of the womb appears to have begun in defective uterine involution. At all events, when I am consulted on such cases, they have lasted seven or eight years, or longer, to the misery of the patient, to the calamity of the family, and to the opprobrium of the profession, for such cases go the round of all those who are accepted as authorities for diseases of women. The patients do not get cured, because consulting men have no faith in the only way of curing such cases—the application of potassa fusa cum calce, or some equally strong caustic, to the cervical canal. Dr. H. Bennet put this forcibly before the profession twenty years ago. He made converts of Sir James Simpson and of many eminent practitioners in this and in other countries; and I discussed, in the best way I could, this mode of treatment, in all its bearings, in thirty pages of my *Handbook*. The treatment is solidly based on the recognised utility of caustics in a host of surgical complaints, and it has been well established by the Lyons school of medicine; but when such patients come and tell me what they have had done to them by men in authority, I never learn that a strong caustic has ever been applied. I hear of long ineffectual treatment with nitrate of silver, of an acid having been used, of a pessary to support the womb, of uterine dilatation, of division of the cervix, or of the leaving in the womb of one of those thirty intra-uterine pessaries which were handed round on a tray, one night when I had the honour of presiding over the Obstetrical Society of London. I even have heard that there are practitioners who believe that they can benefit their patients by introducing the index into the vagina, to attempt to rectify a moderate amount of uterine displacement, three times a week, for two or three months; but I never hear that trial has been made of the only mode of treatment likely to effect a radical cure of these cases.

To resume the preceding remarks: instead of advising nitric acid in all cases of cervical disease requiring a caustic, as Dr. Braithwaite seems to do, I now hold—1. That, in comparatively recent cases of endocervicitis, nitrate of silver, tincture of iodine, or carbolic acid, suffices; 2. That chronic cases of endocervicitis had best be treated by acid nitrate of mercury or nitric acid; 3. That hyperchronic endocervicitis with considerable cervical hypertrophy requires potassa fusa cum calce, or some strong acid.

Since these remarks were penned, Dr. F. Churchill of Dublin has endorsed Dr. Braithwaite's views respecting the all-sufficiency of nitric acid in all cases of chronic cervical inflammation, and I am sorry to differ from so eminent a pathologist.

THE PRESENT EPIDEMIC OF SCARLET FEVER IN BRISTOL.

By DAVID DAVIES, M.R.C.S.Eng.,
Medical Officer of Health for the City.

II.

Sceptical Misgivings regarding our Present Hygienic Views and Practice with regard to Scarlet Fever.—One failure starts a doubt in a believer's mind; a second confirms it; a series of failures makes one look out for a better creed. Are we doing any good with our present preventive means? If they could be universally enforced, as they have been in isolated families with disciplined minds, I grant they would succeed; but when this is attempted with large thickly packed communities, can they be, or have they ever been, successfully enforced? By the imperfect execution of them through the length and breadth of the land, do we increase or lessen the mortality from disease? I feel certain that we increase the anxiety of the domestic and social troubles of the public by our preventive measures; and I feel doubtful of the answer to the former question. Take, for example, an imaginary but typical case in private practice.

There is a family named X., in easy circumstances. They have five

children—three boys and two girls. There is an epidemic, of a very mild type, of scarlet fever in the locality. Hundreds have had the disease; but there has been no death. The season is July; the weather rainy, the atmosphere moist. The youngest boy, aged 4, contracts the disease in the prevalent mild type. The other four children, by the advice of their medical attendant, are sent to a distance, and escape the infection. The sick child recovers. Two years elapse. The eldest son goes to Eton, Rugby, Marlborough, or some other public school. An epidemic of a severe type has just broken out where he is; he contracts the disease. The parents are telegraphed for to see their son, supposed to be dying. They travel to and fro three hundred miles. The patient ultimately recovers, and escapes only by the skin of his teeth. The school is temporarily broken up. The convalescent is sent to a fashionable watering place before he is properly disinfected, and there he spreads the disease. The second son has escaped, through being kept at a distance from his brother. He has, in the course of time, taken his degree at college; has been admitted as a barrister; has, after a long struggle, made his position; has been married. He passes through Paris on his honeymoon. The weather is cold, the wind easterly. In Paris, an epidemic of scarlet fever prevails. He contracts the disease, and dies in a strange land; and leaves his young bride a widow among strangers. In time, the eldest girl is married to a rich man. She is in due time confined of her first-born. The bells are ringing, and all goes on merrily as a "marriage bell". A fortnight afterwards, that house is desolate. In that house are now only a bereaved husband and a motherless infant; the subtle seeds of this mysterious disease have been inadvertently introduced to the puerperal patient in the nurse's shawl, or on the sleeve of the doctor's coat. I will not follow this case further; but ask, in all seriousness, would not life and suffering have been saved if all this family had been allowed to pass through the disease when it first appeared among them in a mild type, when they were all children? I wish it to be thoroughly understood that, as a health-officer, I have never had the moral courage to discard my former profession of faith, and to undertake the responsibility of giving practical effect to my doubts. I have never used disinfectants so extensively as during the present epidemic, and yet our failure is complete.

The doubts I have expressed do not in any way extend to typhus and enteric fevers, small-pox, and Asiatic cholera.

It is a fact beyond contradiction that occasionally this tiger of pathology seems to stalk abroad, having left both claws and teeth at home. Could we not play with him *then*? Inoculation from mild cases of variola previous to the discovery of vaccination proved of immense benefit. We cannot inoculate scarlet fever, but it can be imported. We can choose our type and season of the year. I lay these thoughts before the profession most humbly, "seeking for more light" under a failure in the midst of a great epidemic. I have never practised the suggestions, either in public or private, except in my own family, and with my own children, and these, thank God, with the best result.

Is there a milder exanthem of an allied species that can prevent or modify this disease?—Rötheln is nearly allied; is very infectious, but harmless. Does it modify scarlet fever, or is it modified by it? I have for some time looked upon it with affection, but am afraid to theorise on the subject. Can anyone throw light on this unexplored field? Observation convinces me that there is some unknown condition which gives immunity to some persons from scarlet fever: what is this condition? An analogous condition was known in the Vale of Berkeley regarding small-pox before the days of Jenner, and might have remained unknown to the outer world had not that great man unearthed it.

Who will be the Jenner of scarlet fever?

This pest, which broke out in Italy about the middle of the seventeenth century, is now two hundred years old. It has surely committed havoc enough among our race. In the kind provision of nature, there must be an antidote somewhere. Who will discover it?

A Delusion concerning Bristol.—It appears in some of the daily metropolitan papers that there is an impression abroad that my good and talented friend Dr. William Budd succeeded in preventing epidemics of scarlet fever; and that he was in some way or another connected with our sanitary arrangements. Both these views are erroneous. Scarlet fever was never more prevalent and more fatal in Bristol than when Dr. Budd was at the zenith of his well-deserved fame. No family suffered more severely than his own. He lost his eldest son from the disease—a blow from which, I believe, he never fully recovered. He could never mention his loss to me without tears. In individual and isolated families, his instructions have succeeded, but not on a large scale. My good, kind, and most talented friend Dr. Budd had never any connection with the sanitary arrangements of Bristol, either as director or as administrator.

NOTES OF AN UNUSUAL CASE OF EPILEPSY.*

By P. MAURY DEAS, M.B. Lond.,

Medical Superintendent of the Cheshire County Asylum, Macclesfield.

I AM induced to lay before the Section some notes of this case, now under my care, both because it presents, so far as my experience goes, some singular and anomalous features, and also in the hope that the experience of other members may be able to throw some light upon it, or to cite similar cases. Epilepsy and the affections allied to it have been so long and so carefully studied, that it is with great diffidence I venture to bring forward a case as presenting unusual or novel symptoms; but there is a combination of symptoms in the case which I have not myself met with before, and have not found recorded.

I am sorry to say that I have failed, as yet, to trace out the earlier history of the case as carefully as is desirable, the patient having come from a distance, and having been under my care only about six weeks.

E. W., female, aged 22, was admitted into the asylum on June 14th of this year, under an order of transfer from the General Lunatic Asylum at Northampton, where she had been under treatment for nearly four months. The certificate on which she was received into the Northampton Asylum stated that she had had "maniacal paroxysms succeeding epileptic fits, talking violently, throwing herself out of bed, threatening to destroy herself as well as others; that she had been subject to epilepsy for six years, that she was incoherent in language, that she tried to strangle herself and to jump out of the window; sometimes talking and hallooing all the night." It seems that she had been in the Wellingborough Workhouse Infirmary for some months prior to this; and I obtained the following information from the medical officer, Dr. W. Clarke. "Before she was sent to this Workhouse Infirmary, she was subject to fits and aggravated hysteria while at service. She became worse, difficult to manage, and, at times, violent; and was sent to the Union Infirmary, where she became periodically noisy, violent, and dangerous. I considered that she might have disease of the brain; and, as she became dangerous to herself and others, and there being no accommodation for such patients here, I was obliged to send her to the Northampton Asylum. She has been frequently as you describe."

From Mr. Bayley, Superintendent of the Northampton Asylum, I ascertained that E. W. "was subject, while there, to violent attacks of epileptic mania. She had a contracted foot when she was admitted, and was never able to walk without help. She got much stronger and better during the time she was with us."

The following was her state upon admission. She was little, stout; of fresh healthy colour, and apparently in good health. Height, 5 ft. 3 inches; weight, 10 stones. Her tongue was large, and rather white; the bowels were inclined to be constipated. The left foot was contracted and distorted exactly like a bad case of talipes varus; she walked with difficulty, and on the outside of the foot. There was, also, a certain amount of contraction at the knee-joint, with some wasting of the muscles of the calf. Two fingers of the left hand were stiff and useless. The circulatory system was normal; pulse regular, about 80. The respiratory system was normal. She was very quiet, spoke readily and rationally, and presented little evidence of mental weakness.

She was reported by the nurses who brought her to have many and severe fits; and to be at times violent, excited, and destructive, requiring to be placed in the padded room; also to have shown suicidal tendencies. Her history, as given by herself, was as follows; and I believe it may, to a great extent, be relied upon. When well, she conversed very readily; her memory seems pretty good, and she writes sensible, coherent letters.

She stated that, as a child, till she was about eight years old, she was subject to St. Vitus's dance, which was worst down the left side. This left her, and she subsequently began to take fits, but not to any extent till she was grown up; and even then she was once for twelve months without any. She had been in service at different times, and was so shortly before last Christmas; then the fits came on badly, and she went to an aunt. Then she had a very bad attack; and, when she came to herself, she was in the union, and she found that her left foot was twisted as it was on her admission; it had never been straight since. It was very painful to walk upon it; and she would give anything, or suffer anything, if it could only be straightened again. Before this, her foot was quite right. She thought herself that a bone was out, and that she had got it hurt in some way while she was ill. Eighteen months ago, she said, her left hand swelled and gathered. She was in

hospital with it for some time. It was twice cut, and then a splint was put on for a time. The hand had not been strong since; she had not much use in two fingers. Before that, there was nothing the matter with her hand. She said that she suffered much from her head; she often had a full feeling in it; so bad, at times, that she would like to have it cut open. This was before she had fits. Just before a fit came on, she felt as if there were something which boiled up towards her head; then it boiled over, and she remembered nothing more.

On the day of her admission, E. W. had several fits, which were reported as being "odd sort of fits". The following day, she was very well during the day; but, about 7 P.M., she began to have fits, and continued to have them, one after the other, in rapid succession. About 9 o'clock, I was sent for to see her. I found her lying on a mattress on the floor, with two nurses beside her, to prevent her from hurting herself from the violence of the fits. She was lying quiet, almost completely unconscious; her hands up at her head, pulse small and quick, skin cool and dry. In a little while, she gave a groan or two, and moved about restlessly; the nurses said, "She is going off again", and immediately seized her arms. I asked why they did it; they said, if they did not hold her arms, her hands would be bitten severely. In a few seconds, strong tonic spasms began in the limbs, the arms being strongly flexed. At the same time, a peculiar rhythmical lateral movement of the head began, becoming rapidly more violent, so that the head was thrown violently from side to side. The head described a complete semicircle or more each time; and the movements were of the most regular character, the oscillations being at the rate of about a hundred a minute. So powerful was the muscular action, that, applying all my strength with both hands, I could not hold the head. The face was much flushed, the eyes partially open, and the eyeballs turned forcibly upwards and inwards. The movements of the head were accompanied by a short rapid expiration, producing a peculiar barking cry; each double oscillation being synchronous with one of these. The convulsive movements of the head and the rigid spasms of the limbs continued increasing for about three minutes, when the lateral movement of the head ceased, the latter becoming fixed and thrown back; and the tetanic spasms became more general and severe, accompanied by several prolonged respiratory efforts. The face became congested and livid; the spasms increased in intensity; closure of the glottis took place, the face and neck becoming turgid and swollen; the whole body became rigid, and was arched in a state of complete opisthotonos; respiration was arrested, and suffocation seemed imminent, when, with a final effort, as it were, relaxation suddenly took place, the whole body became helpless and quiescent, the respiration blowing and stertorous, with frothing at the mouth; and, in fact, the typical appearances were presented of the final stage of an epileptic fit. In a short time, the stertor diminished, and a condition of semiconsciousness ensued; the hands went up to the head again, and, with a groan, were pressed against it. In the course of a few minutes, the premonitory signs of another attack showed themselves. I motioned to the nurses not to hold the arms. In a few seconds, the fit began; and, in an instant, both arms were violently flexed, the hands thrown towards the face, and the fingers of the right hand seized between the teeth, and severely bitten. It was with some difficulty they were released, and the arm brought down. Precisely the same succession of phenomena now ensued as before, and ended in the same way. I remained and watched several attacks throughout; but there was no material variation in the symptoms. A noticeable point was that, even at the height of the convulsions, the skin remained cool and dry. Consciousness during, and for some minutes after, each fit was completely suspended, the pupils being insensible to light. At no period, even of the intervals, could she be roused, or got to swallow anything. She was ordered a stimulating injection, containing castor-oil and turpentine.

On visiting her again about twelve o'clock, I found that she was still having the fits; but the intervals were longer, and there was more consciousness during them. She was able to swallow a little milk; and once or twice said, "Oh, my head", as she put her hand to it. I noticed now that the right foot was becoming inverted similar to the left; and, in the next paroxysm, could watch it being forcibly contracted under the influence of the spasms. The injection had acted freely, and brought away a considerable quantity of fæces. The fits continued till 4 A.M., but diminishing in number and severity. They then ceased, and the patient fell into a heavy sleep, having had at least forty fits during the night.

Next day, she was better, but weak, and her mind was confused; she had several fits during the day. She passed next night pretty well, without fits. Next day, she was up, and much better, though weak. She was quiet and sensible, and very much distressed about her feet. She was now quite helpless, the right foot being distorted nearly as much as the left, and resisting any ordinary effort to straighten it, the

* Read before the Section of Psychology at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

attempt causing, also, intense pain. The following night she had no fits, but complained much of pain in her legs and feet, which prevented her from sleeping. Next day, June 18th, she was worse, and had nine fits. The tendency to bite the fingers was very marked, so much so that leather gloves were put on to prevent injury from this cause. During the following night, she had a succession of fits, lasting till 5 A.M., when she became a little better; but during the succeeding forty-eight hours she was more or less constantly having fits. Maniacal symptoms now began to show themselves; she became restless, noisy, and excited. On the 28th, the following note was made.

"All last week, she was in a maniacal state, but did not have many fits till two nights ago, when she had a series till 11 o'clock, and the same last night. They are generally worse at night. Several nights last week, she was very noisy, singing, shouting, etc., and, at times, destructive. Two doses of chloral were necessary more than once before she got any sleep. During these last two nights, the left hand has become inverted and distorted in a similar manner to the feet. To have a blister on nape of neck 4 x 4 in.; and bromide of potassium, one drachm, three times a day. In the intervals of a series of fits, she always puts her hands to her head; and, when sensible at all, says, 'Oh, my head'; and at times asks to be killed."

The storm of fits seemed now to have exhausted itself for this time; and, in the course of another week, the maniacal symptoms had also gradually subsided, and she was again mentally in the state noted on admission. The distortion of the hand passed off spontaneously in a few days, but that of the foot remaining persistent; and, the crippled condition of the poor girl being very pitiable, the question presented itself to me if an effort could not be made to overcome it. Accordingly, I determined, though with no very sanguine expectations, to try the effects of chloroform. On July 9th, therefore, Dr. Lyle administered it, while I took charge of the foot. It was with some difficulty that she was brought fully under its influence; but, when this was at last effected, I was gratified to find that, by the use of very gentle force, the contracted state of the foot was overcome, and it was easily restored to its normal position. An ordinary straight splint was then applied on the outside of the leg and foot. No bad effect followed, except that the following night she complained of a good deal of pain. In a week, the splint was removed, and the foot found to be quite straight. Although the ankle was swollen and stiff for some days, she was soon able to walk upon it, and to get about as she did before.

On the 17th, I find the following note.

"She has a heavy, dull expression to-day. She complains of her head. She says she has a full feeling in it; would like it cut open. The forehead is hot, and face flushed. A few minutes afterwards, she had a fit; she fell off her chair like a log, without any cry. The fit had the same characters as noted before, only not so violent, and it was over in two or three minutes. There were the same violent and rhythmical movement of the head, the same 'barking' respiration, and the same tonic spasms of arms and legs, ending with general ones of the body, and opisthotonos; then blowing respiration, frothing at the mouth, and relaxation."

On the 21st, it was determined to make an effort to overcome the deformity of the left foot; though it was felt that, owing to the length of time that had elapsed, and her having walked so much on it, the result was very doubtful. Greater difficulty than before was experienced in producing the full effects of the chloroform; and, after succeeding in effecting a partial straightening of the foot, a splint was applied, and further efforts desisted from for the time. I may mention that, shortly after the inhalation began, a fit came on; but it appeared to be, to a great extent, aborted by the chloroform; the characteristic phenomena were greatly modified, and the fit cut short. Five days afterwards, a second and more successful attempt was made. The foot was got, without using undue force, into an almost perfectly straight position, and was kept so by means of a pad and a Dupuytren's splint on the outside. The final result as to this leg cannot yet be given, although it must, in any case, be much more doubtful than the other one; but there can be little doubt that, had the same means been employed equally early, the result would have been equally satisfactory, and a most distressing deformity averted.

The patient, during this month, has had no further bad attack, the fits having only been slight and occasional. It is, of course, very doubtful how long this remission will continue. She has continued the bromide, and careful attention is paid to the state of her bowels. I may say here that she has menstruated twice since her admission.

One or two questions now present themselves as to the precise nature of this case. In the first place, am I right in calling it one of epilepsy? Although the symptoms are, in many respects, peculiar and anomalous, I think it has so many of the features generally allowed as distinctive

of an epileptic seizure, that it must be placed in the same category. These points are:

1. The undoubted evidence there was in the whole seizure of a "nervous discharge".
2. The existence of a premonitory sensation or "aura".
3. Complete unconsciousness during the fits.
4. The fits occurring, at times, in a rapidly following series, inducing a comatose or semi-comatose state.
5. The closure of the glottis, with venous congestion, frothing at the mouth, and stertorous breathing.
6. A series of fits being followed by the characteristic transient epileptic mania.

The peculiarities in the seizures, as compared with an ordinary epileptic one, I have sufficiently indicated in the account of the case, and I will only here summarise them as follows:

1. The rhythmical oscillations of the head.
2. The predominance of tonic spasm.
3. The permanent deformities remaining after the convulsions have passed off.

Another question, however, suggests itself, which is: How far an element of hysteria may enter into the case, or have modified the symptoms. There can be little doubt that this girl was constitutionally predisposed to neuroses of a convulsive nature; and that, as she approached maturity, she suffered from "aggravated hysteria". It is hardly necessary, I think, to argue seriously the point that hysteria, even in its most Protean forms, could never account for the series of phenomena described.

The symptoms which I have indicated as pointing strongly to epilepsy are alone sufficient to negative the idea of the convulsions being hysterical; but, further, there was an absence of all the more usual phenomena of hysteria: such as globus, alternations of laughter and tears, rapid sobbing, respiration, etc. But I think, nevertheless, that it is quite possible that the strong hysterical temperament may have had some effect in modifying and moulding, as it were, the particular form which the epileptic seizures should take, and may serve to account for some of their peculiarities. It is, perhaps, even a question whether, under certain circumstances, hysteria might not develop into true epilepsy, by the constant repetition of impressions on nervous centres predisposed to irritability and instability, in a way somewhat analogous to the development of a predominant idea into an actual insane delusion. To make my meaning more clear, we know that the essence of hysteria lies in the will ceasing to control phenomena which it itself originated; and it is only a step further for these or similar phenomena to arise automatically without the intervention of the will at all—the nervous centre involved having acquired, through habit, the requisite irritability.

I will only notice one more question which arises; and that is: how far some of the symptoms point to the existence of anything like serious organic mischief, such as a tumour. It will be recollected that the patient complains much of pain in her head at times, especially in the intervals of a series of fits; presses her hands on it; cries out, "Oh, my head"; and even asks wildly to have it cut open, or to be killed. Then the marked predominance of tonic spasm and the prolonged contraction of groups of muscles, as well as the forcible turning up of the eyes, rather point to some organic source of irritation in the brain or its membranes. On the other hand, there is no symptom of paralysis, and there is no progressive or steady aggravation of the symptoms going on.

The case is incomplete at present; and it may be expected that, in its further development, some light will be thrown on points which are now doubtful. In the meantime, I present it as it is, as a case of some interest, of which some of the features admit of discussion, and are open to different interpretations.

Since writing the above, I have ascertained some additional particulars as to the patient's history through Dr. Clarke. It appears that she suffered from convulsions during infancy, but seemed quite to recover; and there was no paralysis. When grown up, she became subject to hysteria and slight fits, which prevented her from continuing in service. About two years ago, it seems that the catamenia ceased for a time. Her statement as to the cause of the contraction and stiffness in the left hand is confirmed, and, generally, the account she gave of herself. The important fact is added, that there was no contraction or deformity formerly.

A very important item in the history is that, about eighteen months ago, she had a severe fall upon the back of her head; and her sister says she has been worse since; and it seems that she had no bad fits till after this.

Dr. Clarke adds that he "considered it a very unusual and peculiar case, and thought there might be a tumour or some mischief going on in the membranes".

THERAPEUTIC MEMORANDA.

THE SUBCUTANEOUS INJECTION OF WATER.

MENTION is made in the JOURNAL for November 27th, of the subcutaneous injection of water as a successful expedient for relieving pain. I wish to say that Dr. Léclut was not the first to inject this simple agent subcutaneously for the relief of pain; nor was its use in the instance to which I refer in any way accidental. The experiment was made by Dr. G. W. Moore, at that time an excellent house-physician in King's College Hospital, on a patient of my own, who was suffering from thoracic aneurism, and who could not sleep on account of the troublesome neuralgic pains with which it was accompanied. He had been injected several times with a combination of morphine and atropine, when it occurred to Dr. Moore to try the effect of the hypodermic injection of pure water. The experiment was entirely successful. We did not, however, think of claiming for our expedient any other virtue than that of making a mental impression on our patient's nervous system; a means, probably, of relieving many troublesome symptoms which we do not sufficiently estimate; or which we are prone to confound with "doing nothing", which is a wholly different thing.

I. BURNEY YEO, M.D. Senior Assistant-Physician in King's College Hospital.

SUBCUTANEOUS INJECTIONS OF WATER.

IN the BRITISH MEDICAL JOURNAL of November 27th, 1875, there is an allusion to Dr. Léclut's communication to *L'Union Médicale* on the subcutaneous injection of water only, for the relief of pain.

To the advantages of this method in a number of instances, I can bear corroborative evidence, having now for many years adopted it. In 1868, a lady, newly arrived from America, called on me and told me she was in the habit of having morphia injected three times daily; that she could not get any sleep without it; and that, in fact, she lived on it. I first injected half a grain; in a few hours, she came back, saying that it was of no use whatever. I then injected a grain. After the lapse of some hours, she returned and craved for more, telling me she had been in the habit of having three grains at a time. Reluctant to give her any more, I resorted to the artifice of drawing some hot water into the syringe and injecting it. After this, sleep was induced. On subsequent occasions, I injected a small dose of morphia once a day, following up such administration of the sedative by the hot water hypodermic injection, until I reduced the quantity of the drug used to a very minute dose.

Since then, I have attended many patients who had been in the habit of taking morphia, and have treated them with the hot water plan, to the great improvement of their health, and the weaning them of the baneful poison. Even in cases of delirium tremens which had been accustomed to the injections, and in the fury of delirium persisted in calling out for them, I have employed the hot water and so lulled them to rest. But here I would pause to admit that sometimes this plan would fail me, and then I would fall back upon the injecting a small dose of morphia first, following it up with the use of the hot water in two, three, or four hours.

But it is in the cure of sciatica and deep-seated pain, as well as in brow-ague and similar distress, that I have found the hot water injections most beneficial; indeed, I cannot recall an instance of failure. For the purpose of carrying out this method of cure, I had, in 1868, a hypodermic syringe made after my own plan. The needle is some inches in length; the cylinder is silver (I had broken many glass-tubes or cylinders when drawing in the hot water), and contains a drachm and a half of fluid, if such an amount should be required to be thrown in. The piston has not a screw action, but runs up and down like an ordinary syringe, in order that the water may be expelled with the amount of force the operator may think best. In some instances, burying the needle up to the very end, I force in the hot water amongst the muscles, and then withdraw the instrument immediately afterwards, placing the tip of my finger on the perforation point, and, by a rolling movement, dispersing the fluid in its bed. The long nozzle of the syringe acts as an acupuncture-needle; the fluid as an additional counterirritant; the patient complains of a smarting, burning sensation, soon followed by relief from the pain; and, if the operation be done in the patient's own home, and while he is in bed, sleep will often supervene. In this manner, I have frequently stopped sciatica, the agony of acute lumbago, or that resulting from a sudden strain or fall, besides other minor pains.

G. DE GORRQUER GRIFITH,

Senior Physician to the Hospital for Women and Children.

CLINICAL MEMORANDA.

VARICELLA-PRURIGO.

IN conjunction, doubtless, with many others, I feel much indebted to Mr. Hutchinson for his able exposition of what seems to have been hitherto an undescribed affection. I have met with several cases identical in all essential points with those described by Mr. Hutchinson, which at first puzzled me not a little. In one case, a boy aged 7 years, the rash came on suddenly, and presented all the appearances of ordinary varicella, for which it was at first mistaken; but, as it continued for several weeks, and the irritation produced by it was most distressing, scabies was diagnosed, and at this period I was requested to see him. The boy seemed well nourished, and there was nothing particular in the general state of his health to throw any light upon the nature of the disease. There were four other children occupying the same nursery, none of whom were similarly affected. On examination, the trunk and extremities were found to be studded over with small vesicles; some clear, more pustular, and some broken and inflamed, evidently from having been scratched. There were several deep-seated transparent vesicles on each hand, and some also on the sole of the left foot. The irritation produced was such as to interfere materially with sleep, and the mother was ashamed to let the child come down into the drawing-room for fear it should be suspected that the boy was suffering from itch; but careful examination failed to detect any of the well known characteristics of scabies, and the scattered appearance of the rash was also opposed to this view. Bark and nitric acid, restricted diet, more especially as regards animal food, and a mild aperient on alternate mornings, succeeded, in the course of a few weeks, in relieving this condition; but it was not until at least two months had elapsed that the vesicles ceased to make their appearance.

Another case was that of a very active, intelligent little girl, aged 8, who was brought to me in May last at the Middlesex Hospital by one of our midwives. Several diagnosed the case as varicella, but were rather nonplused when told that the rash had already been out over seven weeks; others expressed their opinion that it was scabies. The irritation produced was very great, and in some places the skin was very much inflamed from the scratching that had been resorted to. The itching was described as always worse at night. Warm baths, attention to diet, diminution of the amount of animal food, gentle aperients, and an acid tonic succeeded in alleviating the condition, but only after treatment had been persevered in for some weeks. The child ultimately recovered perfectly, and has had no relapse. I inclined to the belief that the irritation arose from injudicious and excessive feeding.

Other cases have occurred in my practice; but I cannot lay my hands on the notes at the present moment.

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DIPHTHERIA AND CROUP.

WHILE reading the report of the paper on Diphtheria and its relation to (so-called) croup, read before the Royal Medical and Chirurgical Society by Dr. Semple, I called to mind three cases I saw in Birmingham a few years ago. In the same house and on the same night, three persons—a father and two children—died; the children of scarlatina, and the man of diphtheria. The house was situate on the bank of a stream which passes through the town before reaching the neighbourhood, and at that time (I do not know if it be so now) the water was dark, muddy, and offensive, and had the appearance of having received a great deal of sewage matter in its course. I have no doubt whatever of the nature of the diseases; moreover, I had the advantage of consultation with Dr. James Russell. The children had a remarkably fine scarlatina rash, but died apparently from congestion of the brain and lungs, from the great amount of blood-poisoning they had received. The man had no rash; but the whole mouth, tongue, and fauces were absolutely covered with diphtherial deposit. I had so many times seen diphtheria at the same time that scarlatina also prevailed, that at that time I felt sure some intimate relation existed between them, and these cases tended strongly to confirm that opinion. The man may, however, have got his contagion from a different source than that from which the children received theirs. I have hitherto believed that croup and diphtheria were separate and distinct diseases, and shall look with great interest for the result of the investigation of the committee recommended to be appointed to consider the subject.

SAMUEL LLOYD, M.R.C.S. and L.S.A.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN
THE HOSPITALS AND ASYLUMS
OF GREAT BRITAIN.

LONDON HOSPITAL.

STRUMOUS DISEASE OF KNEE-JOINT; FIBROUS ANKYLOSIS; SUB-
CUTANEOUS OPERATION.

(Under the care of Mr. MAUNDER.)

In a recent number of the JOURNAL (November 6th), we published the account of a new operation by Mr. Maunder for the relief of fibrous ankylosis of the knee-joint, the result of injury. We now record a case in which the same operation was employed to remedy ankylosis following disease of the knee-joint. For the report of it we are indebted to Mr. John Job, house-surgeon.

Charlotte B., aged 6½, was admitted into hospital on September 28th, 1875. The patient's mother said that her little child struck the knee two or three years ago. It then became swollen and painful, and remained so for a long time. She had a doctor for it, who called the disease "white swelling". The child was fairly nourished, but rather anæmic; she had dark hair and eyes; was very intelligent. On examination, the left thigh and leg were found to be a good deal wasted. The leg, when fully extended, formed an angle of 115 deg. with the thigh. The patella was absolutely immovable, and fixed to the outer condyle of the femur; the leg was somewhat rotated outwards and slightly displaced backwards.

Mr. Maunder said that he had no doubt that the medical man who first saw the case had formed a correct diagnosis. The case had been originally one of gelatinous disease of the synovial membrane, which had run its course and left the limb thus maimed. The question was, how to straighten it, and to approximate its pristine usefulness. Mr. Maunder pointed out that the first obstacle to extension of the leg was the adherent patella; possibly next in order, the biceps muscle; and, lastly, the fibrous tissues at the back of the joint. He proposed to attack these in turn.

Operation, October 6th. The patient being under ether, Mr. Maunder passed a tenotome into the knee, entering it towards the outer and upper boundary of the joint, and carried it directly downwards behind the middle of the patella, when it was made to divide the adhesions in all directions. This done, and the patella being now movable every way, the knife was withdrawn, and the wound closed with a compress and strapping, as after the common operation of tenotomy. The limb was placed on a McIntyre splint, and ice-bags were to be employed for forty-eight hours. Mr. Maunder explained that the object of his operation was twofold: first, to dislodge the patella, in order that the leg might be passively extended on the femur; secondly, and most important, that, the patella being again liberated, the quadriceps extensor femoris might now be able to resume its original function of actively extending the leg upon the thigh. Dr. Thorowgood and Mr. Curling chanced to be present in the theatre, and the latter expressed himself as "quite satisfied with the immediate result of the operation which Mr. Maunder had in view when undertaking it" (setting free the knee-cap).

October 7th. She slept fairly well; there was no pain nor discomfort in the joint. Temperature, 98.2 deg.

October 9th. The splint was removed, and a weight of 5 lbs. attached to the foot by way of extension.

October 10th. The child was perfectly well. The patella was freely movable without pain. Two pounds were added to the weight.

October 15th. The weight was increased to 10 lbs.

October 20th. Mr. Maunder divided the biceps tendon, and placed the limb on a McIntyre splint.

October 23rd. The splint was removed; the weight was reapplied.

October 25th. The leg was already much straighter. The patella was movable without pain. There was no sign whatever of irritation about the knee-joint.

November 7th. The leg still continued to get more and more in the axis of the thigh, the angle at the knee being about 160 deg. (already a gain of half a right angle). There was not the slightest evidence of inflammation about the joint, the child suffering it to be pressed and moved without complaint. The patella was freely movable. The 10 lbs. weight was constantly employed, and counterextension was obtained by a perineal band adjusted to the groin of the opposite side.

The parents this afternoon expressed themselves as being much surprised and pleased to see the great improvement in the condition of the limb, and would be satisfied with it even in its present state.

The adult above alluded to was exhibited. He could both flex and extend the leg, and walked with a scarcely perceptible halt. Mr. Maunder was of opinion that this operation offered a ready and safe means of relief from apparently permanent and distressing deformity, many of which deformities could only otherwise be remedied by excision or amputation.

BIRMINGHAM GENERAL HOSPITAL.

CHOREIC MOVEMENTS IN AN OLD CASE OF HEMIPLEGIA.

(Under the care of Dr. RUSSELL.)

As much interest attaches to the "choreic" movements sometimes observed in the paralysed limbs of a hemiplegic patient, a description of these movements exhibited in the following case will not be without interest. They occurred in a young man, aged about 25, who had been partially paralysed in his right side from his second year of age. He ascribed the paralysis to a fright, but could give no further particulars respecting it. The movements in question affected those muscles of the right side which are the seat of the paralysis in hemiplegia. They consisted of rapid energetic clonic contraction of all the muscles more or less simultaneously.

On some occasions, with considerable muscular action, the movements of the affected limb were of the most limited description; the antagonist muscles all contracting at once counteracted the effect produced by one another. Dr. Russell placed his hand on the limb, and felt all its muscles in active intermitted contraction, the contraction travelling down the limb from the shoulder, and yet the position of the scapula was little affected; the arm remained by the side, only the shoulder being slightly rotated inwards or outwards, in consequence of slight overaction of one or other of the scapular muscles. The fingers were more active, being chiefly extended and spread out, the former posture resulting from the flexors of the fingers losing their purchase, owing to the permanently bent position of the wrist. Of course, a marked exception was presented by the mouth, which was under no opposing influence from the opposite muscles; the muscles acting upon the right angle of the lips drew the angle forcibly outwards, and these muscles were aided by the violent action of the platysma on the same side, so that great distortion of the lower part of the face was the consequence. But at other times, especially when the movements were most violent, the exact opposition of antagonists was not maintained, and considerable movement resulted, though apparently wanting much of the complexity and range observed in chorea.

These movements differed from those of chorea in another and more characteristic particular: though the patient could not restrain the muscular action which has been described, he yet retained the power of employing the various groups of muscles in any manner he pleased. He could walk well, without deviating from a direct course, though occasionally, if he had a violent "snatch", he ran against persons in the street; he could grasp my hand or any other object without any trouble; but, owing to the permanent predominance of the flexors, he was quite unable to release his hold until aided artificially; yet the fingers simply closed on the object, and manifested none of the fidgetiness and intermitting grasp characteristic of chorea. Of course, he was quite incapable of performing the more delicate movements of the hand. The muscles affected were notably those of the right angle of the mouth; the right platysma, to a remarkable degree; the scapular muscles and those operating upon the shoulder; and the muscles of the upper and lower extremities. The muscles of the upper suffered much more than those of the lower extremity. The bilaterally acting muscles were spared almost, if not completely. Those of the upper part of the face entirely; and also the muscles of the tongue. The chin could be raised during a violent paroxysm, and the sternomastoids were quiet. The abdominal and lumbar muscles sometimes were slightly in action; but it seemed rather for the purpose of steadying the body. The wrist and the knee were maintained permanently in a semiflexed position, owing to the predominating action of the flexor muscles; but they could be extended artificially with facility. The movements occurred in paroxysms; but one often saw the patient almost still. They were quiet during sleep, but were remarkably under the influence of excitement. A dream would bring them on, and rouse the patient from sleep, or any mental excitement by day. During the day, he was quiet whilst he was reading, or whilst his mind was fully engaged; but sometimes a paroxysm of movement would last all the day.

The limbs were of the same length with those of the opposite side.

The girth of the right wrist equalled that of the left; but the girth around the heads of the metacarpal bones on the right was half an inch below that on the left side. The fingers were rather slender. The muscles of the right arm were smaller than those of the left, occasioning a lessened girth of one inch in the upper arm and of half an inch in the forearm. Sensation was normal. The fundus oculi was healthy, excepting for a posterior staphyloma. The sounds of the heart were natural.

The man was well developed, fully intelligent, and had good health. The movements, it should be added, had been present so long as he could remember, but not with so much severity as for the last few years.

REVIEWS AND NOTICES.

DISEASES OF THE HEART.*

FOR a number of years, there was a complete pause in the issue of works on diseases of the heart. The observations of Laennec, Bouillaud, and of Hope as to the indications of murmurs, the causes of the sounds of the heart, and the diagnosis of the different forms of disease of this organ, had become crystallised in the well known works of Walshe and Fuller, and were absorbed in the grander work of Stokes. Having learned to recognise the different diseases of the heart, and formed some vague ideas as to their progress and prognosis, the profession calmly folded their hands and went to sleep over the matter, paying but little heed to what physiology was finding to say on the subject. Nothing could remove the inflammatory products from a distorted valve, nor stay the progress or reverse the career of fatty degeneration; so what was there to be done but to build up careful diagnosis and shrewd prognosis? No work could give the diagnosis more distinctly or more accurately than Walshe's had done; Fuller's book was fairly good all round; and heart-diseases were left to wait their time, while the interest in them centered itself round the diverse views of the action of digitalis, involving as it did the value of palpitation in diagnosis, and the place of hypertrophy in pathology.

But, under all this indifference, good substantial work was being done, which was to explain how diseases of the heart were brought about, and, with that, how a great many of them were to be avoided. The investigation into the action of drugs upon the circulation found many and able labourers, until our views have of late undergone some profound modifications. The observations of Lauder Brunton, that there was a rise in blood-pressure during an attack of angina pectoris, revolutionised our views as to that puzzling malady, and showed that angina is not a neural malady always, nor is it a primary failure of the heart; it is a failure of the heart, in the face of a high blood-pressure. This observation pointed at once to those means of relief which physiological research into the action of remedies had indicated; and dilatation of the peripheral vessels by the nitrite of amyl was the result, giving relief to the patient. The sphygmograph had taught us much about blood-pressure, its variations and their causes, and explained the causal relationship betwixt renal disease and consecutive affections of the heart. In addition to this, German workers had tracked out the different consequences of arrest of the circulation, and, with this, the importance of treating the heart-lesion so far as was possible; and workers at home, notably Clifford Allbutt, had pointed out how disease of the aortic valves was related to certain forms of labour. In fact, the time would appear to have arrived when a treatise on the diseases of the circulation was feasible, which not only should give the diagnosis clearly, but which would describe the oncome and progress of heart-disease, and, still further, would give definitive indications for the choice of remedial agents, and explain their *modus operandi*; so as to remove heart-diseases from the list of ailments merely diagnostically interesting, and refer them, to a large extent at least, to the class of maladies which could be treated with benefit, both as regards prevention and relief, aye, even cure or repair.

Such a work was attempted in the treatise by Dr. Milner Fothergill; but the book has never become a popular one. We pointed out a number of objections to it at the time when it was issued; and, if these objections be removed in a future edition, the work may become one in common use. It indicated an advance in a right direction, if the execution had only been more careful.

In the two works now before us, there is no such advance, but a dis-

tingent return to the works of an earlier date. In this these works agree, and the diagnostic divisions are in every way superior to the sections on treatment. But there is a wide difference in merit between the two works.

Dr. SEMPLE'S book is much the smaller one, and is a handy book in size. It contains some shrewd suggestions as to estimating the gravity of each case of chronic heart-disease, taking their origin apparently in the writer's experience as physician to an insurance company. But the work generally is not on a level with the knowledge of the present day. The views of the early writers, especially of the French school, are given at great length; though, no doubt, of much value at the time, and of interest as matters of history now, they are now somewhat out of date as regards practice. The old views about the causes of the sounds, the fanciful varieties of murmurs made by Laennec, and the lengthy discussions on the treatment of the acute inflammations of the serous coverings of the heart by mercury, are antiquated and belong to the past. But more recent information does not seem to have come within the sphere of the writer's cognisance, or, in the instances where it has been recognised, it is but imperfectly understood. Dr. Semple's mind seems to be still associating with the shades of the leaders of the French school, and not to have ranged itself alongside modern thought.

Dr. HAYDEN'S book is a work of a much more ambitious character, and is written by a physician of extensive experience, whose contributions to cardiac literature entitle him to be heard at length. It must be admitted that he has used this last privilege somewhat mercilessly; and a monograph of over 1,200 pages is a serious matter for any reader. It is unfortunate that the work, when found to have grown to its present dimensions, was not divided, so as to form two handy volumes. It is evidently Dr. Hayden's aim to make a complete and elaborate treatise. His work is indeed painstaking, laborious, and erudite; his material is good and ample, and his numerous cases are well chosen and illustrative. The work furnishes abundant evidence of opportunities of which the writer has availed himself; it demonstrates his familiarity with the subject-matter in hand, and is a warranty of his extensive experience. And yet, after all, it is not the book on heart-disease for which we are on the outlook.

The anatomy and physiology of the heart are given at length with care and accuracy in the commencing chapter, and this chapter is a good one. "Milk-spots" are described as the result of long-continued friction in persons engaged in active labours: doubtless a correct view. They are of no moment. The account of the innervation of the heart is good. Several pages are devoted to the cardiac cycle of Lancisi, which may be interesting to many readers.

The second chapter, on the phenomena of the heart's action in relation to its modification by disease, is long and carefully done. The reduplication of the first sound, of the second, and the accentuation of the second sound, are discussed fully; and diastole is discussed at some length.

In the third chapter, the physical signs of disease are reviewed: palpitation, irregularity, and intermittency are appraised, while murmurs are described at much length. The notice of presystolic murmur is very complete, and contains all we know about it. The remarks on hæmic murmurs are very good, and worthy of careful perusal. Dynamic or non-organic murmurs at the auriculo-ventricular orifices are well described.

The fourth chapter, on the causes of diseases of the heart, is very poor. It is chiefly taken up with rheumatism, though Bright's disease, dress, and occupation are included. But the relations of Bright's disease to heart-disease are stated very imperfectly; and the causal relationship of endocarditis to exanthematous fevers little better; while the description of the effects of deformity of the chest upon the heart is not what might have been expected from a pathologist of Dr. Hayden's standing and erudition.

The fifth chapter is taken up with pericarditis, and is a long one. Dr. Hayden does not agree with some other writers as to pericardial effusion, following pericarditis, taking place in the first instance at the base of the heart and around the roots of the great vessels. His views of the treatment of acute pericarditis are still more widely different from what is usually held. Bleeding by lancet-punctures or leech-bites is the first matter. "Immediately blood in sufficient quantity has been abstracted by a first leeching, my invariable practice in acute cases is to administer mercury in small and frequently repeated doses. . . . Administered in this manner, I push the use of mercury to slight salivation, and am satisfied when the imprint of the teeth, with white and elevated lines of union, appears upon the inner surface of the cheeks; when the gums present a swollen, soft, and spongy appearance, and when coppery taste is experienced, and a slight drivelling of saliva at the angles of the mouth takes place." Alcohol may after this be ad-

* *Diseases of the Heart.* By R. Hunter Semple, M.D., Physician to the Bloomsbury Dispensary. Pp. 246. London: J. and A. Churchill. 1875.

Diseases of the Heart and the Aorta. By Thomas Hayden, Professor of Anatomy and Physiology to the Catholic University, Dublin; Physician to the Mater Misericordie Hospital. Illustrated. Pp. 1232. Dublin: Fannin and Co. 1875.

ministered, and an opiate is often useful. Warm poultices are only referred to to encourage bleeding from leech-bites, or to accelerate the action of a blister. "In the treatment of liquid collections in the pericardium", he writes, "I have no faith in blisters, and rely mainly upon diuretics and hydragogue purgatives". Paracentesis pericardii is discussed at full length. In the treatment of myocarditis and endocarditis (acute), the same reliance on "moderate local depletion, followed by mild but rapid mercurial action", is exhibited.

Diseases of the substance of the heart are considered in Chapter vi, and the view taken of hypertrophy is in accordance with the most recent investigations. The view of Dr. G. Johnson as to thickening of the muscular walls of the arterioles, followed by hypertrophy of the left ventricle, is espoused. As to its progress, Dr. Hayden says:—"Action and reaction, with alternate increase of muscularity of the ventricle and of the minute arteries, might thus go on indefinitely, were it not for failure of nutrition and consequent tissue-deterioration in both. In the ventricle, this assumes the character of fatty degeneration of the muscular fibre, and induces debility and dilatation; whilst in the arteries it consists in a similar change of the contractile fibre-cells and atheroma of the middle coat, with consequent liability to aneurismal dilatation and rupture." The diagnosis is all through the book carefully done, except the part relating to enlargement of the two sides of the heart; and the diagnosis betwixt right and left side enlargement (alluded to at page 571) is not given distinctly; at least we have been unable to find it, the index affording no clue or aid.

In the seventh chapter, endocarditis and disease of the valves are discussed. In speaking of the diagnosis of acute endocarditis, Dr. Hayden writes:—"The associations of a systolic apex-murmur in acute endocarditis are of great importance in regard to differential diagnosis and the prospects of the patient. A murmur accompanied by a first sound and a regular though quick and weak pulse indicates simple endocarditis; but replacing the first sound, and especially if attended with a falling and irregular pulse, such a murmur should be regarded as diagnostic of endomyocarditis. The weakness of the left ventricle, consequent upon inflammation of its muscular wall, serves to explain both the irregularity of the pulse and the suppression of the first sound; the valve-element of this sound being abolished by the inflammatory thickening and softening of the mitral curtains, and the impulse-element by the debility of the ventricle consequent upon similar changes in the myocardium." The diagnosis of the different valvular lesions is well done. In speaking of hæmoptysis in mitral stenosis, Dr. Hayden says:—"Hæmoptysis, in moderate quantity, need not cause alarm. The condition which it indicates, namely, congestion of the lungs and engorgement of the right side of the heart, is best treated by active purgation, dry cupping of the chest, and, if the discharge be copious or persistent, by the use of ergot or ergotine." In dropsy, the use of purgation is advocated. That "the treatment of mitral inadequacy should be directed mainly to the consecutive changes of dilatation of the left ventricle and debility of its parietes" will be a new view to many who hold that failure of the right side is the thing especially to be feared. It is not a mistake of "left" for "right", but is deliberate.

Chapter VIII is taken up with the formation and migration of blood-clots, and is a very good chapter, well and skilfully written.

The neuroses of the heart form the subject-matter of Chapter IX. Cardiac asthma finds its place here, as does a well told case of gouty palpitation; also angina pectoris; they should surely be somewhere else. Dr. Hayden's book is remarkable for the erudition displayed, and the views of Edward Jenner as to the pathology of angina pectoris, and its associations with gout, given by Parry in 1799, and here quoted, are in singular accord with what we are but now learning. Exophthalmic goitre is well handled.

The concluding chapter is devoted to the consideration of aneurism and other diseases of the aorta. It is a thoroughly good chapter, and done in a masterly style. If all the work had been as excellent as this section, it would have called for unqualified praise. The different forms of aneurism, the diagnosis and the treatment are all fully considered; and a long and valuable list of cases of thoracic aneurism is given. Abdominal aneurism is also well handled.

Taken as a whole, Dr. Hayden's book is one which will be very acceptable to many men, and is especially good in the literature of the past, though not so rich even here as to more recent works, especially German. Its deficiencies are chiefly in the direction of treatment, and a philosophical consideration of the progress and indications for treatment of chronic heart-disease is wanting. The opinion about digitalis is wavering, as if old views could not be laid aside; while the employment of mercury, as given in several places, is in distinct contradiction to modern views. The use of opium in advanced heart-disease, and of chloral-hydrate in angina pectoris, though usually held unsafe, is

advocated here; and no reference is made to the eloquent sentences of the late Hyde Salter as to the use of soporifics in advanced disease of the organs of the circulation. The cases related are very numerous, but, though good, are not so arranged as to point out principles distinctly. The illustrations are too often poor, and are not well selected. It is the largest work we possess on diseases of the heart, and is probably the last of the present race of these works. Heart-diseases must be described for the future in short clear chapters, and the pruning-knife must be used energetically to lop off or circumscribe the views of the past. The relations of causation to the management of these affections must be vividly appreciated, and diseases of the heart must be less regarded as diagnostic puzzles than they have been. The satisfactory work on diseases of the heart has yet to be written. When it is written, the writer will find much in Dr. Hayden's work which will be very useful to him.

DISEASES OF THE KIDNEY AND URINARY DERANGEMENTS. By W. HOWSHIP DICKINSON, M.D. Cantab., F.R.C.P., Physician to and Lecturer on Pathology at St. George's Hospital; Physician to the Hospital for Sick Children, etc. In three parts. PART I.—DIABETES. Pp. 236. London: Longmans, Green and Co. 1875.

DR. DICKINSON'S work *On Albuminuria*, published seven years since, has been favourably received by the professional public, and is shortly to be republished with additions, as the second of a series of three, of which Part I is now before us. The author, in his introduction, expressly asserts that "diabetes is a disease of the nervous system characterised by the secretion of saccharine urine", and, therefore, although this subject is placed first, it clearly comes under the second head of "urinary derangements"; a term, by the way, which is by no means nice-sounding or unequivocal in meaning. This is, however, a minor matter, and provided the medical public gets a good book at a moderate rate, it cares little for the title, and still less for the nosological arrangement. We can very safely anticipate its verdict in regard to the work before us. It is a good book, especially in its clinical portions. At the same time, in common perhaps with most monographs, it is not equally good all through. What we may call the historical portion, in other words, the chapters on the physiology and pathology of diabetes mellitus, are not of equal value with the purely clinical parts. No doubt Dr. Dickinson may plead that he has selected some of the best, most certain, and most fruitful of the experimental researches in the production of glycosuria. But the addition of a very few pages, and the condensation of others, would have given space for other experiments, and for a wider view of the subject. We cannot find (as might reasonably be expected) any notice of the discrepancy between Brücke and Seegen as to the occurrence of sugar in normal urine, nor any description of the tests to be employed for the detection of sugar, although the various methods are by no means of equal value, or equally easy to use. Here our fault-finding, as far as regards the author's part, must cease; our only other ground of complaint is in the illustrations. Looking at the price of the work, which is only ten shillings and sixpence, it may be said to be profusely illustrated; but there is a diagrammatic harshness about the figures which is far more German than English, whilst Plates I and II, which are taken from the *Medico-Chirurgical Transactions*, are far too faint and "washed-out" looking to be at all pleasant. On the other hand, the type is clear and readable, with marginal notes, a luxury which is supplemented with a really good index. Dr. Dickinson's original researches on the morbid changes in the nervous centres, found after death in cases of diabetes, including the microscopic appearances, are reproduced in this volume and very freely illustrated. There are numerous tables of the comparative frequency of diabetes at various ages and in different countries. The general arrangement of the work is exceedingly clear, methodical, and logical. The section relating to the other constituents of urine containing sugar, seems particularly deserving of note, as containing much original matter. In the parts relating to other organs besides the nervous centres, e.g., lungs, kidneys, liver, etc., there is also much original work. We feel confident that this volume will not only sustain but greatly increase the author's reputation as an excellent clinical observer, and as a scientific as well as practical physician.

The cases from his own note-books (whether in hospital or in private practice they are clearly detailed) have evidently been studied in all their bearings, and show, as regards treatment, a full knowledge of all the remedial measures which have justified a trial in this serious and too often intractable complaint. The principal conclusions arrived at by the author are as follows.

1. Diabetes (mellitus) is a disease of the nervous system. (P. 1.)
2. "Both forms of diabetes—the slight or early kinds in which

sugar is only transmitted, ceasing from the urine when sugar and starch are withdrawn from the food; and the more severe kind in which the sugar discharged is made in the body out of albumen and the like—may equally be described as failure of the liver to make glycogen, or the due proportion of glycogen, out of what should form it. In the first instance, the liver loses its hold only of some of the superabounding glycogenic material of sugar and starch, but can deal normally with the smaller proportions presented in nitrogenous food. In the second case, the glycogenic elements from both sources elude transformation. The two kinds would thus appear to be merely different degrees of imperfection in hepatic glycogenesis; and that they are closely allied, is evident from the manner in which they pass into each other. The imperfect (or in the other view the excessive) formation of glycogen has its immediate cause in an unnatural excitement of the circulation within the liver, which may be due to direct irritation of the organ, to mechanical expedients which increase the quantity of blood sent to it, and apparently to conditions like respiratory embarrassment which prevent the free discharge of blood from it. But of all the causes which, presumably acting through the blood-vessels, excite the gland to the action necessary to diabetes, nervous disturbance is the chief. This in its nature appears to be irritation rather than interruption, analogous to that which causes tetanus; the incidence of irritation in the one case being upon the cord, in the other upon the liver. In position, the nervous irritation of glycosuria has a wide range. It may arise in many parts of the sympathetic; in the cervical region of the cord; or anywhere in that great cerebral tract which lies between the cord and the crura cerebri. The medulla oblongata contains the structures, the irritation of which causes the exaggeration of function with the greatest facility and profusion. Impressions pass thence to the liver, first through the cord, afterwards by a route which has been sufficiently defined. [A diagram of this route is given at p. 15.] This chain of communication represents the cerebro-spinal, or excitor nerve of the gland. Every gland, as Bernard first showed with regard to the salivary, has nerves of two kinds, which are derived from different sources, and have antagonistic functions, one stimulating, the other repressing, secretion. The vaso-motor nerves which belong to the sympathetic contract arteries, lessen blood-supply, and diminish secretion. The cerebro-spinal nerves accelerate circulation, dilate ducts, and excite to secretion and function. The cerebro-spinal nerve of the liver has its origin at the fourth ventricle. Irritation at or directed upon this spot, or striking the nervous chain between it and the liver, causes, if transient, temporary glycosuria; if permanent, diabetes." [Pp. 27-29.] This long extract will give a fair idea of the general style of the work.

3. The chief *post mortem* changes are—1. In the nervous system, increased vascularity in some cases, wasting, softening, minute excavations and erosions, extravasations (hence hæmatin, etc.), degenerations, sometimes miliary sclerosis, with vitrefaction and corpora amylnæa; 2. In the liver, increased size, increased vascularity, and overgrowth of fibrous elements (*hypertrophic cirrhosis* of Trousseau), and of epithelium; 3. In the lungs, not true tubercle usually, but a variety of pneumonia—chronic, circumscribed, and caseating—which rapidly leads to the formation of cavities; 4. In the kidneys, a preponderance of congestive and subinflammatory changes; 5. In other organs a general wasting prevails, notably in the heart; 6. In the blood, besides sugar, there is increased fat, more water, less corpuscles.

4. Males are most prone to diabetes.

5. It is very rare in infants, rare in children, and most common in middle life. The article by Dr. Hirschsprung of Copenhagen on Diabetes in Children, of which there is an abstract in the *London Medical Record* for February 18th and 25th, 1874, does not appear to have attracted Dr. Dickinson's attention.

6. It is often hereditary. Of this, the author gives some striking instances, and his position is greatly strengthened by the observations of Dr. Schmitz of Neuenahr. (See *London Medical Record*, January 13th, 1875.)

7. Diabetes is often traumatic. [P. 81.]

8. Mental emotions, particularly grief and anxiety, are the most frequent causes. [P. 75.]

9. There are two great clinical types, one the severe form of the text-books, often acute and rapid; the other milder, intermittent, and often harmless. [P. 97, etc.]

10. Diabetes rarely kills under six months; more often between six months and four years; occasionally it is very chronic. [P. 107.]

11. Urea appears to be always increased. [Pp. 116-120.] Chlorides are generally increased also, and so are the earths and alkaline salts in many cases.

12. Dietetic treatment is most important and most successful. A very useful diet table is given at page 131.

13. The saccharine treatment, that by "skimmed milk", and that by "ozonic ether", are all condemned; the first unsparingly. Chloral hydrate and bromide of potassium proved useless; so did belladonna, Indian hemp, and Calabar bean.

14. Strychnia is of all medicines the most constantly useful. Iron is the one remedy for diabetic œdema. Other tonics, iodide of potassium, and opium, are sometimes of great service. Though the latter sometimes cures, it more often kills. [P. 138.]

The author appears to us to rather underestimate the remedial effects of quinine, and the curative ones, if continental observers are to be believed, of alkaline waters, such as those of Vichy and Carlsbad; although the *genius loci* has doubtless much to do with their repudiated cures, still some credit must be given to the waters. No mention at all is made of carboic acid, which appears to have done good service in a certain class of cases in the hands of Ebstein and Müller.

Dr. Dickinson concludes this part with a brief, but excellent, account of the kindred disease known as diabetes insipidus or polyuria. In taking our leave of his volume, we may say, "although we have found a few faults, we have found more beauties", and are sure that both we and our readers will heartily welcome the parts which are promised to complete the work, as well as any future publications by the same author.

DISEASES OF THE HIP, KNEE, AND ANKLE-JOINTS, AND THEIR TREATMENT BY A NEW AND EFFICIENT METHOD. By HUGH OWEN THOMAS. Pp. 101. Liverpool: T. Dobb and Co. 1875.

MR. THOMAS begins by informing his readers that he will introduce them to an "efficient method of treating diseases of the hip, knee, and ankle-joints", which is a vast improvement on all the modes of treatment hitherto practised in this department of surgery; that he will explain to them "surgical appliances and details, etc., which involve radical changes of treatment, and are now for the first time made known to the medical profession".

We have looked in vain through the one hundred and one pages of the volume for a method of treating joint-diseases hitherto unknown to surgeons. We find very complete immobilisation of joints—in other words, perfect rest—insisted on; but this method of treatment cannot be looked upon as new to either surgeons or physicians. The author, however, introduces us to new surgical appliances, to which we will presently direct attention.

The preface also states "that the means usually employed by surgeons in treating diseases of those joints have rarely been followed by resolution"; and that "it is no exaggeration to assert that a majority of those cases that are benefited are but defectively cured". It appears to us that Mr. Thomas would find great difficulty in substantiating the first part of that statement, and the second part will not bear discussion.

Before describing the new machine for use in the treatment of hip-joint disease, he mentions and condemns the instruments of the following surgeons and authors: Bonnet's "grand appareil", and Charrière's modification of it; Dr. H. G. Davis's, Dr. L. Sayre's, Taylor's, Washburn's, and Dr. J. C. Hutchinson's; Dr. Andrews' and Dr. Baner's; Barwell's and Professor Hamilton's; the weight and pulley apparatus, and the long outside splint. In Mr. Thomas's estimation, those instruments are not efficient in fixing the joint. He admits that the long outside splint possesses merits beyond any others; yet he says "it has its faults, as, being applied laterally, it can only partially control the joint-movements, and the nursing of the patient is not without pain".

He alleges that his treatment "is free from the defects of all previous appliances; is cheap, and within the reach of the poorest"; "is light, and enables the attendant to nurse the patient without pain".

The apparatus, which is well adapted to its purpose, consists of a long iron splint for application behind the hip-joint, to extend "from the lower angle of the shoulder-blade" to "the extremity of the calf of the leg". To the upper end of this, a cross piece is attached to embrace the chest below the axilla; another cross piece is fixed a little "below the fold of the buttock", to half-encircle the thigh; and a third lower down, to half encircle the leg below the knee. The upright and cross pieces are severally to be carefully moulded to the limb, that excoriations, inversion and eversion, or movements, may be prevented. The upright is to be made of malleable iron, "one inch by a quarter for an adult, and three-quarters of an inch by a quarter for children". The cross pieces are to be made of hoop iron. The aid of the blacksmith is required for riveting the cross pieces, and the instrument is to be covered with basil leather by the saddler; but the moulding is to be accomplished by the surgeon, with the assistance of wrenches delineated on Plate 8.

The patient is secured in this machine by a strap and buckle at the

upper cross piece, and by bandages round the limb; but there is not any special arrangement for making extension, as in the machine for the knees. Until night-pains have ceased, the patient is to be confined to bed; but when this stage has been passed, an addition is to be made to the machine, to enable the patient to go about with the assistance of crutches. This addition consists of an iron patten to be placed under the shoe of the sound limb. We are to infer the object of this, as in Taylor's apparatus, to raise the diseased limb out of reach of the floor. Braces are, at the same time, added to the upper cross piece, to keep the machine in its place; and a bandage is passed round the pelvis, to keep the upright close to the body.

In the after-treatment, first the framework is to be left off at night, then the patient is to go about with patten and crutch only. These are to be set aside only when the surgeon is well satisfied of the permanence of the cure.

To illustrate the efficiency of this method, Mr. Thomas records ten cases of hip-disease, but does not give any statistical account of the one thousand cases of joint-disease of which he says he has had experience.

After case No. 1, the author makes a statement at variance, we believe, with surgical experience generally. "Stiff joints are not the result of too long confinement in an immovable position, but, rather, are caused by permitting movement too soon; that is, before all inflammation has subsided." That stiff joints are the result of too long immobilisation, is too often true.

Mr. Thomas states that he has used this machine to correct contractions and deformities, strongly advocates it in preference to division of tendons and forcible extension, and gives cases in illustration. The body and limbs unfold by mere position.

The last case, No. 10, is that of a lad aged 18, who was suffering from suppuration in the left hip-joint. He was fixed in the apparatus, the abscess was laid open; and, later, the head of the femur was excised, but with no permanent benefit, for the lad died twenty days after operation.

Mr. Thomas seems to ignore any classification of diseases of joints, and does not touch upon their pathology; but he dwells at some length upon a method of discovering and measuring disease of the hip-joint, upon which he has great reliance. He makes manifest the degree of flexion at the hip by means of test movements, based on the well known fact that the lumbar spines and the popliteal spaces in the healthy should be able to touch (or all but do so) the surface of a level table when the person is lying flatly on it. He estimates the duration of the disease by the amount of the flexion.

The appliance for the knee-joint consists of two parallel rods, one for the inner side and the other for the outer side of the limb; the inner should extend from the perinæum to three inches beyond the sole of the foot, the outer from a little below the crest of the ilium to the same level. The upper ends are connected by a complete ovoid ring of iron, of the same thickness as the bars, viz., three-eighths of an inch. The lower ends are connected by a cross bar, in which is a temporary staple for retention purposes. For the support of the limb, especially of the knee, a sheet of basil leather is stretched from bar to bar. The ring round the top of the thigh is to be well padded, and secured in its place by a shoulder-strap. A bandage is to be used to confine the limb in the apparatus. A patten is worn on the sound side. When the patient may bear weight on the diseased limb, a patten is substituted for the staple on the machine. This instrument Mr. Thomas has used for overcoming contractions successfully. Eleven illustrative cases are inserted. Writing of case No. 5, he says: "This patient was placed in the appliance when partially ankylosed, and retained in it for three years continuously; yet was found, at the expiration of that period, with the movements of the knee restored." Case No. 8 is even more marvellous. The same appliance is used by Mr. Thomas in treating diseases of the ankle and tarsal joints.

Under the head of ankylosis and its causes, some observations occur on the value of rest in the treatment of joint-diseases, but they do not embrace anything new. Of atrophy in these diseases, he writes that he believes (contrary to the usual teaching) "the more the muscular tissue becomes atrophied, the less will there be of spasm and consequent irritation of the joint"; for this and more trivial reasons, he deems muscular atrophy to be an advantage.

The book has been evidently written in haste. Nevertheless, it should be read by all practical surgeons.

NOTES ON BOOKS.

We do not remember that Dr. BATHURST WOODMAN'S *Address at the Opening of the London Hospital College* on October 1st, 1875 (now

reprinted by Wertheimer, London), was published *in extenso* at the time of its delivery. It is, however, a particularly interesting and pleasing composition, and on the whole, we think, the best of the addresses of the year.

We are glad to welcome Dr. PAVY'S *Treatise on Food* (Churchill) in a second edition. We took occasion to review this book on its appearance at length; and are gratified to find that the favourable opinion which we expressed of its scientific merits has been endorsed by its popularity.

DR. CAMPBELL BLACK'S treatise on the *Functional Diseases of the Urinary and Reproductive Organs* (Churchill) appears, also, in a second edition. We cannot, however, express a favourable opinion of it. It is diffuse and overwritten; and, in our opinion, does not add to useful medical knowledge.

MR. HEATHER BIGG'S title to his new venture, *The Gentle Treatment of Spinal Curvature* (Churchill), is open to obvious objection; and he has shown so much good taste and good sense in his former books, that we are surprised that this should have occurred. "The gentle treatment" appears to be eclectic; on p. 43, it is explained as "stimulus to muscular action by the adoption of some adventitious force which shall be an aid to, but not a substitute for, natural action". This is accomplished, it is explained on page 54, "by the adoption of an appliance which, while so spring-like in construction as to admit of the wearer bending the body freely or performing any amount of muscular movement, yet, at the same time, acts like the erector muscles of the back themselves, and, what is of the utmost importance, causes the hips to be tilted backwards, so as to restore gradually the normal angle of 140 deg." This appliance appears to have been improved in accordance with suggestions by Sir James Paget.

MR. H. K. LEWIS, London, publishes a third edition in a more portable form of the very useful little *Syllabus of Materia Medica* by Dr. Harvey and Dr. Davidson of Aberdeen. This selection of the more important articles and preparations gives in a very compact form a classified view of the chief articles of the *Pharmacopœia* in such a way as to indicate their properties, relative value, and doses. The present edition has also an index for practitioners.

WE note at once as a valuable addition to medical literature long desired, the issue of the first volume of the eighth edition of *Quain's Anatomy* (Longmans, London), edited by Sharpey, Allen Thomson, and Schäfer. The first volume of Quain's classic work is admirably edited and rewritten, so as to bring it up to the level of the latest knowledge, and it will quickly resume its place in the very foremost rank of anatomical text-books.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

RICHARDSON'S PHOSPHORISED COD-LIVER OIL EMULSION, AND COD-LIVER OIL EMULSION WITH QUININE.

THESE preparations of cod-liver oil are likely to prove very useful, as they are so carefully prepared that many invalids who are unable to take cod-liver oil in its usual form will find less difficulty in assimilating it in the shape in which it is offered by Messrs. Richardson of Leicester. The same recommendation would apply with equal force in the case of children for whom cod-liver oil is prescribed. The combination of quinine and phosphorus with the oil will help to enlarge the field of its usefulness in practice.

MAGNESILYNE, OR MAGNESIUM CITRATE.

MESSRS. KINMOND AND CO., of Kenilworth Street, Leamington, have forwarded to us a new preparation of magnesium citrate, to which they have given the compound title of magnesilyne. This preparation is said by the makers to contain 60 per cent. of citrate of magnesia. It effervesces freely in water, is agreeable to take, and is the nearest approximation yet manufactured to a true granular effervescent citrate of magnesia. It is also very portable; and will, therefore, we doubt not, be found useful by medical men who find it necessary to prescribe magnesia in the course of their practice.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, DECEMBER 4TH, 1875.

THE PATHOLOGICAL SOCIETY OF LONDON.

II.

IN returning to the subject of the present management of the Pathological Society of London, we have the satisfaction of knowing that the force of our recent comments is generally acknowledged, and is fully felt by many of the most prominent members and the best friends of the Society. We have laid stress upon the desirability of more careful preparation of the notes read, the preparation of abstracts in advance; of a classification of specimens so as to allow a broader method of treatment; of an attempt to give point to the statement of the points of interest in the specimens by reference to former records and to the existing views of British and foreign pathologists; of a recognition of the fact that the mere cataloguing of the histological characters of known forms of disease is no longer the function of a pathological society, although an useful exercise of the amphitheatre and the laboratory. We shall not at present further develop these views; but we desire to add a few words as to the error of supposing that clinical details have not a special interest in a pathological society. The fact is, that at present this is precisely one of the most interesting aspects of pathology; mere deadhouse pathology is for the present partly worked out. We desire to see at the Pathological Society specimens illustrative not merely of altered structure or of heterologous formation, but of the relations which such pathological conditions have to disordered function and to morbid processes. To illustrate this proposition by present examples, we should be glad to see encouragement given for the exhibition at the Pathological Society of the preparations which Sir William Gull and Dr. Sutton have for some time been collecting of "arterio-fibrosis", and a careful discussion of their characters, and of the relation of these changes to symptoms during life or to the march of disease. We should like to see there submitted to discussion the preparations by which Dr. Braidwood and Mr. Vacher have been guided in their research on the life-history of contagium, of which we are about to publish shortly the first report to the Scientific Grants Committee of the British Medical Association. We should desire to see brought there Dr. Creighton's specimens of cancer, and Dr. Klein's preparations of diseased intestine in typhoid fever. It must be obvious to all thinking persons, that the work by which pathologists can at present most aid the progress of medical science is the investigation of pathological processes, rather than the mere inspection of ultimate pathological results. No one in this country seems to have more clearly perceived this than the Medical Officer of the Privy Council; and, if we were asked to say where the most remarkable pathological investigations and altogether the best pathological work are being done, we should say outside the Pathological Society, under the auspices of Mr. Simon and Dr. Sanderson. During Mr. Simon's presidency, the Pathological Society shared for a time markedly in the movement of scientific pathological research. The great subject of the inoculability of tubercle was brought forward under his auspices; and it produced a debate, and led to a series of researches by himself, Sanderson, Wilson Fox, Andrew Clark, and others, which reflected permanent credit on English pathology, and added some valuable contributions to our knowledge of a subject of the first importance. It is to work done

under the same impulse that we owe in a great measure the valuable contributions by Dr. Sanderson to the Society's *Transactions* on some Infective Forms of Inflammation. But how strange it is that the Society at large shows little enthusiasm or interest in the cultivation of this most fruitful department of pathological work, and that it takes so rarely the initiative in bringing forward the verifactory pieces on which the greatest modern investigations are founded. With what extreme interest would the profession follow a demonstration from specimens by Professor Lister of his recent work on the relations of parasitic growth to morbid change in the fluids. Is it possible that it is thought that the last word has been said on the subject of the inoculability of tubercle, to which we have just referred? If so, a reference to recent continental work will show how unfounded is such a supposition. Who has seen the results of Dr. Creighton, Dr. Klein, or Dr. Braidwood, except the favoured few? It may be said that the Society would welcome them, if spontaneously presented. But it is precisely the duty of the President, Council, and officers of the Society to direct the labours of the Society, to invite communications which place the members in sympathy with the pathological movement of the day, and to make the transactions of the Society a true reflex of its activity.

It is curious to note how greatly one of the most important departments of pathological research is neglected there. How little do we hear of the pathology of the fluids; of chemical pathology, or pathological chemistry, as it is sometimes called. Is there such a department of pathological work, and has it any value for medical science? So far as the transactions of the Pathological Society would indicate, it might hardly be supposed to exist; or, if it exist, it can only be supposed to be of infinitesimal importance. If we hear of such fluids as the blood, the bile, or the intestinal secretions, it is only in relation to what the microscope reveals, and that is not always very instructive. This subject was raised in the Council a couple of years since, we believe, by Mr. Gay. The services of an eminent medical chemist were proffered, but rejected, and a Committee, we believe, was appointed. Where is that Committee now? What has been referred to it? How far has it stimulated or aided the researches of the Society or its members? We believe that one report was made, and that it was found that such researches involved a certain expenditure, which promised, if repeated, to be more than the Society could conveniently afford.

It is, of course, not likely that the Pathological Society of London would ever be stopped in any such matter by a want of funds. But, if any such consideration should intervene, we may be permitted to say that any research recommended by the Council to the Scientific Grants Committee of the British Medical Association could not fail to meet with a ready response. This by the way; for, irrespectively of such a question, the Pathological Society will always rise to the capacity of fulfilling any mission which it conceives itself called upon to undertake. We commend, then, to the governing members of the Society the advisability of surveying their position and that of the Society from a high stand-point. It is desirable that they should cast off the skin of routine which gradually grows up and thickens and hardens around the limbs of every official organisation, and put forth fresh efforts to make their proceedings something more than a transcript of the *post mortem* records of metropolitan hospitals. The young members, who are, we rejoice to see, flocking in every year from among the flower of the rising men at the hospitals, seeing what is expected of them, will quickly prove equal to their task, and will move out of the old lines in which they have so long been treading in solemn and funereal procession.

We are not seeking to discourage the record of rare or interesting anatomical morbid specimens, but to point out that this is not the sole or chief means of usefulness, or the one function of the modern pathologist; it is only the easiest.

To impress such a movement on the Pathological Society demands some freshness of thought, some vigour of action, and a lively sympathy and full acquaintance with the scientific movement of the day, not only in London itself, but in the provinces and throughout Europe. The chief responsibility rests with the president and secre-

taries, and collaterally with the Council. It has always been an excellent feature in the selection of officers of the Pathological Society that seniority has not been too strictly regarded. A certain proportion of very young members has always been added to the Council. To some extent, claims of early services have, however, limited the selection of presidents; and the adoption of a strict rule of a biennial tenure of office, and of the alternation of a medical with a surgical president, has tended still further to narrow the choice of a president, and to make this office one of routine duty. There have been too many examples of presidents of the Pathological Society whose pathology has long ago run to seed and flowered into large and active practice, which has estranged them from the cultivation of the science of which the president of such a working society should be an accomplished adept, rich in a perfect knowledge of all its most recent acquisitions, and in the ready perception of its present needs. Too many examples occur to the memory of the timid senior, too cautious to criticise, and too candid to discuss what he feels he hardly understands, since it is all "new since his day", and of the audacious senior, to whom everything presents itself as having been done in a rougher and a more satisfactory way a quarter of a century ago. There is no reason why the President of the Pathological Society should not be selected solely for his high present position as a pathologist, and his authority in that department of science, irrespectively of his vogue as a practitioner, or of his eminence in other departments of the medical hierarchy. We speak now prospectively, and, we think, of more than one man who ought, in the interests of the Pathological Society and of pathological science, to be president long before it is likely to "come to his turn" under prevailing collateral rules of precedence. Nor can we see why the election should not with advantage be annual, subject to the right and custom of re-election for one, two, or three years, if the president prove pre-eminently useful to the Society, just as is the rule at the College of Physicians. There may be advantages at such a society as the Royal Medical and Chirurgical in adopting some tolerably definite rules of succession, although there the effect of the system in vogue threatens to reach the *reductio ad absurdum*; but we can see excellent reasons why no rule should be adopted at the Pathological Society, except that of electing the most eminent and highly qualified president, who is willing to serve the Society zealously, and keeping him there until another highly qualified president is willing to serve. Mr. Pollock, in his opening address, expressed to the Society his opinion that a biennial term of presidency might not, in his opinion, be the most desirable arrangement. He has served his year of office with great credit, and he has, it is understood, placed himself in the hands of the Council unreservedly as to the next year. If he be re-elected, he will unquestionably do his duty well, with the amenity and kindness of character which distinguish him, and with the knowledge which is due to a long apprenticeship to pathological work in the deadhouse and museum of St. George's; but we think it better that henceforth high accomplishment in pathological research should be the main qualification for the office of President of this Society. Our remarks have, of course, no personal application of a kind which could be held to reflect upon the present president. They have a much wider and more general scope, and we desire them to be considered as an abstract argument on a subject of great importance to the progress of medical science.

THE ARMY MEDICAL DEPARTMENT.

THE dissatisfaction with the manner in which the medical duties at Aldershot and other large military stations are conducted continues unabated. The medical officers complain that they are overworked, that they are subjected to endless harassing changes of occupation, and that the patients in the station hospitals suffer from want of that thorough acquaintance with their diseases and systematic treatment, which can only be obtained when they remain throughout their illness under the observation and care of one and the same surgeon. That confusion must be created, and that mistakes must occur, in the

diagnosis and treatment of diseases under the present arrangements seem, indeed, to be inevitable. The station hospitals are called general hospitals, but the patients in them are grouped according to the regiments to which they belong. The regimental groups of patients are attended by the medical officers attached to the regiments from which they come. The medical officers attached to regiments are not unfrequently detached to undertake other duties, when fresh medical officers are sent to the regiments in their stead. Hence, as a necessary consequence, the patients who are grouped regimentally in the station hospitals, find, with each change of surgeon attached to their respective regiments, a change of hospital attendant in their own cases. All the benefits of a general hospital system which might be afforded if the surgeons were stationary, if they formed part of the staff of the station hospital, are thus destroyed; while the surgeons attached to the regiments, who have plenty of other duties to occupy their time, are unnecessarily worried by calls to the station hospitals, and feel that they have thrust upon them responsibilities which they are aware they are unable adequately to fulfil. It is not merely the discontent among the medical officers, however, that is to be deplored; the greatest mischief of this jumble of systems is the injury that is done by it to the public service. The sick soldiers cannot but suffer from it. If this mongrel system of hospital administration be the offspring of an endeavour to satisfy both those who advocate the general plan, and those who desire a restitution of the regimental plan, of military medical arrangements, it has certainly failed signally in its object. It has satisfied neither party and has irritated both. All the army medical officers appear to agree in thinking that either of the two systems pure and simple—either the regimental or the general hospital system—would be better than the present plan, which is neither one nor the other. All agree in saying that the sooner its existence terminates the better it will be for themselves and the service at large.

Although the manner in which the medical officers of the army are required to discharge their professional duties constitutes a prominent complaint among them, it is by no means the only one. The hope deferred of the new warrant, which was promised long ago, causes a feeling of more than disappointment—a feeling of deep distrust. This want of confidence in the promises of those who are placed in the highest positions of authority, and even in the terms of the published documents which emanate from them, is a state of things most deeply to be regretted. It keeps those concerned in a state of restless uncertainty, and prevents them from giving their thoughts and attention to their ordinary duties with that earnestness which alone can ensure a right and satisfactory performance of them. These sentiments of distrust are widespread; they have existed ever since the Royal Warrant of 1859 was first tampered with, and they have grown as fresh warrants, and circulars, and memoranda have appeared, each as a general rule over-riding or explaining away some of the provisions embodied in one or other of its predecessors. On the question being put to the Minister for War as to the position of surgeons attached to regiments, the reply assured the House that they were regimental officers as much as any other officers in the regiments with which they were put to do duty; yet, in practice, they find themselves regarded in them as aliens, and they find applied to them by the War Office in matters of leave on private affairs, on account of sickness, rules and restrictions which make them feel but too sensibly how little there is in common between them and their combatant brethren. The latest blow is the novel expedient of half-pay without half-pay to which we recently called attention, and of which we publish to-day further particulars. The sources of distrust and discontent among the army medical officers to which we have just alluded have formed subjects of frequent remark and remonstrance in our own pages and in those of some of our cotemporaries, both medical and military; they have been specially brought to notice by deputations from the British Medical Association; and, doubtless, they have been fully and often represented by the successive chiefs of the army medical department, whose administration of the affairs of the important

branch of the army which they have been selected to direct must be greatly hampered by the disturbed state of the officers serving under them. If we now again advert to this topic, it is because we have the strongest conviction that such a state of things cannot continue without producing more serious mischief than is apparent on the surface; that it must tend to degrade the professional character and reputation of the army surgeons, and, with diminished prestige, to lessen their usefulness in the sphere of action in which they have been placed. The position of a military surgeon ought to be one of the most honourable in the profession of surgery; it ought to be one heartily desired and keenly competed for by the best among the juniors who are about to make their start in life. In what estimation it is really held the numbers on the examination lists sufficiently show. For the sake of the army, we trust that those in power will not be much longer before they wake to the necessity of placing the medical department in a less unenviable position than it holds at present in the eyes of its own officers and in those of the outside public.

PROFESSOR MARSHALL, F.R.S., commenced his course of lectures on Anatomy at the Royal Academy, Burlington House, on Monday last, before a large and distinguished audience.

WE are requested to state that the date of Dr. Sibson's second Harveian Lecture has been unavoidably altered to Thursday, December 9th. The first lecture will take place, as announced, on December 2nd.

THE *Tabellon Medico* of November 21st quotes from *La Correspondencia* the statement that a young man from Alcozer, twenty-six years of age, and 2.80 metres (9 feet 2¼ inches) in height, named Augustin Luengo Capilla, has been presented to his Majesty the King of Spain.

THE late Professor Jüngken, of the University of Berlin, has bequeathed his collection of instruments to the Augusta Hospital of that city. A letter of thanks has been addressed to his widow by the Empress Augusta.

A SERIES of lectures on Unhealthy Trades will be delivered before the Society of Arts by Dr. B. W. Richardson, who has been appointed by the Council of the Society to make special inquiry into the subject. These lectures will be delivered on Friday evenings, commencing on December 3rd.

A LARGE ship, says the *Pall Mall Gazette*, arrived in the Victoria Docks on Saturday with six or seven cases of scurvy on board; and an official inspection was immediately ordered by the Marine Department of the Board of Trade. This is the eighth arrival with cases of this disease during the past three months.

HERR JOSEPH TÜRK, court-jeweller in Vienna, who died on June 20th, has, in memory of his brother the late Professor Ludwig Türk, bequeathed the residue of his estate (after legacies to his sister and others) to found a stipend or bursary in the University of Vienna for students of medicine, without distinction of religious creed. It is expected that the stipend will be a valuable one.

MR. STEPHEN ALFORD has issued a brief popular statement on the subject of Drink-Craving and the necessity for repressive legislation, which will, we hope, assist to form public opinion in favour of such legislation. The subject will, we hope, be vigorously prosecuted by the Committee of the British Medical Association formed at Edinburgh, and by the Branches which have shown an interest in it.

FOR the appointment of Chancery Visitor in Lunacy, rendered vacant by the resignation of Dr. Bucknill, there are already several candidates in the field, amongst whom are mentioned Dr. Crichton Browne of the West Riding Asylum, Wakefield, Dr. Orange of Broadmoor, Dr. Sherlock of Worcester County Asylum, Dr. Sheppard of Colney Hatch Asylum, and Dr. Sibbald, Deputy Commissioner of Lunacy in Scotland.

H.R.H. THE PRINCE OF WALES.

OUR special correspondent with the party of H.R.H. the Prince of Wales, writes to us under date November 8th, from H.M.S. *Scaphis*:—"We are at Bombay all safe and well. We have had a very fine passage from Aden; cool north-east breeze and ports open all the way. The thermometer fell to 79-80 degs. when we left the gulf of Aden, and it has risen again since we get near Bombay. The heat has been so tempered by the breeze that we have not been incommoded. H.R.H. the Prince of Wales is in excellent health, and so is every member of the suite and the servants. On the whole, so far, our voyage has been most propitious. The Prince bears the heat remarkably well, and it is no exaggeration to say that he is as strong as, if not stronger than, any of his suite. We land this afternoon, and no doubt we shall feel it rather hot; but every care will be taken to avoid overfatigue or exertion, and there is reason to hope that no inconvenience will result. I am sure every one will be glad to know that His Royal Highness is so well."

THE DEATH OF MRS. CHILDERS.

A VERY few words seem necessary *à propos* of the painful calamity of the sudden death of Mrs. Childers, from the inhalation of chloroform self-administered. They are the more necessary, that two deaths, equally sudden and sad, were recorded last week from the use of chloral—solidified chloroform—self-prescribed by its victims. Medical science, in bringing these divine narcotics to the relief of human suffering, has conferred a boon, which, inestimable as it must be considered, is liable to great abuse. It should never be forgotten that of the three most potent anaesthetics now known, ether, nitrous oxide, and chloroform, the last is by far the most dangerous. It gives death suddenly, mysteriously, and often when least expected on *à priori* grounds. The medical practitioner who administers chloroform, either by inhalation or in the solid form as chloral, incurs a great responsibility, of which he is conscious and of which he is able to measure the extent; the unskilled person who indulges in these narcotics for the relief of pain, or as a nervous sedative, on his own responsibility, takes an unmeasurable risk, of which the fatal consequences are but too often shown publicly by sudden death; while the more subtle mischiefs which they produce, though less liable to occasion startling public catastrophes, are not the less widely observed by medical practitioners. The unauthorised use by unskilled persons of dangerous anaesthetics is a practice fraught with the utmost peril.

CAPTAIN MONTAGU.

WE are pleased to learn that Captain Montagu is progressing most satisfactorily. The wound in the eyelid is healed; the pupil is small, and active under the influence of light; there has never been a trace of inflammation in the eyeball; and Mr. Critchett sees no cause to fear that the shot may be still in the eye. All the evidence points to the conclusion that it is not there. There is considerable impairment of vision, probably due to the extravasation of blood into the vitreous chamber, which, it is hoped, may be gradually and completely absorbed.

THE WAINWRIGHT CASE.

THE protracted nature of the proceedings at the Central Criminal Court in the trial of the Wainwrights for the murder of Harriet Louisa Lane, renders it impossible for us to give in this week's impression a scientific review of this remarkable case. In the mutilation of the body, it resembles the case of the woman Brown, for the murder of whom a man named Greenacre was tried and convicted in 1837. On this occasion, the body of the murdered woman was cut into three portions—the head was found at Paddington, the trunk in the east of London, and the limbs, six weeks afterwards, in the district of Camberwell. The identity of the body was clearly made out in spite of this attempt to defeat justice. In the Wainwright case, the evidence shows that an attempt had been made to dispose of the body by burying it under the floor of a room, a quantity of chloride of lime being thrown over it

and freely mixed with the earth of the grave. This was the mode in which the Mannings, husband and wife, disposed of the body of a man named O'Connor, of whose murder they were convicted at the Central Criminal Court in 1849. These criminals used oil of vitriol and unslaked lime in burying the body, with a view of causing rapid decomposition. According to the evidence given in the Wainwright case, a large quantity of chloride of lime was used for the purpose, as it is suggested, of destroying the smell likely to arise from the putrefying remains, and concealing the crime. The attempt thus made to conceal an atrocious act of murder has signally failed. Assuming the correctness of the general and circumstantial evidence laid before the Court during the last week, this crime has been accompanied by circumstances which only find a parallel in the former proceedings of the thugs in India, so well described by Captain Meadows Taylor. The unsuspecting victim, while feeding with the assassins one on each side of him, was within a short distance of the grave in which his body was to be laid. The digging of the grave went on while he was engaged in friendly converse with his hospitable murderers! According to the evidence adduced for the prosecution in the case of the Wainwrights, the grave had been deliberately prepared for the victim, and the chloride of lime had been already purchased as an aid to concealment. The medical evidence presents a number of important features which are likely to render this a leading case in medical jurisprudence. We reserve our comments on this evidence until next week.

MADemoiselle DÉJAZET.

OUR Paris correspondent wrote, under date Paris, November 28th, 1875:—"You will be sorry to learn that Mademoiselle Déjazet, the celebrated *artiste* and *comédienne*, is lying dangerously ill from an attack of pleurisy. She has been already twice tapped, and her medical attendant had entertained great hopes of her recovery, but she has just had an attack of inflammation of the throat, which is looked upon as a serious complication, as she is unable to swallow any food or medicine. Mademoiselle Déjazet is about seventy-five years of age, and it is said that, feeling her end is drawing nigh, she has asked to receive the last rites of her church, observing at the same time, although she has not lived altogether as a Christian, she would not like to die as a heathen!" The death of Mademoiselle Déjazet was announced on Thursday.

MEDICAL MISSION IN EAST AFRICA.

EARLY in July last, a dispensary was opened at Mombasa, on the east coast of Africa, under the superintendence of Mr. E. W. Forster, M.R.C.S., an agent of the Church Missionary Society. Up to the end of September, the number of persons who attended it was 563, and the medical officers had been called upon to treat others at their own homes. This dispensary supplies a great want, for the natives are quite ignorant of scientific medicine and surgery. The *m'ganga*, or medicine men, of the Swahili tribe, form a secret society, using certain empirical methods of practice, but relying chiefly in serious cases upon their charms and incantations. Some of their methods are reasonable enough, though carried out in a rude fashion. Thus, they employ the actual cautery in chest-complaints and in articular rheumatism. The mode in which they apply it is with the broad head of a large nail, the number of the applications varying with the intensity of the pain. It is no uncommon thing to see the chest spotted with twenty or thirty hard fibrous scars, the result of this treatment. Wood-ashes are given in heartburn and acidity. Ginger is ordered to be chewed for flatulence; and sulphur, mixed either with water or with semseem oil, is applied externally in skin-diseases. Bluestone is applied to ulcers. Bleeding is practised by free cutaneous incisions, and sometimes cupping is employed by applying a horn over the incisions, the air being exhausted by the operator's mouth. This remedy is used for headaches and for ophthalmia, in which latter case the operation is performed on the temples. Warm baths are prescribed during convalescence from fever. The Swahili appears to be unacquainted with purgative medicines, and the use of emetics. In fractures of the long

bones, they apply a rude form of splint; but, as the patients are very restless, they often remove it at the end of a fortnight, and the result is seen in distorted limbs. The attendance at the dispensary during the first three months of its existence shows that its value is appreciated. Mombasa is near Frere Town, the settlement which is now being formed for the reception of rescued slaves, and as a means of aiding in the suppression of the East African slave trade. The importance of a medical establishment in such a locality is obvious; and it seems probable that, at no distant date, the requirements of the settlement will lead to the formation of a central dispensary at Frere Town, of which the Mombasa dispensary will be a branch.

THE BLANE MEDALS.

ON the recommendation of the Presidents of the Royal Colleges of Physicians and Surgeons, London—viz., Sir George Burrows, Bart., and Sir James Paget, Bart.—and of the Director-General of the Medical Department of the Royal Navy, Sir Alexander Armstrong, the undermentioned medical officers of the Royal Navy have been awarded the Sir Gilbert Blane Gold Medals; viz., Fleet-Surgeon Timotheus James Haran, L.R.C.S. Ireland, 1849, of H.M.S. *Glasgow*, 1874; and Staff-Surgeon Richard Eustace, M.R.C.S. Eng., 1853, of H.M.S. *Himalaya*, 1873.

THE FREE MEDICAL SCHOLARS OF EPSOM.

A SOMEWHAT novel, and among medical men, as far as we know, an unprecedented mission, has been carried out by the acting treasurer of the fund now being raised to establish free scholarships at Epsom College. Dr. Carr has paid a visit to Liverpool and Manchester, bringing before his medical brethren and the public the claims of these scholarships. From several sources, we learn that he has been well and successfully received, the fund largely benefiting thereby. Still further contributions are required; and we shall be glad if this appeal of ours induce any who have not yet responded to do so, in order that the required amount of £7,000 may be completed. Already, nearly £5,000 has been funded in the names of three trustees; consequently, little more than £2,000 is required. The late Sir James Clark, who contributed liberally to the fund, suggested that every member of the profession should give £1 is.

THE NEW EXAMINING BOARD AT THE LONDON COLLEGE OF SURGEONS.

IN reply to the official notices which have appeared from the Council of the Royal College of Surgeons of England, inviting its Fellows to become candidates for the membership of the Board of Examiners in Anatomy and Physiology, the following gentlemen have responded to the call. The authorities will have no difficulty in selecting from the long list the required number. Taking them in alphabetical order, they are: Mr. James E. Adams, Assistant-Surgeon and Demonstrator of Anatomy at the London Hospital, Fellow of 1869; Mr. W. Marrant Baker, Assistant-Surgeon and Lecturer on Physiology at St. Bartholomew's Hospital, Fellow of 1864; Mr. Thomas H. Bartleet, Surgeon to the General Hospital, and Professor of Physiology in Queen's College, Birmingham, Fellow of 1871; Mr. Richard Barwell, Surgeon and late Lecturer on Descriptive and Surgical Anatomy at the Charing Cross Hospital, Fellow of 1853; Mr. Edward Bellamy, Assistant-Surgeon and Lecturer on Anatomy at the Charing Cross Hospital, Fellow of 1870; Mr. J. N. C. Davies-Colley, Assistant-Surgeon and Lecturer on Anatomy at Guy's Hospital, Fellow of 1870; Mr. Arthur E. Durham, Surgeon and Lecturer on Surgery at Guy's Hospital, Fellow of 1860; Mr. George G. Gascoyen, Assistant-Surgeon and Lecturer on Surgery at St. Mary's Hospital, Fellow of 1858; Mr. Christopher Heath, Surgeon and Holme Professor of Clinical Surgery at University College Hospital, Fellow of 1860; Mr. H. G. Howse, Assistant-Surgeon and Lecturer on Anatomy at Guy's Hospital, Fellow of 1868; Mr. John Langton, Assistant-Surgeon and Lecturer on Anatomy at St. Bartholomew's Hospital, Fellow of 1865; Mr. Benjamin T. Lowne, Lecturer on Physiology at the

Middlesex Hospital, Fellow of 1873; Mr. Jeremiah McCarthy, Assistant-Surgeon and Lecturer on Physiology at the London Hospital, Fellow of 1873; Mr. Francis Mason, Assistant-Surgeon and Lecturer on Anatomy at St. Thomas's Hospital, Fellow of 1862; Mr. Henry Morris, Assistant-Surgeon and Lecturer on Anatomy, Middlesex Hospital, Fellow of 1873; Mr. Arthur T. Norton, Assistant-Surgeon and Lecturer on Anatomy, St. Mary's Hospital, Fellow of 1867; Mr. Thomas W. Nunn, Surgeon, and formerly Lecturer on Practical Anatomy, Middlesex Hospital, Fellow of 1857; Mr. Urban Pritchard, Lecturer on Physiology at King's College, Fellow of 1872; Mr. Walter Rivington, Surgeon and Lecturer on Anatomy at the London Hospital, Fellow of 1863; Mr. W. W. Wagstaffe, Assistant-Surgeon and Lecturer on Anatomy, St. Thomas's Hospital, Fellow of 1868; and Mr. John Wood, F.R.S., Surgeon to King's College Hospital, and Professor of Surgery in King's College, Fellow of 1854. It will be seen that Birmingham is the only provincial town sending a candidate, and that neither of the following metropolitan hospitals have sent one, viz., St. George's and the Westminster; whereas Guy's, the London, and Middlesex Hospitals send three each; St. Bartholomew's, St. Thomas's, St. Mary's, King's College, and the Charing Cross, send two each; and University College one candidate. At present, the following are the representatives of metropolitan hospitals on the Court of Examiners; viz., Mr. J. Birkett, the Chairman, and Mr. J. C. Forster, of Guy's; Messrs. L. Holden and W. S. Savory, F.R.S., of St. Bartholomew's; Messrs. John Marshall, F.R.S., and J. E. Erichsen, of University College; Mr. F. Le G. Clark, F.R.S., of St. Thomas's; Mr. T. B. Curling, F.R.S., of the London; Mr. H. Spencer Smith, of St. Mary's; and Mr. Timothy Holmes, of St. George's. The election is looked forward to with much interest; and at the last moment, we understand, it will be competent to nominate other candidates for election in addition to those now published.

COMMON SENSE ON CONTAGION.

MRS. FRANCES HOGGAN, M.D., appears to have told some home truths to the lady agitators for free trade in contagious diseases at the recent Annual Meeting of their Central Executive Committee, which took them by surprise, and were very far from welcome. Speaking of the arguments which they used, "showing that they were determined to have no legislation on this question, but to leave the plague to carry unchecked its own punishment upon guilty and innocent alike", she described them as "appalling". Speaking of "moral and religious grounds" on which they oppose these Acts, she described them as "untenable"; and added, on the subject of "injustice to women": "While the inequality in the application of these Acts is to be condemned, we must not forget that there is such a difference in circumstances as to make any equality in the form of the application of these Acts to both sexes alike almost impossible." As a physician, she was "forced to look upon syphilis as a contagious disease to which all the plans for stamping out all other contagious diseases ought to be rigorously applied". Finally, on the subject of examinations by the speculum, she said:

"I believe that, if care were taken in the choice of the medical inspectors, and that if evidence of an unquestionable kind were required as to the fact of prostitution in the women, those latter ought not to be regarded as aggrieved persons. The womanly sensibilities of prostitutes are blunted; and it is an indubitable fact that women of the class referred to have already lost that delicacy of feeling which it is customary to speak of as being violated by the examination to which they are forced by law to submit themselves. The examination is not designed to be an outrage, but is the natural and ordinary method of ascertaining the presence of disease and applying the remedies prescribed for its cure. Respectable women, who innocently become infected with these diseases, are obliged to put themselves voluntarily under the same treatment. It is agreed that the compulsion exerted is here the grievance; but it seems to be forgotten that the women in question are exercising a lucrative trade, which to respectable women is repulsive beyond the power of words to express, but which, in the majority of cases, is not repulsive to themselves. In as far as it is a trade which may spread disease, these carriers of disease naturally fall

within the jurisdiction of good government; just as people carrying on offensive trades, such as chemical works, are likewise placed under control, and they have, therefore, no claim to escape control of a reasonable nature, and to injure with impunity the health of the community."

Mrs. Hoggan's objection to the Acts is that they are incomplete and incompetent for the purpose to which they are applied. Her view is that, if Government is to help us at all effectually in this matter, it must be by making the communication of venereal disease knowingly to any human being a crime against the person. In that view, we entirely concur; it would be a further progress in the direction of stamping out the contagious diseases, which these Acts are intended to restrict. Until such further legislation is agreed upon, however, we shall be sorry to see the Contagious Diseases Acts abolished. Mrs. Hoggan's very sensible speech appears to have been particularly unpalatable to her hearers. If they were at all accessible to reason, however, they might learn a most useful lesson from it; and might so modify their programme as to leave a hope that they might one day achieve some good in place of the harm that they are now doing, and the still greater harm which they are trying to do.

THE EVELINA HOSPITAL FOR SICK CHILDREN.

A CORRESPONDENT writes to us:—Every one who is interested in children's hospital management should visit the Evelina Hospital in the Southwark Bridge Road. Visitors will find much to praise and admire, and little to criticise. Good and economical management, perfect order and comfort, complete sanitary arrangements, all combine to make this hospital worthy of special notice. At the Evelina, the serious errors which many children's hospital managers have committed have been avoided. For instance, at some hospitals, the children's wards are more like drawing-rooms than sick-rooms, and the convalescent playroom is furnished with a luxury more suitable to a royal nursery than to one for the sick children of the poor. We have seen patients decked out in the cast-off clothes of the young nobility, and made to feel, by the luxurious treatment they received at the children's hospital, that it is better to be sick and at ease in a hospital, than healthy and wretched at home. All these abuses have been avoided at the Evelina; and we could wish that they were everywhere abolished from children's hospitals, and that all these institutions would adopt in their place the simple homely comforts of the cottage. The eye of a visitor who is at all familiar with the scene usually presented by the ward of a children's hospital is at once struck with the simplicity, neatness, and comfort of all the arrangements at the Evelina. The bright happy faces of the children tell their own tale; and we are not surprised to hear that this hospital is so popular amongst the poor, that the urgent and numerous applications for admission render it necessary that forty extra beds should be opened. To meet this increased expense, the Committee require £1,500; and we commend this useful work to the warm sympathy and support of all who are able to give, in the hope that they will place, at any rate, a portion of their Christmas offerings at the disposal of the Committee of this useful hospital.

A DEARTH OF SUBJECTS.

WE never remember any season in which the complaints were so numerous of the great dearth of subjects for dissection in the anatomical rooms of the metropolitan hospitals. The state of things which a "St. Thomas's Student" describes as prevailing there, exists, we believe, throughout the metropolis. There is not, we hear, one school which has yet received more than half enough subjects to set the students at work; and those which have a fair stock of material for half the men wanting to dissect, owe most of their subjects to the provision by which the managers have injected antiseptically bodies during the autumn. We call the attention of the Inspector of Anatomy to this subject; as the grumbles against his assumed neglect of the interests of the schools in not looking up the unclaimed bodies in hospitals and workhouses are loud and general. We have no doubt that Mr. Charles Hawkins has a good explanation of the scarcity; but a little activity in following up his subordinates, and in seeing that all the unclaimed bodies

are really forthcoming, would be very acceptable. A few bodies for each of the schools would be more acceptable than any other response to the grumble. Anatomical studies are sadly interfered with, and are very backward this year, in consequence of the dearth of subjects.

ANTI-VACCINATORS.

At a meeting of the Keighley Board of Guardians, held this week, Mr. Crabtree, one of the anti-vaccinating majority, proposed a resolution in respect to the writ of mandamus issued against the guardians by the Court of Queen's Bench, declaring that the time had arrived when no further resistance to the writ of mandamus should be made by the board, but that they accept the decision of the Court of Queen's Bench, and carry out the compulsory clauses of the Act. The motion was carried; the Chairman and three anti-vaccinating members only voting against it. Mr. Crabtree then also proposed that the vaccination officers of the union be instructed to produce their books at the next meeting, with a list of vaccination defaulters, with a view of carrying out the compulsory clauses of the Act. This motion was seconded and carried; the Chairman and two others only voting against it.

RECENT DEATH-RATES FROM PULMONARY DISEASES.

DURING the week ending November 6th, the temperature of the air second week of November it was 43.0 degs., or 0.6 deg. below the average; in the third week 45.8 degs., or 3.8 degs. above the average; at Greenwich it was 48.2 degs., or 1.4 degs. below the average; whilst last week it was 36.0 degs., or 5.7 degs. below the average. In the first of the above weeks, the deaths in London from diseases of the respiratory organs were 322; in the second week they were 349; in the third week 371, or 38 below the corrected average of the week; and last week they were 374, and 73 below the average. Of these 374 deaths, 218 resulted from bronchitis, and 108 from pneumonia, differing but slightly from the numbers returned in the previous week. So far, therefore, the table in the returns which is mainly influenced by cold weather, exhibits a satisfactory condition; but it must be remembered that the temperature of the early part of November was above the average, and the effects of the recent cold are not yet apparent in the death returns. It is to be feared that the severe frost of the last few days will no longer permit the deaths from the above-mentioned class of diseases to remain below the average.

UNUSUAL AMENITIES.

AN unfortunate collision on the Great Western Railway has not only resulted in the death of a guard, but has led to a curious and most unusual medical episode. The accident happened at 8.30 P.M., and the poor guard was not released from his shattered van for twenty minutes. Dr. Maclean of Swindon happened to be a passenger by the train, and saw the man as soon as he was extricated from the *débris*. He then conveyed him to the station, and thence to the Angel Hotel at Chippenham, where he stayed with him till after one o'clock in the morning. Dr. Maclean stated at the inquest that death was caused by exhaustion and shock. Mr. Briscoe of Chippenham gave similar evidence. What follows is taken *verbatim* from the report of the proceedings in *Keene's Bath Journal*.

"Dr. Jay and Mr. Stiles, who were on the jury, thought that Mr. Harrage, who, with Mr. Spencer, also attended the deceased, ought to be called, as there was a rumour in the town that a difference of opinion arose between the medical men as to the advisability of amputation. The coroner and jury dissented from this opinion."

Both the medical witnesses above mentioned were rigidly questioned by Dr. Jay, who had armed himself with several books respecting medical practice. Dr. Jay appeared to think that the leg of deceased ought to have been taken off at Chippenham Station, instead of his being "removed in an omnibus to the Angel Hotel. In support of this view, extracts were read from medical authorities, and a lengthy examination, in the face of the impatience of the coroner and jury, was gone into with respect to the nature, position, and action, in case of fracture, of certain arteries and veins; in fact, the discussion would have been

highly edifying for a class of medical students. Medical men, like lawyers and clergymen, are exempt from serving on juries, and, therefore, the voluntary presence of two or three on one lasting all day speaks well for the health of Chippenham. Dr. Jay endeavoured to show that the injuries to the calf of the leg (a compound comminuted fracture) were such that, in spite of the pad which Dr. Maclean had placed over the wound, and the bandages he had applied to stop the hæmorrhage, there might have been internal bleeding to such an extent as to induce greater weakness than was incidental to the accident. In reply to these inquiries, Dr. Maclean pungently replied that he had "passed his examination once", and stoutly maintained that no bleeding of consequence occurred after his bandages had been applied. He added that, as the case had been given into his charge, he would never have given his consent to the use of the knife, as, from the feeble state of the pulse and the general state of collapse exhibited by the injured man, he should have looked upon amputation as nothing short of manslaughter. He admitted that deceased was sensible, and up to the time he left him; but maintained that, apart from the injuries he had sustained, his age (63) would have been greatly against the success of an amputation. In questioning Mr. Briscoe, Dr. Jay directed his examination principally towards ascertaining the effect of the use of the tourniquet, and appeared to imply that the instrument could not check the flow of blood from all the arteries, especially as the bone was badly splintered, and the arteries ran closely adjacent to the bone. To this Mr. Briscoe replied that the best evidence of the effectiveness of the tourniquet to prevent the hæmorrhage in this instance was that no blood flowed. Had it done so, he should have been aware, as there was an open wound. He added that the four medical men (and he warmly acknowledged the skill of Dr. Maclean, and his courtesy, and also that of Messrs. Harrage and Spencer) were unanimous in their opinion that the amputation would hasten the danger to life, as the pulse was so low." The man died the day after the accident. Unless the *Bath Journal* has misstated or garbled the facts in a way not customary in the press of this country, they would seem to admit of little explanation, and to require but little comment. The supreme law of public safety does sometimes require us to prove the malaproxia of one of our fellows. It may even, in rare cases, demand that one of us should draw attention to such malaproxia. Neither position is one which would be sought by any man of proper feeling towards his brother practitioner, or who was really jealous of the honour of our honourable profession. What, then, can we think of the conduct of Dr. Jay, the ringleader in this attack, or of Mr. Stiles, his abettor? They found themselves on the coroner's jury. We do not know the custom of the Chippenham coroner, or of his summoning officer, but we can only say that in other places it is not usual to find two surgeons figuring in such a capacity. Being there, what did they? Intimated that the amount of collapse was not so great as to render amputation an impropriety. Probably they are the only two surgeons in England who would not admit that this is a question to be decided only by those who see the patient. They further insinuated that the measures adopted to prevent loss of blood were inefficacious; to which the answer on oath was, that they did, as a matter of fact, stop the bleeding. Lastly, they suggested that there was a difference of opinion as to the propriety of amputation. This, again, was on oath point blank denied; and any questions on this point should have been asked first, if at all, and no further criticism suggested by the medical jurors when it appeared that the four surgeons who saw the patient agreed in the propriety of non-interference—an opinion which the speedy death of the patient amply justified. We are thankful to say that such an exhibition as that of these two surgeons is as rare, and we trust that it may be long before we have to report its fellow.

THE INOCULABILITY OF TUBERCULOSIS.

THE adversaries of the doctrine of the inoculation of tuberculosis increase and multiply. At the recent Medical International Congress at Brussels, Professor Crocq strongly attacked several points in M. Ville-

min's doctrine, and, at the meeting of the Academy of Medicine on November 16th, Dr. Metzger continued the onslaught. Some months since, M. Metzger read a memoir before the Academy, in which he set forth the result of his first experiments on the non-inoculability of tubercle. The second memoir, to which we now refer, is the affirmative and extended complement of the first. Dr. Metzger has chiefly devoted his memoir to the demonstration of these two points. 1. The inoculation of tuberculous matter produces a change which differs entirely from tubercle. 2. The inoculated animals which withstand these changes, and which are allowed to live for six months after, do not at the end of that time show any local or general lesion. Dr. Metzger bases his demonstrations on one hundred and thirty experiments performed on rabbits. A committee of seven members of the Academy has been appointed to examine and report on M. Metzger's memoirs, and to decide the important question of the inoculability and specificity of tuberculosis.

INTERMITTENT WATER-SERVICE IN NEW SOUTH WALES.

A DOCUMENT has recently been ordered to be printed by the New South Wales Legislative Assembly relating to the unsatisfactory nature of some portions of the Sydney water-supply; and it is satisfactory to note that the experience as to the danger of intermittent water-services which has been so dearly bought in this country, and yet so little taken advantage of, is being made use of by our colonial brethren. Professor Liversidge, to whom the subject was referred, found that various samples of water taken at different points in the city were "most grossly contaminated with faecal matter"; and he stated that this form of pollution was due to the high-pressure service, associated as it was with the practice of nightly allowing a reservoir to run empty, by which process the intermittent system of supply was ensured. Pollution of water arising from this circumstance is the more insidious, because, as Professor Liversidge remarks, it may only occur at a few scattered points along the mains; and, in some cases where a sample drawn for chemical examination is at one time found to be wholesome, it is quite possible that another sample drawn from the same spot a few minutes later might exhibit signs of serious contamination. Further investigation is promised as to the exact manner in which the alteration in the quality of the water takes place during its passage through the mains; and in the meantime Professor Liversidge, referring to the experience gained in this country, both during the late epidemic at Lewes and also at Hull, lays it down as indispensable conditions that the water-supply must be constant, and that the water-closets must on no account be allowed to be connected with the water-mains without the intervention of cisterns. We trust that before this the recommendations made have been complied with, and that Sydney is no longer liable to suffer from this serious, though easily remediable, source of danger.

HEREDITY IN TWINS.

AT the meeting of the Anthropological Institute on November 9th, Mr. Francis Galton read a paper on this subject, of which the following is an abstract. He said that, on comparing the number of twins found among the uncles and aunts of twins with those found in similar classes of society generally, it appears that twin-bearing is hereditary, in so far that there is in excess per cent. of three individuals of twin birth in the former group. It further appears, that the male and female lines contribute the twin-bearing tendency in identical proportions. The families are very large in which twins are born; even those of their parents average nearly seven persons, but the twins themselves appear neither to marry so frequently nor to be so prolific as other persons. However, the common belief that both twins are in no case fertile is quite untrue. Starting with the generally admitted view that the body consists of a multitude of organs and parts of which is to a certain degree independent of the rest, and with certain postulates which that view implicitly recognises, there exists, according to Mr. Galton, a firm basis on which to establish a theory of heredity. By these and their necessary consequences, the object of double parentage, and

therefore of sex, was first explained by the likeness and dissimilarities observed between brothers and sisters, and the still more remarkable similarities and contrasts between twins of the same sex, were then accounted for. It was argued that the germs which were selected for development into the bodily structure had very small influence in an hereditary point of view, but it was those germs that were never developed but remained latent, that were the real origin of the sexual element; by this hypothesis the almost complete non-transmission of acquired modification was explained; also the occasional fact that strongly marked characteristics in the parents were sometimes barely transmissible; and, again, that of certain diseases skipping alternate generations. It was further supposed, in the successive segregations and segmentations of the earliest germinal matter, that the divisions were never precise, and therefore that alien germs were ultimately included in each structure; thus latent germs of all kinds became distributed over all parts of the body. This accounted for much that Mr. Darwin's theory of Pangenesis overaccounted for, and was free from objections raised against the latter. The assumed evidence that structural changes under modified conditions of life reacted on the sexual elements was then discussed, and it was pointed out that much that had the appearance of heredity was not so in fact, but was due to changes of the sexual elements collaterally with the structural ones. A modification of Pangenesis was adopted, as a subsidiary part of the main theory, to account for the occasional and limited transmission of acquired modification. The precise character of the relationship that connects the offspring with the parents was then defined.

SCOTLAND.

WE understand that, after examination, the Sibbald Medical Scholarship at the University of Edinburgh has been awarded to Mr. Charles Begg.

THE Edinburgh water-supply has again risen to the average quantity, there having been a rise during the past fortnight in all the reservoirs. The delivery has been accordingly increased, and is now at the rate of 26.53 gallons per head daily to a population of 275,700.

AT the last meeting of the Royal Medical Society of Edinburgh, the following gentlemen were elected annual Presidents; Dr. A. Turnbull, Dr. T. Ronaldson, Dr. A. Coldstream, and Dr. T. Wilson.

EDINBURGH OBSTETRICAL SOCIETY.

AT a meeting of the Edinburgh Obstetrical Society held on Wednesday, November 24th, the following gentlemen were elected office-bearers for the next two years. *President*: Professor A. R. Simpson. *Vice-Presidents*: Dr. James Young, Dr. Alexander Milne. *Treasurer*: Dr. William Craig. *Secretaries*: Dr. Charles E. Underhill, Dr. James Carmichael. *Members of Council*: The Office-Bearers, Dr. Angus Macdonald, Dr. Robert Bruce, Dr. John Burn. *Librarian*: Mr. J. Jamieson.

MALIGNANT PUSTULE.

A CASE of malignant pustule is reported as having occurred in Galashiels, and as being under treatment at the poorhouse. The patient is a girl fourteen years of age, and was in the service of a cowfeeder in the town, whose cattle had been affected with foot-and-mouth disease. It is conjectured, though not affirmed, that the disease was contracted from the affected cows.

BURRISLAND WATER-SUPPLY.

THE result of the poll taken at Burrisland as to whether the Town Council shall proceed with the Dour water scheme was declared last week, when the ayes were found in a majority of eighteen only. The Council resolved to ask the Board of Supervision whether they were justified in proceeding with the scheme on so narrow a majority,

and to be guided by their advice. On Saturday last, an answer was received from the Board of Supervision, advising the Local Authority to proceed without delay with the steps necessary for introducing a supply of water in terms of the report of their engineer. The letter continues, "It is the statutory duty of the Local Authority to provide a sufficient supply of wholesome water for the use of the inhabitants, and no vote of the ratepayers, or of any section of them, can absolve the Local Authority from the obligation thereby imposed upon them to execute the Act". The Local Authority of Aberdeen have written to the Burntisland Town Council, requesting a conference as to their participating in the proposed supply.

SURGEONSHIP OF THE EDINBURGH COUNTY PRISON.

THE appointment of Surgeon to the Edinburgh County Prison has become vacant by the resignation of Dr. James Simson, who has held the office for forty years. There are a number of candidates in the field. The emolument connected with the appointment is £200 a year.

THE WATER QUESTION AT DUNFERMLINE.

AT a special meeting of the Dunfermline Town Council, it was unanimously resolved to approve of the action of the waterworks committee in taking the necessary preliminary steps they have already done towards procuring an Act of Parliament during the ensuing session for obtaining an additional supply of water to the town from the district of Glenderson; and, secondly, to instruct the committee to take such further measures as they may deem necessary to obtain an Act in accordance with the plan of the engineers.

EXPENSES UNDER THE FOOD AND DRUGS ACT IN GLASGOW.

DAVID FERGUSON, milkseller, Glasgow, appeared before the Sheriff on November 24th, charged, under the Sale of Food and Drugs Act, 1875, with having sold either adulterated milk, or milk from which the cream had been removed. The summons concluded for a substantial penalty with expenses, but his Lordship said he suspected that the prosecutor, who was in the present instance Inspector of Nuisances, could not claim expenses. When a summons was raised under an Act of Parliament, it had to be considered along with the Summary Procedure Act, the 64th section of which provided that costs should not be awarded either for or against the prosecutor. The charge was found proved, and the Sheriff imposed a penalty of £2, with the alternative of twenty days' imprisonment.

GLASGOW WESTERN INFIRMARY.

THE first annual meeting of this hospital was held on November 25th; and, on the whole, the report was favourable. It was intimated that the ordinary income was £1,399 less than the expenditure; but this had been more than met by a special effort, by which £3,736 was collected. It should also be remembered that the hospital was opened very suddenly a year ago, and the expenditure began without a penny having been collected to meet it. There is no doubt that in future sufficient funds will be forthcoming. The number of patients treated in the wards during the year is 1,400; and, as the accommodation has this month been increased to over two hundred beds, this number will probably be considerably exceeded next year.

FEVER AND MILK.

WE are glad to see that the suggestions of the Police Board of Glasgow as to precautions against the spread of fever by milk have been approved of by the Board of Supervision. They have issued a circular recommending all local authorities in whose district there may be dairies or dairy farms, the produce of which is either sold directly on the spot or distributed through retailers of milk or otherwise, to observe the following rules and precautions. 1. All such dairies and farms, together with their steadings and other surrounding circumstances, should be carefully inspected from time to time with reference to their water-supply and their general sanitary arrangements, such as the arrangements

as to washing-houses and disposal of excrement, and the position of midden-steads. 2. The local authority should also cause inquiries to be made from time to time as to the existence of contagious or infectious disease at such dairies and farms; and, whenever such disease is found to exist at any of them, they should immediately (1) take such steps as their medical officer may advise, with a view to prevent the dissemination of the disease; and (2) give notice of the facts to any other local authority within whose district milk from the infected premises may be distributed or sold. These, together with additional precautions for the safe storage of milk in town premises, and for its distribution in sealed cans, have now been successfully enforced for some time on a large scale in London.

REGISTRAR-GENERAL'S QUARTERLY RETURN FOR SCOTLAND.

THE quarterly return by the Registrar-General of Scotland has been issued, and from it we gather the following particulars. The birth-rate was rather less than the average, reaching only 3.415 per cent., the average being 3.450. The deaths during the quarter, ending September 30th last, were in the annual proportion of 207 to every 10,000 living at the middle of the year, the average death-rate of the third quarter being 198.8. Thus the mortality of Scotland during the quarter has been unusually heavy, though less than in the corresponding months of 1874. The deaths were distributed in proportions varying from 235 in the principal towns to 138 in the insular-rural group. For every 10,000 persons in Greenock, which heads the list, there were 324 deaths, and in Aberdeen only 173. As usual, September was the most healthy month of the quarter in the eight principal towns; but the month of August was rather exceptional, as it slightly exceeded that of July. It is satisfactory to notice that the number of deaths in each month was considerably less than in 1874, without taking into account the increase of population in the meantime. The zymotic disease most rife was scarlatina, which in the eight large towns caused nearly 360 deaths in the quarter. Diarrhoea, however, was credited with upwards of 500: 126 in July, 253 in August, and 201 in September. Enteric fever has been far more frequent and fatal than typhus.

IRELAND.

It is reported that Dr. John Mc Donnell, the medical commissioner of the Local Government Board of Ireland, will resign during the present month. The candidates for the office are Dr. Burke, medical superintendent at the General Registry Office; Dr. Croker King, one of the Local Government Board inspectors, Dr. Grimshaw, and Mr. Macnamara.

ZYMOTIC diseases in Dublin last week caused forty-eight deaths; an unusually high mortality. To measles, ten of these were ascribed; this disease caused in the preceding week twelve deaths, the highest number of deaths for many months from this disorder.

ROYAL COLLEGE OF SURGEONS.

DR. MCDONNELL is a candidate for the vice-presidency of this College at the next election in June, and it is most probable that he will be successful, even though other candidates for the honour present themselves. No other name, however, has up to the present been put before the electors.

DUBLIN MAIN DRAINAGE SCHEME.

THIS gigantic system of intercepting sewerage, which was estimated by its promoters to cost £500,000, has, we are informed, died a natural death. This result has arisen owing to proceedings taken by some ratepayers in the Vice-Chancellor's Court, who obtained an order prohibiting any further proceedings, which injunction will prevent the Main Drainage Amendment Bill from being proceeded with in the next session of Parliament. A member of the Corporation this

week stated that the expenses connected with the scheme had already cost no less than £22,000: a proof of the jobbing that was going on, and which explains the reluctance of various members of the Corporation to relinquish their pet scheme.

PATHOLOGICAL SOCIETY OF DUBLIN.

ON Saturday the 27th ult., the following were elected as office-bearers for the ensuing year—*President*: Henry Kennedy. *Vice-Presidents*: Sir Dominic Corrigan, John Denham, Samuel Gordon, George H. Porter, William Moore, Edward Hamilton. *Secretary and Treasurer*: Edward Bennett. *Honorary Secretary*: William Stokes. *Secretary for Foreign Correspondence*: Robert D. Lyons. *Council*: John T. Banks, Anthony H. Corley, A. W. Foot, Thomas Hayden, George H. Kidd, James Little, Thomas Little, Alfred H. McClintock, Robert McDonnell, Benjamin McDowel, A. M. Purser, William Stokes. The subject chosen for this year's essay, the prize for which is a gold medal, is "On Bursitis, and its Pathology".

SURGICAL SOCIETY OF IRELAND.

THE first meeting of the present session was held on November 26th, the inaugural address being delivered by Dr. Edward Hamilton, President of the Royal College of Surgeons, in the course of which, having referred to the late Mr. John Hamilton, he briefly reviewed the business done in the preceding session, and concluded an interesting discourse by alluding at considerable length to Professor Tyndall's late address before the British Association at Belfast last year.

NEW BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

WE have the pleasure of announcing that, at a meeting held in Glasgow on November 30th, it was resolved to form a Branch of the Association, to be called the West of Scotland Branch of the British Medical Association. An influential committee was appointed to put the Branch into shape.

RUMSEY TESTIMONIAL FUND.

THOSE desirous of subscribing to this fund are requested to do so at once, as the list will be closed before Christmas.

Subscriptions may be forwarded to Dr. Buchanan, New Government Offices, Whitehall; to the Honorary Secretary; or to Messrs. Roberts, Lubbock and Co., Bankers.

Cheques should be made payable to the Rumsey Testimonial Fund or bearer, and crossed "Roberts, Lubbock and Co."

Post Office Orders should be drawn on the Curzon Street Post Office, and forwarded to the Honorary Secretary.

W. H. CORFIELD, Hon. Sec., 10, Bolton Row, Mayfair, W.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Death of M. Giraldès.

I REGRET to have to announce the death of M. Giraldès, which took place suddenly on Friday, the 26th instant. It was only last Tuesday—that is, two days before the melancholy event—that M. Giraldès' voice was for the last time heard in public. He had just entered the field of discussion that had been going on at the Academy of Medicine respecting the mechanism of myopia, and, strange to say, his adversary on that occasion, M. Jules Guérin, was the very man who was delegated by the Academy to represent it at his funeral. M. Giraldès was a great *savant*, and member of several learned societies. He was an *Agrégé* of the Faculty of Medicine of Paris, and was well known in connection with the Children's Hospital, in which institution he had been for many years surgeon, and which he had to quit about two years ago, in obedience to the regulations in vogue in France, which require hospital physicians and surgeons to retire at the ages of 64 and 65 respectively.

ASSOCIATION INTELLIGENCE.

WITH a view to giving increase of prominence to the scientific proceedings of Branches, and to the improved classification of matter, we propose henceforth to report only the official and administrative business of Branches under the head of Association Intelligence, and to transfer their medical and scientific reports to the columns in which are recorded the proceedings of Societies generally. We shall be much obliged if the Honorary Secretaries will kindly arrange their MSS. accordingly.

WEST SOMERSET BRANCH.

MEMBERS of this Branch are requested to take notice that Henry Alford, Esq., Taunton, will perform the duties of Honorary Secretary and Treasurer during the temporary absence of Dr. Kelly, who has gone to Mentone for the winter.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

THE next meeting, to be held in the Music Hall Buildings, Aberdeen, on Saturday, December 4th, at 3 o'clock in the afternoon, will be devoted to a debate on the proper place of Alcohol in Therapeutics. The debate will be opened by Dr. Urquhart, Aberdeen.

November 11th, 1875.

J. URQUHART,
ALEX. OGSTON.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE next meeting of the session will be held in the Council Room of the Midland Institute on Thursday, December 9th, 1875. The Chair will be taken by the President at 3 o'clock P.M. precisely.

The following papers are promised.

1. Mr. J. F. West: Excision of the Ankle.
2. Mr. Hugh R. Kerr: Death under Chloroform.

Members are invited to exhibit Pathological Specimens at the commencement of the meeting.

BALTHAZAR FOSTER, M.D. } *Honorary Secretaries.*
JAMES SAWYER, M.D. }

Birmingham, December 1875.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

A MEETING of the above Branch will be held at the Greyhound Hotel, Croydon, on Thursday, December 9th, at 4 P.M.; Dr. ADAMS in the Chair.

The following papers are promised.

1. Dr. Wiltshire: Two Cases of Puerperal Hyperpyrexia treated by Cold.
2. Dr. Tilbury Fox: Remarks on Lichen Planus vel Ruber.
3. Mr. Christopher Heath: A Case.
4. Dr. Duncan: Prognosis in various forms of Apoplexy.
5. Dr. Lanchester: Case of Tamarind-stone in the Trachea, fatal in Four Months.

Dinner will take place at the Greyhound Hotel, at 6 P.M. Price 6s. a head, exclusive of wine.

JOHN H. GALTON, M.D., *Honorary Secretary.*
Woodside, Anerley Road, S.E., November 22nd, 1875.

SOUTH EASTERN BRANCH: WEST SUSSEX DISTRICT.

THE next meeting of the above District will be held at "Skindle's" Marine Hotel, Worthing, on Friday, December 10th, at 3 P.M.; A. H. COLLET, Esq., in the Chair.

The dinner will be served at 5.30 P.M. Charge, 6s., exclusive of wine. Mr. Collet will be happy to see any member to luncheon at 1, Montague Place, from 1.30 P.M. to 2.30 P.M.

The following communications are promised.

1. Case of Opium Poisoning. By H. Collet, Esq.
2. On a Spontaneous Cure of an Ovarian Cyst after Four Tappings. By Dr. A. Hall.
3. Cases in Aural Surgery. By G. F. Hodgson, Esq.
4. Case of Retention of Urine. By W. J. Harris, Esq.

W. M. J. HARRIS, *Honorary Secretary.*
13, Marine Parade, Worthing, November 27th, 1875.

BATH AND BRISTOL BRANCH.

THE second ordinary meeting of the above Branch will be held at the Royal Hotel, College Green, Bristol, on Thursday evening, December 9th, at 7.30 P.M.: W. M. CLARKE, Esq., President.

EDMUND C. BOARD, *Honorary Secretary*.

Clifton, November 24th, 1875.

SOUTH OF IRELAND BRANCH: ANNUAL MEETING.

THE first annual general meeting was held on November 9th, at the Royal Cork Institution; Dr. GREGG, President, in the Chair.

New Members.—Dr. Redmond of Cappoquin, Dr. White of Carrignavar, and Dr. Kelly of the 23rd Royal Fusileers, were admitted members of the Association.

President's Address.—The President, in the course of a brief address, referred to the extent, importance, and objects of the British Medical Association. He said: In the working of its branches and their scientific meetings, the grants now given by its Council for promoting scientific experiments in medicine, the contributions to its JOURNAL, the original essays and experiments at its annual gatherings, the means it affords of bringing medical men from different parts of the kingdom together for purposes of scientific discussion, the British Medical Association is, without doubt, one of the foremost agents at present existing for the advancement of our profession and the furtherance of its great object—the cure of disease. As a Branch of this Association, we have, in common with its other members, the same object. This is the end of our first year's labours. Every beginning is weak, but already, in this short space of time, we have done some good practical work. Those who attended our meetings, held fortnightly during last session, do not require to be told of the highly useful and interesting matter which was brought before the notice of the members, or the information which was elicited by the discussions on the various papers which were read. I can safely say that I never enjoyed any meetings for the discussion of medical topics with the same degree of pleasure as I did those over which I was privileged to preside during the past winter. I hope that those to be held in the ensuing one will be replete with information as those that are past; and if they are, I think we may be all perfectly satisfied. This is, as you are aware, the first Branch of the British Medical Association in Ireland, and already we number fifty members; we have every hope that before long the number will be doubled. I trust that all connected with this Branch will throw their energies into it, and work it, so as to make it alike useful to the profession, and a credit to the South of Ireland. They can best do this by attending the regular or ordinary meetings of the Branch and contributing papers, narrating the history of important cases, sending pathological specimens, assisting in microscopical investigations, enlisting the sympathy and co-operation of members of the profession outside, and in enlarging the ranks of the Association by the enrolment of new members. At present, our object is mainly scientific; we do not interest ourselves in purely ethical or medico-legal matters. At the same time, there are subjects which are intimately connected with the welfare of the profession, and which, from time to time, may be brought before the notice of the Branch by the desire of the General Council of the Association; if so, these will, I feel sure, receive that attention at your hands which their importance may demand. I congratulate you on your entrance into a second year of active duty. I congratulate the promoters of this movement and the founders of this Branch on its well-merited success; and in doing this, I desire to make special allusion to our honorary secretary, Dr. Jones, to whose active and continuous exertions the formation and success of this Branch is mainly due. I congratulate the profession in the South of Ireland on the formation in its midst of so valuable and useful an Association.

Report of Council.—Dr. MACNAUGHTON JONES, Secretary, read the report of the Council, from which it appeared that the subscriptions which had been forwarded to the treasurer met all the expenses connected with the formation of the society and its working during the past year. Fortnightly meetings were held during the session, which extended from October to April, and those meetings were devoted to the discussion of scientific subjects, and were attended by the students of the Queen's College. The Council suggested that any ethical subjects should be only discussed at a general meeting of the Branch convened for that object, and that the secretary on the requisition of three members might summon a meeting of the Council, with whom would rest the power, if they thought proper, of summoning the Branch. They also considered that steps should be taken to enlarge the Branch, and that members should be requested to exert themselves in that direction. The honorary secretary resigned his office.

Officers and Council.—The following were elected. *President:* W. J. Cummins, M.D., Cork. *President-Elect:* H. Macnaughton Jones, M.D., Cork. *Vice-Presidents:* J. G. Curtis, L.R.C.P.Ed., Cork; D. B. O'Flynn, M.D., Glanmire. *Council:* P. Berry, Esq., Mallow; Dr. Cagney, Cork; Dr. D. Cremen, Cork; Dr. P. J. Cremen, Charleville; W. J. Cronin, Esq., Queenstown; Dr. Eames, Cork; Dr. Golding, Cork; Dr. Gregg, Cork; Dr. Hobart, Cork; Dr. MacDonagh, Killarney; Dr. Macgill, Cork; Dr. O'Reilly, Lismore; Dr. Ronayne, Youghal; Dr. Scott, Queenstown; Dr. Smyth, Cork. *Honorary Secretary:* [Ringrose Atkins, M.D. *Treasurer:* A. O'Connor, M.D.

Meetings of the Branch.—It was agreed that at least six monthly meetings should be held, on Saturdays; the Council to have power to summon others if necessary, notice of the meeting to be given three days beforehand.

Votes of Thanks.—Dr. CUMMINS having taken the second chair, Dr. CURTIS said he did not think they should separate without giving their unanimous approval to the way in which their worthy ex-President, Dr. Gregg, had carried them through the last session, and for the dignified manner in which he had presided that day.

Dr. O'CONNOR had great pleasure in seconding the vote of thanks.

The motion passed amidst applause, and Dr. GREGG returned thanks.

Dr. CREMEN proposed a vote of thanks to Dr. Macnaughton Jones for the manner in which he had discharged the duties of honorary secretary. His attention to the working of the Branch, and the interest he took in its establishment, justified them in paying him this compliment. Were it not for his exertions, it would be many years before the members of the profession could have the advantage that they had now.

Dr. O'FLYNN seconded the vote of thanks.

Dr. JONES, in acknowledging it, repeated that if there was an idea in the mind of any member of the profession in the south of Ireland that there was anything exclusive in the formation of this Branch he was deceiving himself, because it was founded in the most open manner. There was nothing in connection with its formation that could enable any one possibly to say that it prevented him from becoming a member. He was sure the society would be of great advantage to the profession in the south of Ireland.

The proceedings then terminated.

Dinner.—Several members dined together at the Victoria Hotel in the evening.

BORDER COUNTIES BRANCH: AUTUMNAL MEETING.

THE autumnal meeting of the Border Counties Branch was held at the County Hotel, Carlisle, on Friday, October 29th, 1875. In the absence of the President, Dr. P'ANSON of Whitehaven took the Chair. At a subsequent stage of the proceedings, Dr. P'Anson vacated it in favour of Dr. Taylor of Penrith. Fifteen other gentlemen were present.

Papers were read by Dr. Campbell, Dr. Crerar, Dr. Brown, Dr. Barnes (Carlisle), Dr. Murchison (Dumfries); and cases were exhibited by Dr. Maclaren and Dr. Elliot.

Dinner.—The members and their friends afterwards dined together, Dr. Taylor being in the Chair, and Dr. Barnes in the Vice-chair.

GLOUCESTERSHIRE BRANCH: ANNUAL MEETING.

THE annual meeting was held at the Bell Hotel, Gloucester, in the evening of Tuesday, November 16th; W. H. PAINE, M.D., of Stroud, the President, in the Chair.

President for 1876.—Thomas Wright, M.D., of Cheltenham, was elected President for the year 1876.

Insular Sclerosis.—After the transaction of the ordinary business, Dr. WILSON of Cheltenham read a paper on a case of insular sclerosis now under his observation and care in the Cheltenham Hospital.

Medical Education of Women.—The SECRETARY brought forward the subject of which he had previously given notice; viz., "The attitude of the University and other Examining Boards, and the medical profession generally, in relation to the questions connected with the medical education of women". A very full discussion of the subject followed, in which nearly all the members present took part; and the following resolution was proposed and carried *nem. con.*: "That this meeting believes that the exclusion of women from the medical examinations to be wrong in principle and vexatious and useless in practice, and would, therefore, urge on the various examining bodies the importance of making every examination perfectly open."

Disease of the Fauces and Larynx.—Dr. BOND of Gloucester called the attention of the members to the large number of cases of disease of fauces and larynx and trachea which had occurred during the last few months, being anxious to ascertain if there was any relationship, and, if so, what was its nature, between such diseases and the foot-and-mouth disease in cattle. The discussion on this question was adjourned until the next meeting in February, in order to give an opportunity for careful observation.

Supper.—The members afterwards supped together at the Bell Hotel.

STAFFORDSHIRE BRANCH: ANNUAL MEETING.

The second annual meeting of the Branch was held on Thursday, October 28th, at the London and North-Western Railway Hotel, Stafford: present, R. GARNER, Esq., President, and thirty members. The President introduced his successor, Dr. HENRY DAY of Stafford, who then took the Chair.

Vote of Thanks.—Dr. TOTHERICK proposed, "That the best thanks of this meeting be given to the retiring President for his services during the past year." This was seconded by Mr. F. WESTON, and carried unanimously. Mr. GARNER acknowledged the compliment.

New Members.—The following gentlemen, being members of the Association, were elected members of the Branch: Mr. J. J. Bunch, Wolverhampton; Mr. A. Averill, Longton.

President's Address.—The President delivered an elaborate address upon the study of medicine.

Mr. FOLKER proposed, "That a cordial vote of thanks should be given to Dr. Day for his valuable, learned, and thoughtful address." Mr. ORTON seconded the motion, and it was carried with acclamation.

Report of Council.—Mr. VINCENT JACKSON read the annual report, which was as follows. "The Council of the Staffordshire Branch have much pleasure in presenting the first annual report; and, in doing so, they take the opportunity of recording as well as of reminding the members, that the nucleus of the Branch was the North Staffordshire Medical Society, a Society which had for a quarter of a century acted as a scientific centre, as well as a bond of friendly union to the medical profession resident throughout the populous district of North Staffordshire. The work of this Society had been of so utilitarian a character that it was considered, and your Council think wisely considered, that a strong effort should be made to extend the area of its work; and as Staffordshire contains at least seventy towns in which there are resident medical men, the plan which appeared the most likely to be successful was to amalgamate the Society with the British Medical Association; and this line of action was determined upon at a meeting of its members at Stoke-upon-Trent, on Thursday, April 9th, 1874. At a subsequent meeting of Staffordshire medical men held at Stafford, April 30th, 1874, the following resolution was approved and confirmed. 'That a Branch of the British Medical Association be now formed, under the title of the Staffordshire Branch of the British Medical Association.' Your Council consider that time has demonstrated that the formation of this Branch has supplied a long felt want—viz., the means of medical union and association; for, owing to the annual and ordinary meetings being held in succession in the towns of Stoke, Stafford, and Wolverhampton, all parts of the county are brought under its influence, by the convenience of each district being studied; and thus it is to be hoped that a long future of scientific usefulness and friendly intercourse is in store for the members of the Staffordshire Branch, which, although the most recently formed, yet is by no means the least in numerical strength of the Branches of that great medical society, the greatest in the world, the British Medical Association. Your Council take this, their earliest opportunity, of acknowledging, as well as of reciprocating, the congratulations and good wishes which have been accorded to them by neighbouring Branches. Your Council feel assured that the kindly feeling which prompted these expressions of hearty goodwill emanated from an impulse as ingenuous as it was fraternal. The number of members at the present time is eighty, and your Council trusts in time to be able to report the enrolment of every Staffordshire medical man as a member; and, for this end, it asks for the friendly co-operation and the efforts of all who are interested in the numerical progress and growth of the British Medical Association. During the session 1874-75, three ordinary meetings have been held; the attendance of members at each has been large. [A list of the papers, etc., was here read.] Your Council finds, from an examination of the Treasurer's account, that the receipts for the year have been £5:5:0, the disbursements £14:18:6, leaving a balance due to the Treasurer of £9:13:6. It is hoped that this balance, which was incurred by paying for the necessary expenses when the Branch was

formed, will be paid from a fund which is at the disposal of the Treasurer of the North Staffordshire Medical Society."

Place of holding next Annual Meeting.—Dr. J. H. TYLECOTE proposed, "That the next annual meeting be held at Wolverhampton." This was seconded by Mr. CLENDINEN, and unanimously passed.

Proposed Alteration of Rule.—Dr. MILLINGTON proposed, and Mr. CLENDINEN seconded, "That the annual meeting of the Branch shall be held in July, instead of, as in accordance with rule 5, October." After a long discussion, the motion was withdrawn.

Votes of Thanks were passed to the Treasurer and Honorary Secretaries.

Election of Officers for 1875-76.—The following gentlemen were elected. *President-elect:* W. Millington, M.D. *Vice-Presidents:* J. Weaver, M.D.; R. Garner, Esq. *Honorary Secretaries:* Vincent Jackson, Esq.; Ralph Goodall, Esq. *Treasurer:* E. F. Weston, Esq. *Council:* W. E. Clendinnen, Esq., Stafford; C. H. Crawford, M.D., Stafford; E. Fernie, M.D., Stone; W. H. Folker, Esq., Hanley; S. F. Gosling, Esq., Biddulph; A. J. Harrison, Esq., Walsall; C. A. Newnham, Esq., Wolverhampton; C. Orton, Esq., Newcastle; J. J. Ritchie, Esq., Leek; J. Y. Totherick, M.D., Wolverhampton; J. H. Tylecote, M.D., Sandon; J. K. Wynne, Esq., Eccleshall. *Representatives in the Council of the Association:* J. T. Arlidge, M.D.; H. Day, M.D.; W. H. Folker, Esq.; J. Y. Totherick, M.D.

Dinner.—The members and their friends dined together. The President was supported by the Mayor (Alderman Shalleross) and the Rev. W. P. Vincent. R. Garner, Esq., occupied the vice-chair.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, NOVEMBER 26TH, 1875.

SIR WILLIAM JENNER, Bart., M.D., D.C.L., F.R.S., President, in the Chair.

Two Fatal Cases of Acute Pyelitis and Nephritis, apparently consequent on Gonorrhœa.—Dr. MURCHISON read notes of these cases. In consequence of both patients having been admitted into hospital in an unconscious state, no history was obtained of either till after death, and the real nature of the cases was only revealed by *post mortem* examination; hence no observations were made as to the temperature and the character of the urine; still the *post mortem* appearances left little doubt as to the exact state in each case.

Stephen H., aged 23, a grocer's assistant, was admitted into the London Fever Hospital on June 4th, 1865, in a state of profound coma, with low muttering delirium and dry brown tongue. Three hours after admission, he died, having had several attacks of general convulsions. After death, it was ascertained that he had been suffering from gonorrhœa for some time, and that the cerebral symptoms had come on suddenly, only thirty hours before admission. After death, the entire length of the urinary passage, from the anterior end of the urethra to the pelves of the kidneys, was found to be in a state of intense inflammation; the mucous membrane being brightly injected, and the surface bathed with pus. Both ureters were full of thick yellow pus. Both kidneys were in the first stage of acute nephritis, and their pelves were full of pus. The lungs were much congested in their dependent parts, and in the lower lobes were a few small patches of incipient lobular pneumonia.

Maria D., aged 25, a lady's maid, was admitted into the London Fever Hospital. She was unconscious, but constantly moaning. Her countenance was dusky; her breathing laboured. The pupils were equal, but there was slight internal strabismus of both eyes. No note was made of the pulse or temperature, but there were signs of hypostatic congestion of the lungs. She gradually became comatose; and, after two convulsive fits, died on the second day after admission. After death, it was ascertained that the symptoms had come on suddenly on the day before admission.—At the *post mortem* examination, the membranes and substance of the brain were found to be intensely hyperæmic; but there was no exudation of lymph, and no sign of tubercle either within the cranium or in the lungs. The lungs were congested in their dependent parts, but in other respects were healthy. Both kidneys were in the early stage of acute nephritis: large, smooth, and almost black from intense congestion. The ureters and the pelves of the kidneys were full of thick yellow pus. The bladder also contained pus; and the lining membrane of the vagina, urethra, bladder, ureters, and pelves of the kidneys, was intensely red.

Dr. GREENHOW said that he was reminded of a somewhat similar

case, which he saw when he was a student at Edinburgh. He was present at the *post mortem* examination of a man, who had died in a state of coma, lasting thirty-six hours. He was supposed to have been poisoned, but he was the subject of gonorrhœa, for which he had been taking copaiva, and using injections. Sir W. Newbiggin at the time attributed the symptoms to "cerebral metastasis" from gonorrhœa checked by treatment.—Sir WILLIAM JENNER asked if it were quite certain that the female patient had gonorrhœa.—Dr. MURCHISON replied that there was no history to be obtained on this point; but the *post mortem* appearances were similar to those in the male patient. In answer to Mr. Berkeley Hill, he also stated that the duration of the gonorrhœa in the male patient was not defined; it had existed for some time. He further stated, in reply to a question put by Sir W. Jenner, that the man had been under treatment for the gonorrhœa, and he could not say that he had taken cantharides. Opposed to the view of the inflammation of the kidneys being primary, was the fact of the distension of the passages with pus, the ureters appearing as thick cords. Chelius had mentioned that gonorrhœal inflammation occasionally extended to the kidneys; and the occurrence could not be so very exceptional, since two cases occurred within six months of one another at one London hospital.—The PRESIDENT remarked that inflammation spread usually upwards to the secreting organs, as from the bladder to the kidneys, and not in the contrary direction.

Acute Cancer of the Liver, with Pyrexia.—Dr. MURCHISON read notes of this case, which occurred in a man, aged 24. James C., a carpenter, was admitted into St. Thomas's Hospital on November 6th, 1872, with the history of a strain six months previously, which caused swelling and pain in the left testicle. About six months before admission, he began to complain of pain in the right side, and to lose flesh. There was no hereditary history of cancer. When admitted, he was emaciated, and there was a hectic flush on his face. He suffered much from pain on the right side of the abdomen, and from dyspnoea. The temperature was 101.3 deg. Fahr. On the right side of the abdomen was a visible bulging, continuous apparently with the liver; its lower margin extending almost to the brim of the pelvis. The surface of the swelling was firm, smooth, and moderately tender. The skin and conjunctivæ were jaundiced; there were no ascites nor enlargement of the abdominal veins. The tongue was moist, slightly furred; there was no appetite; much thirst; no vomiting; the bowels were open, but not loose; bile was passed in the stools; and the urine had a specific gravity of 1018, and contained copious lithates, some bile-pigment, and a trace of albumen. He lay on his right side. The respirations were 32, thoracic; he had some cough, but no expectoration; sibilant râles were audible over both lungs, chiefly on the right side; and the breath-sounds were feeble, and there was slight impairment of resonance on percussion. Pulse, 120. The heart-sounds were normal. The left testicle was twice the size of the right, hard, but not tender. He lived ten days after his admission, during which time he had rigors, constant vomiting of green bilious matter, and an uniformly high temperature; on two occasions, the thermometer registering 103 deg. Fahr. The liver continued to increase in size; he became delirious, rapidly weaker, and died on November 16th.—*Post Mortem Examination.* The liver was much enlarged, and measured before removal twelve inches and a half vertically. Its entire substance was studded with large masses of cancerous deposit. There was a mass of similarly affected glands found in the neighbourhood of the left kidney, and extending along the vessels to the left testicle, which also contained a vascular tumour of the size of a cherry. Dr. Murchison remarked that little was known as to the range of temperature in cancer, but that he believed that, in this disease, unless there were some inflammatory complication, the bodily temperature was at or about the normal standard. But the case quoted proved that this rule was not absolute. In this case, moreover, the age of the patient was opposed to cancer of the liver, while not only the pyrexia, but the rigors, the previous injury and enlargement of the testicle, the rapid course, and the delirium, all favoured the diagnosis of pyæmic inflammation in preference to that of cancer of the liver.

In reply to the President, Dr. MURCHISON stated that, as regarded the condition of the hepatic tissue between the cancerous nodules, there was a good deal of injection in such situations; but nothing like opacity, or infiltration, or exudation, into the liver-substance, which was examined microscopically. There was nothing like pyæmic infiltration, or any sign of recent peritonitis around the liver. In reply to Dr. Southey, Dr. Murchison remarked that the structure of the growth in the testicle was just like the growths in the liver. The testicle had not grown much; but a secondary chain of enlarged glands ran from the testicle up by the side of the spine, towards the liver.—Dr. MOXON asked whether the condition of the veins of the liver was noted. About three years ago, he had published in the *Lancet* notes of a somewhat

similar case. It was that of a gentleman, aged 26, at Highgate, whom he had seen in conjunction with Dr. Lucey; he had symptoms resembling those of suppuration in the liver, and often had a temperature of 102.5 deg., accompanied by rigors, night-sweats, and pronounced symptoms of hectic. After death, nothing but cancer was discovered. The growth was curious. It had grown into the branches of the portal vein in the liver, which were stuffed with it "like a sausage". In places, portions of the liver-tissue were pale and sunken. The case was an instance of excessively severe and sudden cancerous changes, with symptoms of pyrexia, because the growth was so sudden. He would say that, just as oxygen usually fed combustion, yet one might produce a fire with chlorine, so inflammation usually produced pyrexia, but cancer might also cause it.—Dr. MURCHISON remarked that, in his case, cancer was certainly not present in the larger veins; but that, as regarded the smaller ones, he could not speak so positively.—Dr. SOUTHEY had seen, in a case a fortnight before, the same appearances as had been described by Dr. Moxon. In the portal vein were growths attached, and lying in the vein. The pyrexia observed in Dr. Murchison's case, he (Dr. Southey) thought, was not very uncommon in quickly growing cancer. With all such growths in all parts of the body, temperature was high. In abscess of the liver, there was elevation of temperature.—Dr. MURCHISON asked if ascites was present in the cases of Dr. Moxon and Dr. Southey. There had been none in his own case. He thought that cancer running a quick course might, perhaps, give an elevated temperature; but that, in a critical case of diagnosis, the fact of elevation of temperature would rather be against cancer.—The PRESIDENT mentioned the case of a boy who had a lump in his abdomen, of which Mr. Cæsar Hawkins thought very seriously. Another eminent surgeon thought lightly of it; but the boy died in a fortnight. The cancer was largely disseminated; the diaphragm was invaded, and the internal wall infiltrated, and yet the temperature was not much elevated—was certainly never 102 deg.—Dr. MOXON had always regarded his case as a notable exception to the fact that, with obstruction of the portal vein, one necessarily had ascites. Dr. Moxon had also showed, at the Pathological Society, a specimen in which the coronary sinus was closed, and yet there was no hydropericardium; and another specimen in which the veins of the brain were closed, and yet no water on the brain was found. In cases of cancer of the uterus, the pelvic veins were frequently quite closed, without there being œdema of the feet. Therefore he thought there were certain conditions in which a vein might be closed without the existence of œdema behind it.—Mr. CARTER remarked that Mr. Hutchinson had brought forward a case at that Society in which the ophthalmic vein was quite closed by a cranial aneurism, and yet there was no œdema of the optic disc.—In reply to Mr. Callender, Dr. MOXON stated that not all the coronary sinus, but only a part about an inch from the auricle was blocked in the case he had mentioned. The other veins of the wall of the heart had probably enlarged, and carried on the circulation.—The PRESIDENT thought that, where the passage of blood was impeded, and the blood dammed back, it must get out somewhere. Probably other veins enlarged.—Dr. MOXON thought that, in the case of cancer in the portal vein, there might have been enough connection between the parietal veins of the abdomen and the venules of the portal system to carry on the circulation.—Dr. COUPLAND stated that Mr. Hulke had, for a long time, taken the temperatures of his cancerous patients in the Middlesex Hospital; and that he found the temperature was almost always normal or sub-normal, scarcely ever above normal.

Skin-Grafting upon a Stump after Amputation.—Mr. BERKELEY HILL exhibited a female, twenty-nine years old, from whom he had amputated the left thigh at the hip on August 12th, 1874, to remove a very large rapidly growing tumour of round-celled sarcoma. The new growth completely imbedded the femoral artery, so that the anterior flap was dissected from it; and, thus deprived of its nutrient vessels, it sloughed as high as two inches above Poupart's ligament. The after-healing occupied several months, during which time more than one hundred skin-grafts were transplanted. The strain on the healing surface, caused by the weight of the buttock, was at length effectually supported by a frame bearing round the pelvis, which thrust forwards the buttock by a spring and pad. This was worn till cicatrization was complete. The patient was exhibited, fifteen months after the operation, in excellent health; no recurrence of the sarcoma being apparent in the lumbar glands or liver; and the scar was small, soft, and supple, and easily movable over the pubes and iliac spines, the islands of skin-grafting being very distinct. The acetabulum, dry and free from scabs, was filled up to a cavity about as large as half a walnut-shell.

Mr. CALLENDER remarked that, with the abdominal tourniquet, transfixing and making an anterior flap had fallen into disuse. A flap of skin was now made, and the limb was cut through transversely, so

as to prevent the splitting of the artery during the cutting of the vessel ; and vessels were to be preserved for the nutrition of the anterior flap. As regarded the skin-grafting, the grafts were so numerous that they would probably represent several square inches of skin. Why were so many necessary?—Mr. HILL stated that the operation was performed in this particular way, because the growth enveloped the femoral artery, so that the flap was skin-flap only. The division had to be done high up, in order to remove the tumour entirely, and Mr. Hill supposed that the vessels which supplied the flap might have been divided. The grafts were over one hundred. They were put on at different times, but probably many of them died ; but, as the skin was supple, he thought the majority must have lived. The cicatrix did not resemble fibroid tissue, it was so very supple.

Tumours of the Orbit.—Mr. GEORGE LAWSON exhibited two patients, from each of whom he had removed a tumour of the orbit. The cases were essentially different ; but each presented points of great clinical interest. The first case was that of an elderly woman, who was admitted into the Middlesex Hospital with a large melanotic tumour, involving the eye, and filling up the whole orbit. This growth Mr. Lawson removed, and then applied the chloride of zinc paste, and in such a manner that he succeeded in saving the upper eyelid. One of the great disadvantages, he remarked, of the use of the chloride of zinc in such cases had been that, owing to the running of the paste into the cellular tissue of the eyelids, both lids had been destroyed by it. The plan which he now adopted, when practicable, was the following. After the eye and tumour had been excised, pressure was made in the orbit until all bleeding had ceased. The mouth of the conjunctival bag, from which the globe had been enucleated, was then held open with two pairs of forceps, whilst the chloride of zinc paste spread on small strips of lint was plastered round the sides of the orbit. A small piece of cotton-wool was next introduced to keep the strips of lint *in situ*, and the mouth of the conjunctival bag was closed over the whole by a single continued suture. A layer of lint was then placed over the conjunctiva, and upon this the lids were closed and kept in position with a compress of lint and a roller. The patient progressed well, and had suffered no pain, and had no recurrence of the disease since she left the hospital on May 25th. In the second patient, Mr. Lawson removed a tumour from within the orbit without inflicting any injury on the eye. The growth occupied the floor of the orbit, and seemed to spring from the periosteum far back in the orbit. It was about the size of half a walnut, much flattened where it was pressed between the eye and the orbit, but rounded at its free external border. The specimen was examined by Dr. Coupland of the Middlesex Hospital, who pronounced it to be a lymphoma.

Dr. MURCHISON related the case of a man, from whose orbit a spindle-celled sarcoma involving the eyeball had been removed by Mr. Hulke. The growth returned nine years subsequently in the liver, and gave rise to symptoms closely resembling those of hydatid, but which were proved not to be so by puncture. He died ; and his liver was then found to be studded with spindle-celled sarcoma.—Mr. CARTER mentioned a case in which, four years before, a spindle-celled sarcoma had been removed by himself, and had not yet returned. It had simply left an ugly appearance of the orbit ; and he had thought whether he should fill up the gap by transplantation of skin. Mr. Lawson's case reminded him of yet another. A young man came to St. George's Hospital with the orbit filled with a large growth, and with the eyelids and eyelashes much hypertrophied. The growth had come in his infancy, and had grown rapidly until he was four years of age. It had then grown simply with his growth. Mr. Carter had removed it by a large incision ; and the tumour was found to be a degenerated nævus. The eye then went back, and the deformity was much relieved. The eyeball of that side was larger than its fellow ; and the corresponding palpebral fissure was also large. Mr. Carter united its two sides for about half an inch at the outer canthus, and the man's appearance was much improved. After a time, the growth was found to be increasing, when Mr. Carter again opened the orbit, and took away the growth which was returning. Erysipelas and suppuration followed ; and it was to be hoped the latter process had destroyed all the navoid tissue in the orbit.—Mr. LAWSON considered that the cases fitted for treatment by the chloride of zinc paste, as he had described, were only those in which there was a piece of conjunctiva of which to form a bag in which the paste could be sewn up.

New Method of Performing Tridotomy for the Improvement of Sight. Mr. B. CARTER exhibited a patient who had been greatly benefited by the performance of this operation (a description of which was given in the BRITISH MEDICAL JOURNAL for October 16th, 1875, page 509), and in whose eye the effects of the operation were very visible.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, NOVEMBER 3RD, 1875.

II. JACKSON, M.D., President, in the Chair.

On the Spontaneous Origin of Typhoid Fever. By DUCE BROWN, M.D.—Dr. Brown, in this paper, began by stating that, while the profession generally were agreed as to there being a connection between drains, sewer-gas, and typhoid fever, there was great difference of opinion as to the part played by the gas in the production of the fever : some considering that the fever might originate from exposure to sewer-gas alone, and others that this was but the nidus, and required for the production of the fever a special poison. On the one hand, cases are recorded where the fever had occurred without any previous cases having been known in the district, but where the sanitation was defective ; on the other, cases of excessively bad sanitation were given where no typhoid fever had followed. Both parties agreed that the most powerful cause of the spread of typhoid was the presence of previous cases in the locality ; but the one denied that typhoid ever occurred without a specific cause, while the other asserted that observed facts could only be accounted for by allowing the occasional spontaneous occurrence of the disease. The author reviewed several recorded cases quoted by different authorities on the non-spontaneous side where "dormancy" was stated to have existed for weeks or even for years, and considered that, in those cases where no case had been known in large districts for more than six or seven years, the more reasonable view was to regard the origin spontaneous rather than to assume the existence of dormancy for such a length of time. Dr. Brown then proceeded to give the history of two cases occurring in his own practice, which he considered valuable as a contribution to the question. They were mysterious, if typhoid could not originate spontaneously, but easily accounted for on the supposition that that disease might originate without specific poison. On March 5th of the present year, Mr. G. was seen in Jute Street, Aberdeen, and, in the beginning of the second week, the diagnosis of typhoid was confirmed by observing the rose-spots. Four days after his attack, Mrs. —, who lived in the back room of the same house, and on the same floor, was taken ill also of the same disease. The former was a very severe, the latter a mild case ; but both recovered. These two cases were in a new house on virgin soil, and there had not been any other cases heard of in the neighbourhood for a considerable time. The drinking water was supplied by the town, and taken from the Dee, twenty-two miles from Aberdeen. The drainage was bad, as, from some cause or other, the owner of the house had neglected to connect any pipes with the street sewer, and there was no water-closet or other convenience ; all the sewage from the house being led into a hole in the garden at the back, which was above the level of the floor, and on a level with the back windows. The smell from this hole had been for some time most offensive, especially when the wind was in the direction of the house.—Dr. ANGUS FRASER could not consider Dr. Brown as having any ground to regard the two cases reported as examples of non-spontaneous origin of typhoid. He thought the conclusions arrived at not justified by the facts, as the man and woman might have got the disease when absent from their houses, by drinking water, or in other ways (typhoid being in the town at the time). As to the two cases happening about the same time in the same house, that was but a coincidence.—Dr. F. OGSTON objected that the lower animals, as dogs, might have carried the infection, and were supposed to be subject to similar diseases. Besides this, though the cases were said to have occurred in virgin soil, yet it was well known that new ground was often old rubbish. Perhaps also the pit was, as was not unfrequently the case in half-finished streets, more or less public.—Dr. A. OGSTON thought that typhoid occupied a peculiar position in regard to the opinions entertained of its origin by the profession. No one doubted that English cholera was spontaneous, neither did anyone believe small-pox to be spontaneous ; but most medical men had seen cases of typhoid which had, for the time at least, given rise to a doubt as to whether, in some cases, there might not be a spontaneous origin of this disease. He had just heard of a case in a country district near Aberdeen which had staggered one of the greatest of our non-spontaneous authorities ; still the amount of the typhoid-poison required for the spread of the disease was so minute, that there had were no doubt many cases which at first sight might appear to be spontaneous, but on more particular examination might turn out not to be so.—Dr. BLACKIE SMITH wished to know, from Dr. Brown, where the milk used by the affected persons was got, as he had had a case in a milkman's family, near the Small-pox Hospital, not far from Jute Street, about the middle of February last.—Dr. CROMBIE thought that, as typhoid attacks depended partly on the condition of the patient's system, the long dormancy in some of the recorded cases might easily be accounted for.—Dr. STEPHENSON related a case in consultation practice which was supposed to be spon-

taneous, but was discovered on more careful investigation to be caused by typhoid poison being imported in the milk supplied. A relative of the milkman had come from Glasgow to the village where the case occurred to recruit after an attack of typhoid, but still having the bowels affected, and was the cause not only of the case mentioned, but of several more in the village, beginning with the milkman's own family.—Dr. COWAN (H.M.S. *Clyde*) supported the spontaneous origin, and mentioned a case which seemed unaccountable on any other supposition.—Dr. JACKSON was of opinion that he had seen cases in which the origin of typhoid fever was spontaneous.—Dr. DYCE BROWN replied, and said he had not attempted to dogmatise. The question must be decided by evidence, and the two cases he had brought forward appeared to him to contribute to the solution of the question. He would not detain the meeting longer, but conclude with the remark that one positive was equal to many negatives, and that, if he had proved his cases to be spontaneous, it was unimportant.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE Gloucester guardians have voted Mr. Ambrose D. Cookson a superannuation allowance of £53:6:8 *per annum*, being two-thirds of his salary, on resigning as Medical Officer to the Union Workhouse.

THE SKIPTON GUARDIANS.

At their meeting last Saturday, only one candidate offered himself for election as medical officer to the Skipton Workhouse and Infirmary at the salary of £35, which had been refused by the late medical officer; and this candidate was elected subject to the approval of the Local Government Board. We cannot but think that it would be wise that that approval should be withheld, as this gentleman only possesses one legal qualification (there are three or four doubly qualified practitioners in the town willing to take the post at a fair salary), and as also we are informed that his brother practitioners refuse, under the circumstances, to meet this gentleman; so that he might be unable to comply with No. 200 of the Consolidated Orders as to naming a substitute in case of sickness or absence.

APPOINTMENTS OF MEDICAL OFFICERS OF HEALTH.

BOOTH, Lionel, M.D., appointed Medical Officer of Health for the Accrington Urban Sanitary District, *vice* G. M. Gillespie, M.D., deceased.
 BLYTHMAN, Clement S., M.B., appointed Medical Officer of Health for the Swinton Urban Sanitary District.
 *HALL, Cornelius S., M.R.C.S., appointed Medical Officer of Health for the Rural Sanitary District of Carlisle.
 LOVETT, Samuel R., L.R.C.P.E.D., appointed Medical Officer of Health for the St. Giles and St. George District, *vice* George Ross, M.D., deceased.
 PERKS, Charles, L.R.C.P., appointed Medical Officer of Health for the Burton-on-Trent Urban Sanitary District, *vice* P. B.licher, L.R.C.P., resigned.
 REDWOOD, Thomas Hall, M.D., reappointed Medical Officer of Health of the East Moseley Urban Sanitary District.
 WILLIAMS, William E., M.R.C.S.Eng., reappointed Medical Officer of Health for the Bedwelly Rural Sanitary District.
 YELD, Henry John, M.D., reappointed Medical Officer of Health for the Sunderland Port Sanitary District.

MILITARY AND NAVAL MEDICAL SERVICES.

THE CASE OF SURGEON SPURWAY,

LATE SURGEON OF THE ARMY MEDICAL DEPARTMENT.

WE have received copies of a correspondence between Surgeon Spurway, who was recently placed on *half-pay without half-pay*, and the authorities of the Army Medical Department at Whitehall Yard, with a request to publish it for general information. We are unable to publish this correspondence, which extends to a considerable length; but, as the case of Mr. Spurway, who has now resigned his appointment in the Army Medical Service, has attracted a great deal of attention, not only among the medical but also among the combatant ranks of the army, we think it may be useful to furnish a short digest of it.

Mr. Spurway premises that he is a sufferer from "migraine", and that his disease was so aggravated by the climate of India, that, when ordered to return thither, he sought an exchange, but that this was not permitted. On August 12th, a curt unsympathising official letter was sent to Mr. Spurway, written in the name of the Director-General, to inform him that, as he had received "the six months' sick leave to which medical officers are limited", and as his "disability was not

contracted in and by the service", the authorities have decided that he "shall be placed upon the half-pay list, but without half-pay", for six months from the previous June 23rd, after which time he is to be re-examined by a medical board. The following day (the 13th), Mr. Spurway writes a short but indignant letter at the injustice done to him, and places his resignation as surgeon in Her Majesty's service at the Director-General's disposal. Twelve days afterwards, a letter is sent to Mr. Spurway, returning his letter of the 13th, expressing surprise at the intemperance of its language, and requesting him, if he adhere to his intention of resigning, to "respectfully renew his application". Mr. Spurway replies on the following day that his letter was simply the expression of the indignation he felt at the gross hardship and injustice with which he had been treated "after ten years' good service". He reminds the Director-General that "half-pay without half-pay to one who is without friends and without private income implies simply starvation in a case like his for six months"; that such injustice is not to be met with in any other branch of the service; and he contrasts his treatment with that of some medical officers who have been put on half-pay on account of being addicted to intoxication. He, therefore, renews his application to resign his commission. No reply appears to be sent to this letter until two months afterwards. On October 22nd, the Director-General himself writes to Surgeon Spurway, and informs him that his case "has been under the consideration of the authorities"; that no modification of existing rules can be made in his behalf; and that his resignation of his commission will, therefore, be submitted to Her Majesty. He points out that "the course of placing him on half-pay without half-pay was adopted as a necessity rendered absolute by the precise language of the regulations, which only justifies the issue of half-pay for disabilities contracted in and by the service"; and that the treatment extended to cases of misconduct is governed by a portion of the Warrant of March 1873, viz., par. 31, clause 22, under which he could not be brought. To this letter, Mr. Spurway sends a lengthened reply, pointing out how much his disease had been aggravated by foreign service, though not contracted in and by the service, again contrasting the treatment dealt out to him with that to others, and referring especially to a case—one which was not long since before the public—in which a medical officer of intemperate habits was tried for the murder of a brother officer, but who was yet put on half-pay (it was said in some journals permanent half-pay), on account of past service. Mr. Spurway adds that he has submitted his case to old commanding officers, and "they one and all say I have been treated shamefully". So ends the correspondence. We may add that the fact of Surgeon Spurway being gazetted out of the Army Medical Department was noted in a recent number of the JOURNAL.

We confess we have perused the correspondence, of which the foregoing is a digest, with much surprise. How the "authorities", whoever they may be, can so add to the fuel of discontent, which is surely burning strongly enough in the Army Medical Department already, by such a line of conduct as is exhibited in this instance, we are at a complete loss to understand. But, however impolitic such a treatment of an army medical officer who has done good service for ten years may be, is it justified by the language of the Warrant quoted in the correspondence? We believe not. In the Royal Warrant of March 1873 (Article 28), a scale of half-pay is laid down for medical officers who are "placed on half-pay by reduction of establishment", or "in consequence of wounds or ill-health caused in and by the discharge of his duties". The correspondence shows that it was decided that Mr. Spurway could not be placed on half-pay under this latter head, although, according to his own statement, his disease, severe periodical headache, was increased by service "in one of the worst stations in Lower Bengal, where repeated attacks of fever enervated me so that my constitutional ailment became intensely aggravated". The next article refers to half-pay on retirement after twenty years' service, and Article 30 on retirement after twenty-five years' service. But the following article of the Warrant (Article 31) lays down the rule that "a medical officer placed on half-pay from any other cause than the foregoing shall be allowed only a temporary rate of half pay, not exceeding the rates specified in Article 28, for such period and at such rate as our Secretary of State for War shall decide with reference to the services rendered to the public by such officer".

There is no allusion in the Warrant anywhere to the absurd contradiction of half-pay without half-pay. Clearly, then, it appears to us that Mr. Spurway was entitled by Article 31 to a temporary rate of half-pay, and by the same article the Secretary of State for War should have decided what the rate should be according to his ten years' previous service. The Director-General himself states, in his letter to Mr. Spurway, that he was not placed on half-pay without half-pay "as any slight upon his previous service"; and, in one of his letters, Mr. Spurway challenges the authorities to contradict the fact that he

had always conducted himself as a gentleman, and performed his duties with credit. This is not denied, and we cannot, therefore, but come to the conclusion, on the evidence of the correspondence before us, that a medical officer who has served his country honourably for ten years, and who has been unfortunate enough to have undergone deterioration of health in an unhealthy climate like that of Bengal, has been placed on half-pay without half-pay in direct opposition to the terms of the Royal Warrant of March 1873, and has, in short, in the end been needlessly lost to the public service. It is evident that the case of Mr. Spurway is not likely to stop where it now stands. Its effect has already been very hurtful; it has greatly shaken the confidence of officers not only in the Army Medical Department, but in other branches of the army; and, in the interests of the public as well as of the army, something must be done to rectify the error which has been committed.

OBITUARY.

GEORGE WEBSTER, M.D., F.R.G.S., DULWICH.

THE numerous members of our Association who have known and esteemed Dr. George Webster of Dulwich, will regret to learn that, having on the previous day appeared to be in excellent health, he was found on the morning of November 13th to be senseless from an attack of apoplexy, of which he died on the 19th, at the age of 78.

Dr. Webster, who was a native of Forfarshire, became a licentiate of the Royal College of Surgeons of Edinburgh in 1815; and obtained the degree of M.D. at Aberdeen in 1829. His original intention of entering the army was abandoned in consequence of the peace of 1815, and he at once settled in Dulwich, where he remained to the end of his life—a period of sixty years. Here, after a partnership with the late Mr. Hall, he carried on a general practice with much success, enjoying the confidence and esteem of his *clients*. He did not confine himself to his professional duties, but took an active interest in the schools and other public matters connected with his place of residence. In the profession, he has long been known for the energy which he for many years displayed in regard to medical reform. It was through his influence that, about thirty years ago, a combination of medical practitioners was formed under the name of the "British Medical Association", of which he was the first (and, we believe, the only) President. This Association, which had but a short existence, was altogether distinct from the present British Medical Association, at that time known as "Provincial".

In our Association, both as Provincial and as British, Dr. Webster was held in high esteem. He was one of the founders of the Metropolitan Counties Branch, and was its fourth President. He was on many occasions returned by the Branch as a member of the General Council of the Association; and, at the time when, before the passing of the Medical Act of 1858, medical reform was a topic of frequent discussion in the Association, he was one of the members of the Special Committee on the subject.

For some years, Dr. Webster had retired from the active duties of his profession; and had undertaken the duties of a magistrate of the county of Surrey.

Among his numerous acquaintances in the profession, Dr. Webster's genial manners and integrity of character gained him a high degree of respect and esteem; and he will be long remembered as an energetic promoter of the interests of his profession, and of every good cause that came within his reach.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, November 25th, 1875.

Tomartin, Henry de, Lying-in Hospital, York Road
Mahoney, Laurence Francis, Amhurst Road, Dulston
Roberts, Gordon Money, 82, Finchley Road
Stephens, Meredith Lloyd, Belper, Derbyshire

The following gentlemen also on the same day passed their primary professional examination.

Backell, Ernest H., University College Hospital
Coquelin, Daniel, Charing Cross Hospital
Greenwood, Arthur, Charing Cross Hospital
Hyne, Frederick Alexander, Guy's Hospital
Rouche, Eugenius A., St. Mary's Hospital

MEDICAL VACANCIES.

THE following vacancies are announced:—
ADDENBROOKE'S HOSPITAL, Cambridge.—Dispenser. Salary, £60 per annum. Applications on before December 15th.

- AMERSHAM UNION.**—Medical Officer. Salary, £70 per annum, and extra fees. Applications on or before December 8th.
- ARDWICK and ANCOATS DISPENSARY, Manchester.**—Resident House-Surgeon.
- BURKS COUNTY ASYLUM, Meadsford.**—Assistant Medical Officer. Salary, £20 per annum, with board, fuel, and washing.
- BIRMINGHAM AND MIDLAND EYE HOSPITAL.**—Dispenser. Salary, £70 per annum. Applications on before the 6th December.
- BOOTLE BOROUGH HOSPITAL.**—House-Surgeon. Salary, £80 per annum, with board, furnished apartments, and washing. Applications to the Honorary Secretary.
- CARMARTHEN UNION.**—Medical Officer.
- CHIPPENHAM UNION.**—District Medical Officer, Public Vaccinator, and Medical Officer of Health. Salary, £120: 4 per annum as Medical Officer, and £17: 6: 10 as Medical Officer of Health, in addition to extra fees. Applications on or before December 11th.
- CHORLTON-ON-MEDLOCK, RUSHOLME, and MOSS SIDE DISPENSARY, Manchester.**—House-Surgeon.
- DENBIGHSHIRE INFIRMARY.**—House-Surgeon. Salary, £85 per annum, with board, washing, and residence.
- DUMFRIES and GALLOWAY ROYAL INFIRMARY.**—Assistant House-Surgeon. Board and washing. No salary. Applications to the Treasurer.
- EAST SUFFOLK and IPSWICH HOSPITAL.**—House-Surgeon. Applications on or before December 8th.
- GENERAL HOSPITAL and DISPENSARY FOR SICK CHILDREN, Penetration, near Manchester.**—Superintendent. Salary, £100 per annum, with everything found.
- GLOUCESTER INFIRMARY.**—Surgeon and Assistant Surgeon. Applications before January 27th, 1876.
- GREAT NORTHERN HOSPITAL, Caledonian Road.**—Surgeon. Applications on or before December 9th.
- HAMBLEDON UNION, Surrey.**—Medical Officer. Salary, £53 per annum, with extra fees. Applications on or before December 15th.
- HOSPITAL FOR THE INSANE, Barnwood, near Gloucester.**—Assistant Medical Officer. Salary, £100 per annum, increasing £10 annually to £120, with board (exclusive of washing, fuel, and washing).
- HUDDERSFIELD INFIRMARY.**—Physician.
- INFIRMARY FOR CONSUMPTION, Margaret Street, Cavendish Square.**—Visiting Physician. Applications on or before December 16th.
- LIVERPOOL INFIRMARY FOR CHILDREN.**—House-Surgeon.
- MOFFAT HYDROPATHIC ESTABLISHMENT.**—Medical Man to take charge. Applications to Messrs. Bann and Kerr, W.S., Edinburgh.
- PARISH OF LISMORE AND APPIN, Lettermore.**—Medical Officer. Salary, £100 per annum. Applications to the Rev. D. Dewar, Manse, Appin, Argyll.
- REDDITCH and DISTRICT MEDICAL AID ASSOCIATION.**—Medical Officer. Salary, £200 per annum, extra fees, and unfurnished house. Drugs, cab hire, etc., found. Applications on or before December 9th.
- ROTHERHAM HOSPITAL.**—Resident House-Surgeon. Salary, £120 per annum, with board and furnished apartments. Applications on or before December 23rd.
- ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields, E.C.**—House-Surgeon. Salary, £5 per annum, with board and residence. Applications on or before December 6th.
- ST. PANCRAS and NORTHERN DISPENSARY.**—Resident Medical Officer. Salary, £100 per annum, with residence and £20 of porter's wages.
- SALOP INFIRMARY, Shrewsbury.**—Dispenser. Salary, £70 per annum. Applications on or before the 15th instant.
- SHEFFIELD GENERAL INFIRMARY.**—Physician. Applications on or before January 5th, 1876.
- STROUD GENERAL HOSPITAL.**—House-Surgeon. Salary, £60 per annum, with board, furnished rooms, attendance, and washing.
- THARSIS MINES, Province of Huelva, Spain.**—Medical Practitioner. Salary, £200 per annum. Applications to the Secretary, 15, West George Street, Glasgow.
- TONGUE and FARR, District of, County of Sutherland.**—Medical Officer. Salary, £100 per annum, and house.
- TRINITY COLLEGE, Dublin.**—Professor of Pathology. Applications on or before January 2nd, 1876.
- WELLS UNION.**—Medical Officer. Salary, £80 per annum, and extra fees. Applications on or before December 7th.
- WORKSOP UNION.**—Medical Officer and Public Vaccinator. Applications on or before December 7th.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTHS.

DOBSON.—On November 17th, at 11, Lansdown Place, Clifton, the wife of *Nelson C. Dobson, F.R.C.S., of a son.

MARRIAGES.

BREBNER-SIMPSON.—At Christ Church, Georgetown, Demerara, on October 25th, 1875, by the Rev. J. Elliott Fox, M.A., the incumbent, assisted by the Rev. Thomas Farrar, Rector of St. Paul's (cousin of the bride), William Brebner, M.B., C.M., M.G.C.U.E., Surgeon H.M.P.S., to Ellen Innis, eldest and only surviving daughter of James B. Simpson, S.C.P. (N. cards).

CAMPBELL-MACDONALD.—At Edinburgh, on November 25th, by the Rev. C. G. Hutchins, M.A., Rector of Dunton, Bucks, Edward E. Campbell, M.B., C.M., to Johanna Catherine Macdonald, youngest daughter of the late Alexander Macdonald, Esq., Town Clerk, Isle of Shyde.

DEATHS.

BUCHANAN, Thomas Cox, F.R.C.S.E., for many years one of the Surgeons of the County Infirmary, Gloucester, at 11, Spa Walk, Gloucester, aged 71, on November 24th.

CHAUMAS, Henry Thomas, F.R.C.S.E., formerly of 21, Lower Seymour Street, Portman Square, London, at 2, Segrave Villas, the Park, Cheltenham, aged 60, on November 17th.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY**Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
- TUESDAY**Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
- WEDNESDAY**..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
- THURSDAY**...St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.
- FRIDAY**.....Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
- SATURDAY**...St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY**.—Medical Society of London, 8.30 P.M. Mr. Maunders (living specimen), "The Arm seven years after Excision of the Elbow-joint"; Mr. Alfred Freer (of Stourbridge), "Case of Impaction, with *post mortem* Results four years and a half afterwards"; Dr. Robert Lee, "Different Forms or Possibilities".
- TUESDAY**.—Pathological Society of London, 8.30 P.M. Mr. Hutchinson: Molluscum Contagiosum. Mr. John H. Morgan: Dilatation of Bile Ducts. Dr. Fred. Robinson: Aneurism of Aorta. Dr. Habershon: Obliteration of Superior Cava. Dr. Habershon: Ulceration of Duodenum extending into Vena Portæ. Mr. A. Mori-on: Disease of Pulmonary and Tricuspid Valves. Mr. Thos. Smith: Hæmorrhagic Peritonitis. Dr. Gowers: Fatty Tumour of Cord. Dr. Wickham Legg: Congenital Deficiency of Common Bile Duct and consequent Cirrhosis. Mr. Nunn: Injury to Radius. Mr. Nunn: Deformity from Rheumatic Gout. Mr. T. D. Griffiths: Cirrhosis of Liver in Child. Mr. Godlee: Recurrent Epithelioma in Chest and Toe after successful Excision of Tongue. Dr. Greenfield: Cancer of Heart and Supra-renal Capsules. Dr. Greenfield: Cancer of both Breasts and Ovary. Mr. Walsham: Tumour of Clavicle. Dr. Fred. Taylor: Aneurism of Aorta opening into Stomach. Mr. Alban Doran: Arrest of Development of both Forcarns. Mr. Spencer Watson: Report of Sequel of Dr. Walker's Case of Recurrent Sarcoma of Leg. Dr. Goochart: Embolic Infarction in Heart Muscle.
- WEDNESDAY**.—Hunterian Society, 8 P.M. Council Meeting at 7.30 P.M.; General Meeting at 8 P.M., when Mr. Herbert Tibbits will read a paper on Electro-Therapeutics, and illustrate it by Instruments.—Epidemiological Society, 8 P.M. "On the Recent Cholera Epidemic in Syria", by John Wortabet, M.D., Physician to St. John's Hospital, Beyrout.
- THURSDAY**.—Harveian Society of London, 8 P.M. Dr. Sibson, F.R.S., Second Harveian Lecture "On Bright's Disease and its Treatment, considered mainly in relation with Arterial Tension from Blood Contamination". [Date altered from December 16th.]
- FRIDAY**.—Clinical Society of London, 8.30 P.M. Dr. Donkin, "Case of Diabetes treated with Skimmed Milk"; Mr. Haward, "Case of Lymphadenoma"; Dr. T. S. Dowse, "Case of Thrombosis of Cavernous Sinus: Sudden Loss of Vision: Hæmorrhage into Anterior Lobe"; Mr. Venning, "Case of Congenital Tumour".

NOTICES TO CORRESPONDENTS.

- CORRESPONDENTS** not answered, are requested to look to the Notices to Correspondents of the following week.
- PUBLIC HEALTH DEPARTMENT**.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with *Duplicate Copies*.
- AUTHORS** desiring reprints of their articles published in the JOURNAL are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.
- CORRESPONDENTS**, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.
- WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.**
- COMMUNICATIONS** respecting editorial matters, should be addressed to the Editor; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

GARD'S PATENT MEAT ESSENCE EXTRACTOR.

SIR,—Please correct error in last JOURNAL. Gard and Co. live at Dunstable. The machine was the invention of a Colchester man.—Yours, etc., C. R. BREE.
Colchester, November 29th, 1875.

L. M. (Tiverton).—An examination for the "L.M." of the College of Surgeons will take place about the 8th of the present month. Write to the secretary.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

WHARFEDALE CONVALESCENT HOME.

The Committee of Management of this institution has issued cards to the members of the medical profession, announcing that the Home will be opened for the reception of convalescents during the whole winter months, and that the arrangements for heating and ventilation are of such a nature as to insure the most perfect warmth and comfort to the inmates. This determination has been arrived at through the strong wish of the founder, Mr. Charles Semon, to extend to middle and working-class convalescents, and also to those amongst the working-class, who, from depressing mental and bodily causes, require change of air and scene during the winter months, the same benefits as those which can be obtained by their richer brethren at the Ilkley Wells House and other kindred establishments throughout the county. The Committee announce that the charge per week will be the same during the winter as the summer—namely, ros. 6d.

We doubt not that the Committee, in thus making known to the medical men this decision of Mr. Semon's, is taking the best and most judicious method of reaching the very class which he intended to benefit. The Home itself is situated in one of the most picturesque, bracing, and splendidly watered localities in Yorkshire.

The *jeu d'esprit* which Æsculapius Quindne forwards us, "On a New Longitudinal, Versatile, Flexible, Clinical Stethoscope", is amusing, but too long and laboured for insertion.

SCARCITY OF SUBJECTS.

SIR,—I hope it will not be considered presumption on my part to venture to direct the attention of the medical profession to the present extraordinary scarcity of subjects for dissection in most of the London schools of medicine, and to inquire, through your valuable JOURNAL, the reason of it. At the present time, when the anatomical examinations are notably becoming more searching and severe, it seems doubly unfortunate that those who are studying for them should be deprived of the means of attaining a thoroughly practical knowledge of anatomy, which is universally admitted to be the only true foundation of success in the practice of medicine and surgery. In my own school (St. Thomas's), at which there have been seventy-four entries this October, and, I believe, over sixty last year, making over a hundred and thirty men, who ought to be spending a great portion of their time either in attending demonstrations or dissecting for themselves, we have had only eleven subjects, and I am assured there is no chance of obtaining more till after Christmas. Other schools are, I believe, worse off; so altogether the chances are, that the percentage of "plucked" men at the forthcoming examinations will be larger than usual.

Apologising for trespassing so much on your valuable space, I am, sir, your obedient servant,

Albert Embankment, S.E., December 1st, 1875.

A SECOND YEAR'S MAN.

DR. RINGROSE ATKINS' (Cork) letter shall be attended to.

SNAPPING A TESTIMONIAL.

SIR,—Is there any remedy against the introduction of my name into a touting advertisement, to which I am neither directly nor indirectly a party? This morning, a paper was put into my hand lauding a certain liqueur. Among the medical testimonials I find a note to the following effect.

"Dear Sir,—My friend Dr. —, physician to —, was here yesterday, and tasted and approved your liqueur. I enclose a cheque for two cases.—I am, dear sir, your truly, G. T. D."

I have a faint recollection of once receiving a present of the said liqueur, but I should have absolutely refused it had I known the penalty I should have to pay in seeing my name thus paraded.—I am, dear Mr. Editor, yours faithfully,
November 30th, 1875.

THE ABOVE DOCTOR.

. The question is a legal one. There can be no doubt that a grave breach of confidence is involved, and we do not think any respectable tradesman would continue to use a "testimonial" so obtained. In the first instance, therefore, the tradesman himself should be communicated with: in the event of persistence, a solicitor might suggest some means of relief.

We shall be happy to receive clinical memorandum of the case which Mr. Johnston Macfie mentions.

GALVANISM IN POST PARTUM HÆMORRHAGE.

SIR,—In answer to "A Busy Practitioner", I beg to reply: Hæmorrhage is arrested *post partum* when ergot or brandy is given, or cold or pressure applied only by contraction of the uterus. Iron, being an irritant, causes contraction; it is questionable, even if it have the property of acting as a direct styptic, if this is to be desired, the probable danger being greater than the benefit gained. Any uterine irritation will probably cause contraction; the hand introduced does so; the introduction of the blade of a forceps is often followed by an unusually severe pain; galvanism or electro-magnetism may in like manner sometimes be beneficial in *post partum* hæmorrhage.

Sir James Y. Simpson records (*Obstetric Works*, by Priestly and Storer, pp. 375-393) the result of galvanism in eight cases; in one case, the pains were more frequent in recurrence but shorter in duration during the application of galvanism; in five, the employment of galvanism did not increase the average frequency or duration of the pains; in one, the pains ceased whilst galvanism was applied, and returned on its removal; in another, pains not only ceased during the application of galvanism, but did not return for twenty-four hours after the current was withdrawn; so that, generally speaking, galvanism is not only unreliable as a promoter of uterine contraction, but is a direct antagonist rather.

Fraserburgh, N.B.

A. D. L. NAPIER, M.B., C.M.

Mr. J. B. BRIBERLEY (Manchester).—We should have been happy to publish Mr. Brierley's letter, but for its great length and the mass of correspondence which we received on the subject. We are compelled to make a selection in such cases.

J. W., M.D.—Mr. Joseph Swan died at Filey, Yorkshire, October 4th, 1874, aged 83, where he was buried on the 8th. The preparations are in the museum of the College of Surgeons.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

CÆSAREAN SECTION.

THE following is Mr. Holmes' explanation of the circumstances referred to in a paragraph which we recently quoted from the *Pall Mall Gazette* under this head, and which, we observed, seemed to require explanation.

"I was called in as I passed to see a woman just dead. I made no inquiries, but ordered them to give information to the police. Shortly afterwards I was met by the clerical gentleman named in your report, who stated that the woman was at her full time, and that there was evidence that the child was alive. He begged of me to go at once and take away the child by 'Cæsarean section'. Never doubting the gentleman's having the consent of the family (which is one of the three authorities named as requisite), as she was one of his church, and as an operation of that description if the child be living and can be saved) must be performed at once, I had no hesitation in acceding to his request. Not having my instrument-case, with an ordinary bleeding lancet I opened the body, and, on finding there was not any appearance of the existence of a full-grown child, my examination went no further. It was quite evident that the symptoms of advanced pregnancy were owing to distension from dropsy. I did not make any *post mortem* examination in the full professional meaning of the term, so that the remark referring thereto as 'unskillfully performed' does not apply, my sole operation being that simply narrated above, and very likely not presenting a fair specimen of surgical skill from the nature of the instrument. If the police did ask me to give a certificate, how could I do so? not having seen the case alive, nor made a *post mortem* examination after death to find the cause. I of course declined to give an opinion verbally for the same reasons. And, further, I may state that if the authorities require professional men's time and opinion, they cannot reasonably expect to have them without remuneration, which is implied in cases where they are invited to give evidence without being subpoenaed. It appears to me that there would have been much greater cause for speaking of 'a grave scandal to society' if no effort had been made to save a living child. Such separation of child from its mother, under the circumstances which I assumed existed, is not uncommon, and would assuredly be made by any surgeon."

Dr. R. Brecher (Openshaw) adds: "At the inquest held at Gorton on Saturday, November 6th, I understand that I am reported to have said that the operation was 'unskillfully performed' by Mr. Holmes. I now write to say that that statement was not made by me, as a reference to my attested evidence in the hands of the coroner will verify."

"* * * We are bound to say that Mr. Holmes does not appear to have acted with due caution in omitting to ascertain on what authority he was asked to perform this operation."

ADMISSION OF LADIES TO THE BRITISH MEDICAL ASSOCIATION.

SIR,—I think there is something very abrupt—"stand-and-deliver-like"—in the tone of the "resolution", which I have received from the General Secretary to-day and have answered, calling for the opinion of members of the British Medical Association "as to the admission of female practitioners to the membership". To do this in this curt fashion precludes the expression of the reasons—some good, some bad, no doubt—that may have influenced members in determining their votes, and so precludes the possibility which should be kept open for us in the future, of modifying our opinions with the advance of thought, and the interchange and conflict of all the reasoning that the subject may draw forth, which is as yet all too unthought over by most of us to insure a sound final judgment on it. Further, I think that the time is not yet ripe in very many relations for the innovation and liberality of action which may, and perhaps will, be admissible and proper fifty years hence, so that we should not commit ourselves now, without exhibiting our reasons, to any judgment which, fifty years hence, our reasons not being recorded, may be reversed to our discredit. I speak here only of that discredit which a more advanced age of our own profession may cast on our judgment. Yet it is but fair also to consider what imputations of jealousy, unreasonableness, prejudice, etc., may be thrown at us by the outside world now, if we do not produce reason for our judgment, which will without doubt be freely criticised, and to weigh the importance, whatever it may be, of any adverse stricture or imputation.

I have answered "No" to the question propounded in the resolution, and these are the grounds for my doing so. 1. The British Medical Association is not only a very distinguished medium and arena for the display of advancing science, but it is also a body professing, and acquiring still more largely, a great measure of public influence beyond the limit of its own members—an influence which has weight, and will yet have more, with many governing local bodies in their charge of the public good, and even with the supreme governing powers of the country. This influence, which we ought by all means to promote, I think the admission of female practitioners to membership, whatever may be their excellence or their attainments in the study of medical science, will derogate from and harm. When the experiment has been found to succeed elsewhere, of admitting women to a place in deliberative or legislative associations or assemblies, it will then be proper, perhaps, for the British Medical Association to follow the example; but I do not think that it is for the British Medical Association to be among the foremost to hazard such an experiment. Can one not also, with but small exercise of the imagination, present to one's mind the sarcasm which, from an opposing party, would meet the opinions or pleading on any public question of an epicurean British Medical Association? 2. However admirable female practitioners, and however great blessings they may be in the circumstances for which they are specially adapted, I think their excellence and the blessedness of their calling are such as to be only especially excellent and blessed in the private exercise of their gifts. It is true that a female practitioner may, as well as any male practitioner, have something of experience or teaching to impart to the advantage of the science of the profession; and it may be, also, that the difference of physiological constitution in her-self may, indirectly at any rate, be a source of special excellence in such experience or teaching. But in all such cases it is open for the female practitioner to communicate by writing, and receive the commendation or thanks of the profession for the experience or teaching she may have to impart, without necessarily personally assuming a place in public. 3. When it can be shown that the British Medical Association, as a public body, is likely to be benefited or raised to higher influence by the public appearance or action of women among its members, or that it is due to women, either socially or morally, to admit them to a public standing with men, it will be time enough then to introduce them to the membership.

I have written at greater length than I anticipated doing, and an apology is

due to you for thus venturing to tax your attention so long, perhaps uselessly; and yet I seem to have written with such shortness as almost to be gruffness. If I have indicated what I intended to say, however, it is enough—I am, dear sir, yours obediently,
R. LINDSAY, F.R.C.S.E.

21, Grange Loan, Edinburgh, November 19th, 1875.

G. H. D. (Chorlton) is referred to the note on "Sham Degrees and Diplomas" in the Notices to Correspondents of November 27th. Holders of the sham degrees of the "American University of Philadelphia" are liable to prosecution for pretending to practise medicine as though legally qualified; and if our correspondent will put himself in communication with the Secretary of the British Medical Defence Association (George Brown, Esq., 72, Colebrook Row, Islington), he will probably obtain assistance and advice in the pursuit of his objects.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Hastings and St. Leonard's News; The Belfast News-Letter; The Sheffield Daily Telegraph; The Chester Guardian and Record; The Hereford Times; The Bristol Daily Post; The Statesman; The Birmingham Morning News; The Cork Constitution; The Newcastle Weekly Chronicle; The Worcester Journal; The Hobart Town Mercury; The Weekly Times; The Mid-Weekly Hampshire Independent; The Lincolnshire Herald; The Sunderland Daily Echo; The Co-operative and Financial Review; The South Wales Daily News; The Macclesfield Courier; The Glasgow Herald; etc.

* * * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. A. S. Taylor, London; Dr. Parkes, Netley; Dr. J. C. Hall, Sheffield; Mr. W. Fairlie Clarke, London; Dr. Procter, Bath; Dr. J. Brunton, London; Mr. R. Davy, London; Dr. Dyer, Ringwood; Mr. J. N. Radcliffe, London; Mr. Stephen Alfred, London; Dr. A. P. Stewart, London; Mr. Haviland, Northampton; Mr. W. J. Harris, Worthing; Dr. B. Foster, Birmingham; Mr. John Marshall, London; Dr. W. T. Gassner, Glasgow; Dr. J. Russell, Birmingham; Dr. Dickinson, London; Dr. Duffin, London; Dr. Harvey, Aberdeen; Mr. W. Adams, London; Mr. G. Cowell, London; Dr. Madge, London; Dr. Cheadle, London; Mr. T. Holmes, London; Mr. Spencer Wells, London; Dr. Langdon Down, London; Mr. Callender, London; Dr. Fincham, London; Dr. R. Livingdon, London; Mr. Erichsen, London; Mr. Gordon Brown, London; M.D.; Dr. Althaus, London; J. S.; Mr. George Brown, London; Dr. Thomas Bell, Uppingham; Dr. Habershon, London; Dr. Cavafy, London; Dr. S. Fenwick, London; Dr. W. R. Basham, London; Dr. Tilbury Fox, London; Dr. Thorburn, Manchester; Dr. S. H. Wright, Glasgow; Mr. C. G. Wheelhouse, Leeds; Dr. Russell Reynolds, London; Dr. L. Athill, Dublin; Mr. Howard Marsh, London; Mr. Michell Clarke, Clifton; Dr. Eade, Norwich; Dr. J. B. Potter, London; Mr. S. Gamgee, Birmingham; Mr. H. A. Reeves, London; Dr. J. Milner Fothergill, London; Dr. Palfrey, London; Dr. Copeman, Norwich; Dr. R. D. Powell, London; Dr. R. Thompson, London; Dr. F. T. Roberts, London; Dr. Philippon, Newcastle-upon-Tyne; Dr. F. Ogston, Aberdeen; Mr. H. T. Butlin, London; Mr. Chiene, Edinburgh; Dr. Stephenson, Aberdeen; Dr. Gowers, London; Sir H. Thompson, London; Dr. Grafty Hewitt, London; Dr. W. B. Woodman, London; Dr. G. Johnson, London; Dr. O. Sturges, London; Dr. A. Robertson, Glasgow; Dr. Charteris, Glasgow; Dr. T. Spencer Cobbold, London; Sir R. Christison, Edinburgh; Dr. Edis, London; The Secretary of the Clinical Society; Mr. Eastes, London; Mr. G. Critchett, London; Dr. John Duncan, Edinburgh; Mr. Sydney Jones, London; Dr. Greenhalgh, London; Dr. Bradbury, Cambridge; Dr. Shepherd, London; Dr. F. J. Farre, London; Mr. Longmore, Netley; Dr. Barclay, Banff; Dr. Symes Thompson, London; Dr. H. Gervis, London; Mr. Rouse, London; Dr. C. Godson, London; Dr. J. E. Pollock, London; Dr. G. H. Porter, Dublin; Dr. Lockhart Clarke, London; Dr. Charles, Cork; Mr. Andrew Clark, London; Mr. W. P. Swain, Devonport; Dr. J. Sawyer, Birmingham; Dr. Hayden, Dublin; Dr. Hudson, Dublin; Mr. Rivington, London; Dr. Cummins, Cork; Dr. Thomas Jones, London; Dr. Grinshaw, Dublin; Mr. C. Holthouse, London; Dr. L. S. Beale, London; Dr. G. Harley, London; Dr. W. C. Grigg, London; Dr. Hilton Fagge, London; Dr. Donkin, London; Dr. Ainslie Hollis, Brighton; Mr. F. Holmes, Gorton; Dr. Robert Smith, Heckfield; Mr. Hamilton Cartwright, London; Dr. E. L. Fox, Bristol; Dr. Burney Yeo, London; The Secretary of the Hunterian Society; Dr. Alfred Meadows, London; Dr. Goldie, Leeds; Dr. Taaffe, Brighton; Mr. Broadbent, Manchester; Our Glasgow Correspondent; Our Paris Correspondent; Dr. Farquharson, London; Mr. Sewell, London; Mr. J. A. Wanklyn, London; Mr. R. Torrance, Matfen; Dr. Bree, Colchester; Mr. E. L. Jacob, London; Dr. Goyder, Bradford; Dr. Ducat, Highbury; Mr. Glynn Whittle, Liverpool; A Senior Member; Mr. M. A. Kenny, York; Mr. E. V. Whitby, Birmingham; Mr. J. Smith, London; Mr. McIlvain, London; Mr. E. Thurston, Ashford; Dr. Weir, Sreinton; Dr. Tilt, London; Mr. G. May, Reading; etc.

BOOKS, ETC., RECEIVED.

The Cause and Treatment of Imperfect Digestion. By Arthur Leared, M.D. Oxford. London: J. and A. Churchill. 1875.
The Anatomy of the Lymphatic System. By E. Klein, M.D. London: Smith, Elder, and Co. 1875.
Lectures on Dermatology, delivered in the Royal College of Surgeons of England in 1874-75. By Erasmus Wilson, F.R.S. London: J. and A. Churchill. 1875.
Manual of Materia Medica and Therapeutics. By A. Milne, M.D. Third Edition, revised, enlarged, and re-arranged. By W. Craig, M.D. Edinburgh: E. and S. Livingstone. 1875.

CLINICAL LECTURE

ON

CASES OF INJURY TO THE HEAD.

Delivered in University College Hospital.

BY CHRISTOPHER HEATH, F.R.C.S.,
Holme Professor of Clinical Surgery.

GENTLEMEN,—During the past month, there have been three cases of head-injury in my wards, which you have had the opportunity of watching to their terminations. Two of these patients made good recoveries, but the third died; and the *post mortem* examination yielded the specimen of fractured base of the skull now before you. The first case was that of a cabman, who was in the first bed on the right hand in No. 1 Ward at the beginning of the session, having been admitted on September 23rd, under the following circumstances. The night before, his cab, a four-wheeler, was accidentally upset, and he was thrown off the box, being stunned for the moment, but quickly recovering himself, with a recollection of having fallen on his right side. He was able to assist in righting his vehicle, which he then took home; and, about midnight, he applied here for the treatment of his bruised ribs. At that time, the house-surgeon found nothing wrong with his head, and therefore dismissed him; but, when he appeared next day among the casualties, Mr. Collins noticed some recent ecchymosis beneath the conjunctiva of the eyeball, which had not been there before, and therefore, very properly, at once admitted him. When I saw him the following day, the man complained of headache, and his pulse intermitted, but the ecchymosis had not increased; and, after a few days' quiet in bed, the headache passed off, the blood began to be absorbed, and he was discharged on October 6th.

Now, here was a case which presented few symptoms, but one of them of possibly grave import—I mean the subconjunctival ecchymosis. The ordinary ecchymosis of the orbit from a blow—the familiar “black eye”—consists principally of blood effused beneath the skin, which may possibly extend to the palpebral conjunctiva, and even beneath the conjunction of the eyeball, though this last is rare. But, then, there is a distinct local injury, and the hæmorrhage occurs immediately after its infliction. In this case, on the contrary, the hæmorrhage did not appear for at least two hours after the fall (probably later still); and there was no bruising of the neighbouring parts. Hæmorrhage of this kind occurring beneath the ocular conjunctiva must always be viewed with anxiety; for it may depend upon some fracture of the orbit, or of the anterior fossa of the base of the skull, the blood finding its way forward along the sheath of the optic nerve. With no further development of symptoms to guide us, we may hope that the patient had no serious injury, and that the hæmorrhage arose from some capillary rupture of no consequence; but the second case I have to bring before you shows how cautious one must be in drawing conclusions in cases of head-injury.

The second patient was also a cabman, and was in No. 1 Ward. He, also, was thrown off his cab, breaking his collar-bone; and was admitted on September 16th, with bleeding from the left ear. Now, bleeding from the ear may or may not be a serious symptom, according to the amount of it. A blow on the ear may cause slight hæmorrhage by lacerating the lining membrane, or rupturing the membrana tympani; but when blood flows continuously from the ear, as in this patient, for twelve hours, the case is obviously a grave one. Where did the blood come from? Not from one of the large sinuses of the skull; because, if one of these were torn, the hæmorrhage would almost necessarily be fatal, as I have seen in a case of bad fracture; but from the small vessels which supply the temporal bone and the organ of hearing, and are derived partly from the internal, and partly from the external, carotid. No plugging could be of any avail to arrest such bleeding; and the treatment consisted simply in keeping the patient quiet, with a bladder of ice to his head. The hæmorrhage ceased, as I have said, at the end of twelve hours, and was not followed by the flow of any other fluid from the ear; but the patient remained deaf on that side. Feeling pretty certain that the temporal bone had been injured, we left the patient quiet, and on low diet; and, at the end of seven days, the diagnosis was continued in the following way. In the evening, the man complained of difficulty in closing his eye;

and, the next morning, the facial paralysis on the affected side was fully developed. I frequently called your attention to his condition when going round; and I hope you all studied his case, for facial palsy is easily misunderstood. You will remember that the left side of the face had a peculiar lifeless appearance, while the right side was slightly drawn. He was unable to close his eye, to whistle, or to blow out his cheeks, owing to the portio dura of the seventh pair, the motor nerve of the facial muscles, being paralysed. Clearly this paralysis was due to injury to the nerve itself, and not to any cerebral lesion; for we know that, in facial paralysis accompanying an ordinary paralytic stroke, and dependent upon brain-disease, the fibres supplying the orbicularis palpebrarum usually escape.

What, then, is the explanation of this occurrence? It is that, at the time of the accident, the temporal bone was fractured, or, at least, fissured, in such a way as to permit the flow of blood into the tympanum, from which it flowed through the ruptured membrana tympani. The fracture was not sufficiently severe to give exit to any cerebro-spinal fluid, or to lead to inflammation of the meninges of the brain; but it undoubtedly passed close to one, or probably both, branches of the seventh pair. When, at the end of seven days, the lymph poured out for the repair of the bone began to be organised, it caused temporary pressure upon the nerves, giving rise to the facial paralysis and part, probably, of the deafness; but, after a few days more, either some absorption took place, or the nerve became accustomed to the pressure, as nerves undoubtedly do; and the patient gradually recovered entire use of his facial muscles, though he still remains somewhat deaf. He was discharged on October 20th, and has been here occasionally since to have his clavicle seen to.

The third and fatal case was that of a boy, aged 10, who was admitted on October 25th, having shortly before fallen to the ground head foremost from a furniture truck on which he was playing. On admission at 8 P.M., the patient was pale and slightly collapsed; pulse 72, small and soft; respirations 20, regular; pupils dilated, equal, reacting readily to light. He answered questions when spoken to, and said he was deaf, which he had not been before. A slight bruise was felt two inches above the left eyebrow. He had been, and was, vomiting. He was left in the casualty-room for half an hour; and, at the end of that time, blood-stained serous fluid was noticed trickling from the left ear. He vomited again, and then this fluid was shot out from the ear in considerable quantity. He was at once admitted to Ward 5; and it was then noted that the tongue was protruded straight, that there was slight drooping of the left upper eyelid and left angle of the mouth, and that there were slight twitchings of the left arm and all the right side. By 3 A.M., an ounce of the clear fluid flowing from the ear was collected. This gave the reaction for sugar, with Fehling's solution, very distinctly, a red precipitate being thrown to the bottom of the test-tube, which you all had the opportunity of seeing. The fluid was alkaline in reaction, and showed a trace of albumen.

When I made my visit on the following day, you will remember that we found the boy lying in a quiet drowsy state, exceedingly deaf with both ears, but quite conscious when we succeeded in rousing him. The pupils were equal, and of natural size, acting slowly under the stimulus of light. The tongue was clean and moist, and was put out straight. There was no evidence of paralysis, and no twitching at this time. The pulse was small and rather hard—75 per minute. The boy was unable to pass his urine, and it was drawn off with a catheter. The bruise on the forehead was distinctly visible, but no line of fracture could be detected. The clear fluid continued to flow from the left ear in considerable quantity.

Now, there could be no doubt in one's mind that this boy had sustained a most severe and probably fatal injury; since the symptoms I have detailed, and particularly the last, pointed unequivocally to fracture of the base of the skull, involving the left temporal bone. But there was more than this. The patient, who had heard perfectly well before, was now stone deaf; and, although no fluid poured from the right ear, yet this fact pointed to injury of that side, probably from extension of the line of fracture across the middle line of the skull. Under these circumstances, there was very little prospect of the patient's survival, the great risk being the occurrence of meningitis and suppuration within the cranium. With the object of combating this, I ordered one grain of calomel every four hours, and had the boy's head shaved and kept cool. You will find a divergence of opinion among surgeons as to the propriety of administering calomel in these cases of head-injury; but I have seen so many of them die without calomel, whilst I have seen three or four undoubted cases of fracture of the base recover under its administration, that I should not feel justified in omitting it; and I am glad to have such an eminent authority as Mr. Jonathan Hutchinson on my side. To do any good, however

the calomel must be pushed so as to affect the system rapidly; and I would remind you that, in young children, the best evidence we have of the constitutional effect of mercury is the passing of green motions resembling chopped spinach.

The patient was very restless during the following night; and the next day (30th) he was quite conscious, but perfectly deaf. The fluid still flowed from the ear. An ice-bag was kept to the head, and the calomel continued. At midnight, the boy was noticed to be little less conscious than before. At 3 A.M., the house-surgeon found him partially comatose; he gave a short sharp cry, and appeared to be in pain. At this time, the pupils were normal, and there was no squinting. At 10 A.M., the temperature was 100.2 deg., and pulse 132. He continued in much the same state till 3.15 P.M., when he suddenly became very livid, the respirations fell to four per minute, and he rapidly died.

At the *post mortem* examination, twenty-four hours after death, on the calvaria being exposed, you will remember that I called attention to there being no fissure or fracture opposite the bruise on the forehead, nor in any other part of the vault; and I shall have to refer to this point again. There was considerable congestion of the membranes of the brain, which was a little opaque. There was some recent lymph in the cavity of the arachnoid, especially on the left side and within the circle of Willis. On the brain being removed, the dura mater over the temporal bones was seen to be uninjured; but a clot of blood lay beneath the dura mater and the bone on the left side, and a smaller quantity in the same situation on the right. On stripping up the dura mater, we found a crack in the left temporal bone running from the upper border of the squamous portion, along the anterior surface of the petrous bone, as far as the foramen lacerum medium. Another small fissure extended from the jugular foramen of the left side to the petrosal sinus, lying a little external to the auditory meatus, and not joining the other. On the right side, there was a fissure at right angles to the axis of the petrous portion, passing from the jugular foramen through the internal auditory meatus. The membrana tympani was ruptured on the left, but entire on the right side. On the under surface of the brain were two spots of ecchymosis on the right side, corresponding to the position of the fissure. There was fluid in both lateral ventricles, but not in large quantity; otherwise the brain was healthy.

The *post mortem* examination thus confirmed the diagnosis made during life. The patient had a fracture of the base of the skull, involving both temporal bones, and hence the deafness; and he died of incipient meningitis, with effusion into the ventricles. This effusion was not sufficient to distend the ventricles; but, no doubt, occurred suddenly, and was sufficient to destroy life by pressing upon the great ganglia in the floor of the ventricle.

And now let me say a few words on the causation and pathology of this serious accident—a fracture of the base of the skull. The boy fell from no great height, but he fell on his head, and his head came into contact with the pavement. Now, according to the old and now exploded pathological doctrine, this would have been a good example of "fracture by *contre-coup*"; for one side of the skull was struck, and that opposite to it was broken; but we know now that fracture by *contre-coup* does not really exist, and that any fracture found must be the result of force applied to the bone more directly. When this boy fell, the weight of his trunk gave him the momentum which brought him violently to the ground; and when his skull was suddenly "brought up" against the paving stones, the whole of the impetus which his body had acquired came suddenly upon the base of the skull. No doubt he struck the left brow against the stones; and it was this that determined the direction of the fracture, which is in the line of force transmitted from the condyles (upon which the vertical column would impinge) towards the frontal bone; and had he fallen more directly upon the top of his head, the force would have been transmitted upwards from the condyles; and then the fracture would probably have been in the posterior, instead of in the middle fossa of the base of the skull. I must tell you that this view is not maintained by all surgeons; and notably Mr. Prescott Hewett, in his valuable article on Injuries of the Head, expresses the opinion that the fracture starts from the point of impact, and spreads to the base of the skull. In this case, however, I was most careful to examine the vault of the skull for any fissure, and none was discovered, the fracture through the squamous portion of the temporal bone being completely covered in by the temporal muscle and fascia, and there being no evidence of a blow at this point. Mr. Hewett quotes some experiments of Dr. Aran in support of his view; and in so far that "the part of the vault which first struck the ground gave, as it were, the key to the fracture which would take place at the base", I agree with him, but simply because the direction of the line-force transmitted from below is no doubt thus determined.

Then with regard to the flow of fluid from the ear: this was not

noticed at first; but, half an hour after the accident, it was seen by Mr. Collings, the house-surgeon, and at once decided the question of the admission of the patient. Fortunately, every child that falls on its head and is stunned for a time, does not break the base of its skull; but you must be careful not to give too confident an opinion as to the nature of the case directly after the accident, lest a symptom of such great gravity should develop a little later. And yet, let me say, although we all nowadays lay so much stress upon this flow of fluid from the ear, it is remarkable that the older surgeons, who must have seen it often enough, appear to have attached no importance to it. It is less than forty years since the symptom was recognised as denoting fracture of the base, although one or two cases of its occurrence had been put on record at a much earlier date. And even when it was recognised, surgeons were not agreed as to the source of the fluid. Now, there is but one fluid which is clear and alkaline, and contains a trace of albumen and some sugar; and this is the cerebro-spinal or sub-arachnoid fluid. You will remember that, on one occasion, when the patient vomited, the fluid is reported to have shot out of the ear—*i.e.*, that when, by the effort of vomiting, the brain became more congested, the fluid was driven out of the cavity of the skull; and Mr. Hilton narrates an experiment he made on a case of fracture of the base to prove the same fact, in which he temporarily produced congestion of the brain by closing the patient's nose and mouth, with the result of causing this fluid to shoot out. All authorities are, I think, agreed as to the nature of the fluid; but it is a little difficult to explain its escape. As Mr. Hewett tersely puts it, "the escape of the cerebro-spinal fluid implies a fracture cutting across the meatus internus, and communicating with the tympanum, a laceration of the tubular sheath of the cerebral membranes surrounding the seventh pair of nerves within this meatus, and a laceration of the membrana tympani". Now, on the left side, we had a rupture of the membrana tympani, and a fracture involving the meatus internus and tympanum. I could not demonstrate to you that the tubular sheath of the seventh pair was ruptured; but we may conclude that this was the case; and there could be no doubt about the escape of the cerebro-spinal fluid. On the right side, there was no fracture into the meatus internus, but no rupture of the membrana tympani, and, therefore, no flow of fluid from the ear. There was a fracture into the tympanum; and this had, no doubt, broken the connection of ossicula across that cavity, and hence the deafness. It would have been interesting to have ascertained, had the gravity of the case been less, so as to justify the inquiry, whether the child could have appreciated the note of a tuning-fork or the sound of a watch applied to the bones of the head, since this would have shown that the auditory nerves themselves remained uninjured. His best chance of life, however, consisted in maintaining perfect quietude, and I did not like to have him disturbed.

CLINICAL LECTURE

ON THE ADVANTAGES OF ETHER OVER CHLOROFORM.

BY JAMES SAWYER, M.D. Lond., M.R.C.P.,

Physician to the Queen's and Children's Hospitals, Birmingham.

GENTLEMEN,—I purpose to offer you a brief comparison of the relative values of chloroform and ether as anæsthetics. It has very frequently been my duty during the last ten years, in hospital and in private practice, to induce anæsthesia for the performance of surgical operations. Until a year ago, I invariably used chloroform; during the last twelve months, I have always employed ether. I shall offer for your consideration some reasons why ether should be preferred to chloroform—reasons which have induced me to rely upon ether as the better anæsthetic.

Surgical anæsthesia was unknown in modern times until thirty-one years ago. I say in modern times, because there is good reason for believing that some means by which the painless performance of operations could be ensured were known to practitioners of the art of surgery long before the present century. In Middleton's comedy, *Women beware Women*, printed in 1657, the following passage occurs.

"I'll imitate the paces of all surgeons
To this last line, who, ere they show their art,
Cast one asleep, then cut the diseased part."

On December 11th, 1844, nitrous oxide gas was successfully used as an anæsthetic by Mr. H. Wells, of Hartford, Connecticut. (Townsend's *Manual of Dates*.) From this time, the use of anæsthetics has rapidly spread in surgery. Anæsthesia has become a want of the age; the

public demand it at our hands; and with us rests the grave responsibility of determining how it can be supplied most safely. Nitrous oxide soon fell into disuse. On September 13th, 1846, in Boston, United States, a man named Frost had a tooth extracted painlessly while he was under the influence of ether, given by a dentist named Morton. (*Chloroform, its Action and Administration*, by A. E. Sansom, M.D., 1867.) This was the real commencement of modern surgical anaesthesia. The news of the discovery of the means of rendering the performance of operations painless soon reached England, and ether was at once largely employed by Mr. Liston, Mr. Fergusson, and other surgeons. In March 1847, Flourens laid before the Academy of Sciences of Paris some observations of the anaesthetic powers of chloroform upon animals. (Sansom, *op. cit.*) On November 4th, 1847, the late Professor Simpson of Edinburgh, who for some time, in the hope of finding a better agent for producing insensibility to pain than ether, had been experimenting with various substances, first tried the effects of the inhalation of chloroform upon some medical friends in his own house, and he saw at once that he had found a prompt and pleasant anaesthetic. Six days afterwards, Dr. Simpson brought the subject before the Medico-Chirurgical Society of Edinburgh. Chloroform was at once accepted by the profession; it soon displaced ether, at least among the British; and it has since held amongst us, until a few years ago, an undisputed priority over ether and other anaesthetic agents. I think I may safely say that chloroform was almost the only anaesthetic used in operations in these islands eight or ten years ago. Since that time, however, various new substances have been employed in place of it. About five years ago, an ether-revival began, and it has gradually grown, until ether-inhalation now seems likely to supersede all other means for the production of insensibility during painful surgical procedures.

A medical practitioner never assumes a greater or more direct responsibility than when he undertakes to induce general surgical anaesthesia. Insensibility to the knife is not allied to sleep; it is more nearly akin to death. In sleep, a very feeble stimulus—a noise, a touch—is often enough to rouse the perceptive faculties into vigilance. But in perfect surgical anaesthesia the perception of painful impressions, even the most painful, is annulled; the will is extinguished; the intelligence is suspended; nothing remains of life but the organic functions; the nervous centres are paralysed down to the parts which preside over the performance of respiration and circulation. Life hangs in a trembling balance. No hands can be too skilled to hold the scales. Perhaps unskilfulness has killed some of those who have died under anaesthetics.

We must answer two questions before we give up chloroform for ether. Can we produce as perfect anaesthesia by means of ether as by chloroform? Is ether safer than chloroform? I believe both these questions may be confidently answered in the affirmative.

No one who has given ether a fair trial, even in one case, can doubt or disparage the perfectness of ethereal anaesthesia. I have employed ether very frequently in private and in hospital practice. I have given it for the severest and for the most protracted operations: for ligation of the common carotid artery, ovariectomy, amputation at the hip-joint; and, in eye-surgery, for squint and for enucleation of the globe; for excision of the breast, the gouging out of diseased bone, the removal of piles, etc.

But is ether safer than chloroform? This is the most important question. No complete anaesthetic is perfectly safe. We cannot fairly attribute all deaths which have occurred during artificial anaesthesia to the anaesthetic agent in employment at the moment. I wish to make the fullest allowance for all deaths from other causes. I will remind you that the first patient to whom Dr. Simpson intended to give chloroform was a boy who was about to undergo lithotomy. When all was ready, the boy unexpectedly died. No chloroform had been given. Had a few whiffs been taken, death might have been attributed to the anaesthetic. A surgeon, about to perform lithotomy, marked out a line on the patient's skin with his finger, and the man fell dead. Other similar instances might be quoted. But I have seen a hale and hearty labourer, free alike from all emotional excitement and organic disease, laid with a crushed foot upon the operating-table; chloroform was given; and before the operation was commenced, without any previous embarrassment of the respiration, the man suddenly died: died because the heart was stopped by chloroform. Of this event I was only a spectator. I believe the man died because the chloroform was given without due dilution with air. In its depressing action upon the heart lies the greatest danger from chloroform. Any one who has given chloroform largely, and with attention to the evidences of its action, knows that it usually diminishes the force of the pulse. In a few cases, however, in which the pulse is small and weak before the operation from emotional disturbance, the beats become fuller and

stronger as insensibility is coming on and the circulation is liberated from emotional control; but, as a general rule, the inhalation of chloroform weakens the pulse. It is often necessary to suspend the administration because the pulse has become feeble and flickering, without the occurrence of any signs of respiratory difficulty. Here, in the fewest words, is a typical case of a cardiac death from chloroform. "A young lad named G. J. Weston, aged 14, died at the Royal Free Hospital whilst under the influence of chloroform. Mr. F. J. Gant, surgeon, said that, when the deceased was admitted, it was thought that the hip had been dislocated. When he examined the lad, it gave him great pain. He ordered the house surgeon to administer chloroform. The chloroform was administered for about two minutes, during which time about sixty drops were inhaled. The deceased seemed to be half-sensible; and, on looking round, they saw the lad fainting and in a dangerous state. Silvester's respiratory method and galvanism were applied, but without effect, for the lad died at once. A *post mortem* examination was made. All the organs were sound. The cause of death was syncope from the effects of chloroform." (BRITISH MEDICAL JOURNAL, December 19th, 1874.) I have selected this case, because it is a typical example of death from sudden stoppage of the heart's action during the administration of chloroform. No one can maintain that degeneration of the heart's walls existed in this young lad. Chloroform, however, like ether, can kill, and has killed, by interfering with the regularity of the respiration, and finally stopping it before the cessation of the cardiac contractions. Death is more avoidable when impending in this manner. The suspension of the inhalation of the anaesthetic, the free admission of fresh air to the lungs, and the performance, if necessary, of artificial respiration, will generally save the patient when dangerous symptoms of respiratory embarrassment show themselves while the heart continues to beat. But we are powerless, or nearly so, when the heart fails first. There is no room to dispute the fact that, in those recorded cases of death from chloroform in which the signs of danger have been sufficiently noted, indications of cardiac failure have greatly prevailed over those of respiratory difficulty. Taking one hundred and nine fatal cases, in nearly all of which the mode of death was assigned, and which were embodied in the Report of the Chloroform Committee of the Royal Medical and Chirurgical Society, we find a decided preponderance of cardiac over respiratory deaths. Here is the table, as given in Dr. Sansom's excellent book on chloroform.

Syncope	56
Syncope during stage of excitement	6
Died suddenly	6
Died in a fit	10
Pulse and respiration ceased together	9
Failure of respiration (pulse not noted)	6
Failure of respiration (pulse remaining)	2
Not stated	14

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Dr. Snow, to whom we are indebted for much valuable information concerning chloroform, made a series of experiments and observations with the view of determining the manner in which death occurs in the human subject from chloroform. He arrived at the following conclusions. "Chloroform-vapour, if it be inhaled in large proportion with atmospheric air, destroys life by paralysing the heart. In smaller proportions, but long continued, it produces death apparently by the brain, and by interfering with the respiratory function. In such cases, the heart is found to beat after respiration has ceased. Chloroform-vapour, if it be blown upon the heart, paralyzes it immediately." (Quoted in Dr. Farrer's *Abridgment of Dr. Pereira's Materia Medica*, 1865.)

It is not fair to make a comparison of the absolute number of deaths from chloroform and from ether respectively. As yet, in this country, chloroform has been given infinitely more frequently than ether. Only the ignorant deny that ether-administration has ever been fatal. Trousseau collected details of nineteen deaths from ether. But chloroform has had hundreds of victims. Writing more than ten years ago, Dr. Sansom puts the number of deaths attributable to chloroform at "nearly 300". Perhaps the number may have now reached 500. I know that many deaths from anaesthetics have never been recorded.

Just as the great danger of chloroform lies in its power as a cardiac depressant, so does the relative safety of ether consist in its action as a cardiac stimulant. No one can give ether without being struck by its favourable influence over the circulation. In most of the cases in my experience, I have found the pulse improve in force and volume during ether-inhalation. Mr. Clover, who gave chloroform for many years, and than whom we have no more careful or more experienced administrator of anaesthetics, concerning the comparative safety of ether

and chloroform, writes: "Ether is undoubtedly safer; that is to say, life is not so quickly destroyed by it." ("Remarks on the Production of Sleep during Surgical Operations." By J. T. Clover, F.R.C.S. BRITISH MEDICAL JOURNAL, February 14th, 1874.) In Dr. Neligan's well known work on *Medicines*, edited by Mr. Macnamara, I find it stated that "the great recommendations (of ether) are the complete state of anaesthesia it produces, and the safety attending its employment—a safety so remarkable that its exclusive use has become a law in the Massachusetts Hospital".

But we may ask some further questions before we decide to give up chloroform for ether. Are the more remote ill-effects arising from ether-inhalation greater than those which spring from the use of chloroform? So far as I have seen, vomiting, the chief troublesome after-effect of anaesthetics, is met with as often after one agent as after the other. Speaking of the remoter consequences of breathing ether, Mr. Clover says: "Sickness is about as frequent as after a moderate use of chloroform." Dr. Neligan mentioned, as one of the disadvantages of ether, "the subsequent persistent taste and odour of ether experienced even for days by those to whom it had been administered". There is, perhaps, a little truth in this: but, with the liberal admission of fresh air, the taste and smell of ether, which are not unpleasant to most people, soon pass away. It has been said that bronchitis may arise as a consequence of ether-inhalation. I have never met with such a result, nor with anything approaching to it. The condition which has probably been mistaken for bronchitis is one which I have observed, and one to which Mr. Clover has drawn attention in the following words. "The flow of saliva is considerable; and the larger air-tubes are often obstructed by fluid, which makes a loud moist rhonchus; but it does not appear to be of much consequence, as it passes off afterwards." Patients who have taken ether usually complain of nothing more than a slight feeling as of recovery from drunkenness. Are there any other inconveniences attending the administration of ether as compared with that of chloroform? It takes a very few minutes longer, as a rule, to produce anaesthesia with ether than with chloroform. But I have induced perfect surgical anaesthesia with ether, so as to permit the painless performance of the operation for squint, in three minutes. Ether is not quite so pleasant to breathe as chloroform, and it is more apt to cause a feeling of suffocation during the first few inhalations. But no inconveniences of such a trivial and temporary kind as those I have mentioned—inconveniences involving time, or taste, or trouble—ought to deter us from using the safest anaesthetic we possess. If our patients were able to decide the question, safety would be the paramount consideration with them.

I have generally found it best to give a little chloroform at first. One drachm is usually sufficient. I give a drachm as a dose, poured upon a thickly folded towel, held about two inches from the patient's mouth. After this quantity of chloroform has been inhaled, ether can be borne, in most cases, without giving rise to any choking. There is rarely more effect from this quantity of chloroform than a little mental obscurity. I then give the ether, in doses of an ounce at a time, poured upon a sponge, fixed at the top of a cap-shaped inhaler, made from an ordinary bedroom towel. The inhaler I use has been devised and described by my friend Mr. Lloyd Owen. It must be applied closely around the nose and mouth; I like it to be large enough to include the nose and the chin. But little air must be admitted. The dose of ether must be renewed about every two minutes, removing the inhaler completely from the face, and allowing one or two inspirations of air, until anaesthesia be induced. When the insensibility is perfect, it may be maintained by giving smaller doses of the ether, half an ounce, at less frequent intervals. We can only judge whether to stop or continue the administration by the condition of the patient. We must give enough ether to produce anaesthesia, and we must continue to give it so as to maintain anaesthesia, so long as the operation may last. But it must never be forgotten that even ether is not absolutely safe when given to full anaesthesia. The administrator must never cease to watch the patient closely, observing, with undistracted attention, the breathing, the pulse, and the colour of the face; he must have nothing whatever to do with the operation or the operator, not even to look at it or him; he must be wholly occupied with his own most important and responsible work. Whether chloroform or ether be given, it must be given with carefulness, but yet with confidence; "we must get rid of fear, we cannot act at all till then"; we must avoid alike timidity and temerity.

And now, gentlemen, I have done. I have been obliged, from a regard to time, to leave unsaid much that I should like to have said concerning anaesthetics, concerning more especially the relative values of the various methods of administration. I have been obliged to omit all mention of many little practical details which I have acquired in a somewhat lengthened experience of the employment of chloroform

and ether. But I have striven to confine myself to the question before me, and to discuss it fairly, which is the better anaesthetic, ether or chloroform? I have endeavoured to justify my conclusion that ether must have the preference. I hope I shall not be misunderstood when I say that, on giving up chloroform, I had to overcome that kind of prejudice which springs from habit. We ought to have no prejudices in such matters as those before us; we can none of us advance in scientific or in any other kind of truth until we can more or less completely get rid of prejudice. Its "rotten pales" should never confine us. But I was insensibly and not unnaturally biased towards chloroform, because I had given it largely for several years, because I had given it safely more than a thousand times. But I have had a growing sense of the danger of chloroform; and the results of my reading and of my experience, and my sense of duty towards those who have been placed in my hands, have led me to give up its use for that of ether.

RAILWAY PATHOLOGY:

CASE OF HARRIS *versus* THE MIDLAND RAILWAY COMPANY.

By JOHN CHARLES HALL, M.D.,

Senior Physician to the Sheffield Public Hospital; Lecturer on Medicine at the Sheffield Medical School; Physician to the Midland Railway Company, &c.

In a leading article, the BRITISH MEDICAL JOURNAL of November 27th directs attention to the case of Harris *v.* the Midland Railway Company, recently tried at Westminster Hall before Baron Pollock and a special jury; the case being one in which the plaintiff claimed compensation for personal injuries said to have been sustained on the defendants' line, through the negligence of their servants. As the consulting physician to a large portion of the line over which the trains of this company run, as it was in my district that the accident happened, as I saw Harris the day after the accident, and as, owing to the case being settled out of court, the defendants are as yet medically unheard, I venture to supply some pathological particulars which cannot fail to be of interest to our profession.

It is said in the article referred to, "We should very much like to see a *verbatim* report of a dozen or two of railway cases in print". I have already supplied a good many to the JOURNAL,* and promise ere long to send more. In this case, the medical men called in by Mr. Harris were Dr. Sterling, Mr. Maunder, Mr. Erichsen, Dr. Hardwicke, Dr. Ramskill; by the Midland Company, Mr. Saville, Mr. Skelding, Mr. Gay, Mr. Jonathan Hutchinson, Dr. Radcliffe, Dr. J. C. Hall. It must be remembered that part of the attendance was at The Holmes, near Rotherham; part in London. Hence the number of medical men engaged.

We may have had to deal with what my lord was pleased to term "questions of the highest physiological and scientific refinement, concerning which there might be a difference of opinion amongst the most distinguished members of the profession"—questions which I deeply regret an opportunity was not afforded of discussing before Baron Pollock and the jury; but, in a *l.s.d.* point of view, it doubtless saved the Midland Company money to get rid of the enormous costs of another day's trial, as the very able counsel and solicitors of the company, on the suggestion of the judge, at once perceived. No one denied for a moment that the man was entitled to some compensation; the points in dispute being the nature, amount, permanence or otherwise, of the injuries alleged to have been sustained; and was there, or was there not, great exaggeration? I think all the medical men engaged were of opinion that the man would recover. In how short a time—the case settled, the trial over, the verdict of the jury given, and the damages paid—was a question about which there would have been, no doubt, a difference of opinion. For my own part, I thought, and, for the sake of Mr. Harris, most sincerely hoped, he would very soon be restored to his usual health. The evidence of his own witness, Dr. Ramskill, as reported in the *Times*, is well worthy perusal.

The accident happened near The Holmes Station, on the night of Thursday, December 10th, 1874. (This date will be found of importance in considering the length of time the patient's symptoms lasted.) Plaintiff was in a third-class carriage; he had come that day all the way from Exeter, a distance of about two hundred and seventy-five miles. The weather was very cold, and there was a deep snow on the ground. I may say that, at the time of the accident, the train was "pulling up"; and, so far as my experience goes—and few men living have seen more of these cases than myself—in estimating the probable severity or otherwise of the injuries sustained, it is most important to

* Now published separately: "Medical Evidence in Railway Accidents."

ascertain the speed at which the train was moving at the time of the accident, the nature and weight of the opposing obstacle, and whether it was fixed or moving. These are all questions affecting the probable severity or otherwise of the injuries sustained; for, like any other kind of accidents, those occurring on railways may be serious or the reverse. The presence or absence of cuts, bruises, or fractures, will also assist us materially in estimating the force of the collision.

I may remark, with regard to this accident, that, in addition to Harris, I saw, in consultation with different surgeons, many of them living long distances from Sheffield, thirty-nine other cases, which I attended in consultation until they had all recovered. Every case was settled by the Company, through its authorities, without trial, save that of Harris. Of course, I never attempt to settle any case, that being no part of my duty. Had I gone into the witness-box, I should have proved that all the cases in this accident had recovered; that they were comparatively slight. They were all third-class passengers. The most severe cases were, a publican who had a slight fracture of one rib, and a lady who miscarried. She had previously done so, and possibly this accounts for it. So far as I know—and in this opinion I am confirmed by the late Dr. J. Ogden Fletcher, of the Manchester, Sheffield, and Lincolnshire Railway Company—this is not a very frequent result of collisions on railways.

At the time of the accident, neither his own surgeon, Dr. Hardwicke, Mr. Saville, nor myself, regarded this case as a serious one. It is only right to say that Dr. Hardwicke subsequently, at the trial, modified this opinion; but then my old friend had been up to London; had seen, and had conferences with, some of the most distinguished consulting surgeons of the age; and possibly this may have been only another instance, in which we northern lights have paled before metropolitan luminaries.

At the trial, the plaintiff, who was carried into the court on a couch, swore he could not move his legs, walk, or stand. (During the first part of the examination, the right leg, like the left, had been straight. As the examination continued, it was drawn up, and described a half-circle. To this I drew the attention of the junior counsel, Mr. Gould; Mr. Waddy, Q.C., being at the moment out of court.) He knew nothing of what took place at the time of the accident. For some days afterwards, his mind was a blank. He said "he did not pass water for several days after the accident". Dr. Hardwicke said at the trial that this statement "excited his suspicions". He was at times sensible; at others, not so. What does intermittent sensibility mean? He said: "I recollected nothing of the accident until the Sunday morning." (The accident was on a Thursday night.) "I then found myself in a strange room. I saw my mother; felt pain in my feet and shoulders." The memory of Mr. Harris in the witness-box as to the accident appeared to be gone; not so as to his earnings and calling at Exeter. He did not remember that he had a conversation with the station-master at The Holmes, as to the cause of the accident, the night it occurred; nor his conversation, as sworn to by Dr. Hardwicke, with Mr. Saville and himself, when they gave him, as he sat by the fire, brandy and water; nor the visit of Dr. Hall the following morning, when he came to consult with Mr. Saville. No person from The Holmes Inn was called to say what was his condition during the time he resided there. All the witnesses were members of his own family, save the Jewish rabbi resident in Sheffield.

Extract from my Note-book, made at the time.—The Holmes accident, December 10th, 1874. The Rev. Mr. Harris, seen at The Holmes Inn, Rotherham, December 11th, 1874. I first saw Mr. Harris, aged 22, December 11th, 1874, the day after the accident, in consultation with Mr. Saville. I found him in bed. He appeared feeble, very badly nourished, pale, and looked more like a man suffering from long exposure to cold and want of food than anything I could discover. He was nervous, and, I thought, hysterical. He said "he had travelled all the way from Exeter the day before, and had been in the railway collision at The Holmes last night". He was perfectly clear and collected, and answered every question I put to him at once. He had a very slight abrasion over the eyebrow, and one on the toe, so slight as not even to require a bit of plaster. He said "he had pain in the head". He did not complain of any pain in the back or spine; nor did pressure produce any. He said he was unconscious, he thought, when the collision took place, for a short time. When he came round, he felt sick, but did not vomit. He could turn over in bed, and had perfect power over his arms and legs. The pupils contracted freely on the light of a candle being brought before them. Examined with the ophthalmoscope, both eyes were found natural. The urine was passed freely, as was the case during the whole of my visits in consultation with Mr. Saville, occupying a period of eighteen days. I saw it at each visit. The respirations were natural; pulse 74; temperature 98.5 deg. There was the most perfect command over the

sphincters. The whole of my attendance—I may say from the time of the accident to the day of the trial—whenever I saw him, this was so. There was never a complaint made to me of dribbling of urine—or suppression of urine—or retention of urine. In truth, when I saw him after the accident, there was no single symptom indicative of injury to the brain or chord. He walked, on leaving The Holmes—so he stated at the trial—from the hotel at The Holmes to a cab, leaning on the arm of a friend, and came on by railway to London. In London, he was seen in January, 1875, by Mr. J. Skelding of Euston Square, on behalf of the company. I have Mr. Skelding's report before me, who says: "He made the remarkable statement, that he did not pass water for several days after the accident—that is, four days—from Thursday to Sunday." Here I can only repeat that the memory of Mr. Harris failed him. Mr. Saville saw the copious pale-coloured urine which he passed daily. I saw it at each of my visits so long as he remained at The Holmes. There never was the slightest distension of the bladder, nor one symptom leading me to suspect suppression of urine; and I think that, after a failure to secrete, or, if secreted, to pass urine for so long a period, the symptoms would have been marked indeed. I carefully examined the abdomen at each visit, and especially so for this reason, Mr. Harris feared he had been ruptured by the accident. My frequent and careful examinations convinced him such was not the case.

I did not see Mr. Harris again until June 12th, 1875; Mr. Maunder, Mr. Erichsen, Mr. Jonathan Hutchinson, Mr. Skelding, Mr. Gay, myself, and others, being present. Mr. Hutchinson, at my request, attended for the Midland Railway Company. Compared with his appearance when I saw him at the Holmes, Mr. Harris was much improved. There was no expression of pain or distress in his countenance, nor was there a trace upon it indicative of pain or serious disease. His pulse was 98; his breathing natural; temperature 98.2 deg. His tongue was moist and fairly clean. His pupils were natural, and acted well; said he "could see and read well", but was "soon tired". There was nothing in his muscular system to call for remark. A slim-made man naturally, his thighs and calves were as large as could be expected, taken in proportion to the rest of his development. There was no difference in the size of his calves (carefully measured); nor could any difference of temperature be detected on the one side or the other. He could move the upper part of the body well. Asked by Mr. Hutchinson to grasp his hand, he did so very feebly; but, on Mr. Hutchinson assisting him to raise himself, he was seen to grasp his hand and pull with force. He sat on the couch with much apparent difficulty. When the support was taken away, he fell back helplessly. Afterwards he sat on the edge of the couch without any material support.

He did not raise his lower limbs at first; then he raised his knees, but never lifted his heels. When they were lifted, he complained of pain in the ankles, knees, and hips, but when it was tried to bend these joints, there was considerable resistance. It appeared to me during this examination, that the muscular resistance was much greater at one time than another. He was next tested as to the loss of sensation in the two limbs. He asserted that he could not feel even when the soles of his feet were tickled. Mr. Hutchinson then took hold of the hairs on the front of his legs, and, by them, he lifted the skin. Harris said, "I cannot feel in the least; I cannot tell my leg is touched". This, if so, looked to me like an almost perfect loss of sensation, and yet he again and again detected at once a light touch from the blunt end of a gold pencilcase, which I handed to Mr. Hutchinson.

Asked as to the pain in his back, he pointed to the middle of the lumbar region. At this part, he flinched on a touch light as a feather. But the same touch caused flinching over the crest of the ilium, or over any of the bones of the spine; or, in fact, over any part of the back.

He said he only passed his urine once in twenty-four hours, and that he did not pass much at a time. He stated to Mr. Hutchinson, that "he was unconscious for several days after the accident, and that when he came to himself he was in bed at an inn". It is matter of great professional interest to inquire how far it is consistent—although doubtless there may be exceptions to every rule—with the experience of physicians and surgeons, that inability to move the lower limbs for months, can exist with muscles seen to be in a perfectly healthy condition. He stated, June 1875, that he could not move his limbs, and yet, he could exert the muscles with no little power to resist the bending of the limbs. Sensation was said to be lost. Is such a state of things consistent with the amount of muscular resistance and power undoubtedly retained? This is a case of such importance in every way, that I should be glad indeed if my remarks may induce my friend Mr. Jonathan Hutchinson to publish in this JOURNAL his opinions of the many interesting phenomena we discussed as to this patient again and again.

The next time I visited Mr. Harris was a day or two before the trial. I saw him at the residence of a friend of his in Whitechapel, November 8th, 1875. Mr. Erichsen, Dr. Sterling, and Mr. Maunder, met Dr. Radcliffe, Mr. Skelding, Mr. Jonathan Hutchinson, myself, and others at the house. The plaintiff said, "I am better in health, but not so well in the use of my legs and feeling". He appeared to me looking better than when I saw him in June. The bladder was distended, and I suggested to Mr. Erichsen that a catheter should be sent for. This was placed on the table. He said, "I will try". He was placed upon the edge of the couch. He passed a large quantity of pale-coloured urine freely, and with force. He said he had no sensation down to a certain part of each thigh, which was marked by him with a pen and ink. The battery brought by Dr. Radcliffe having been broken in removing it from his carriage to the house, we agreed to meet again in consultation the next day.

November 9th. Mr. Erichsen was not present with us to-day, but Dr. Ramskill attended on the part of Mr. Harris for the first time. The power of motion and sensation was tested by Dr. Radcliffe; the continuous and induced current (Faradic) being employed. The test fully proved that the muscles had not lost the power of moving, nor had he lost sensation, whatever amount of spinal anemia may or may not have been present. The battery applied, the feet, which had been everted, were drawn together, and the heels raised from the couch; the current removed, one would naturally have supposed, with such an asserted loss of muscular power, that the feet would again have fallen outward. They did not do so. The experiment repeated, a sharp cry indicative of pain proved the existence of sensation—I ought to say, the current applied was very weak. May we take it for granted that the excitation of contractions, when the induced magneto-electric current (Faradic) is passed through healthy muscle, as was the case here, proves that at any rate, to some degree, it was susceptible to the electric current, and possessed electro-muscular contractility, or irritability; and that the cry of pain indicated electro-muscular sensibility?

There are many other points in this case that it is to be regretted for the present, from want of time, I must pass over. But to me, in any man it does appear in the highest possible degree unaccountable, that with an alleged paralytic condition of the lower extremities, there should continue to be enjoyed perfect control over the bladder and rectum. The absence of all objective symptoms in all such cases is matter for the most grave and serious consideration before forming an opinion. When, therefore, I am called to see a patient who has been in a collision on a railway, and who is seeking compensation, who has remained in bed for months apparently without the power of turning over or moving his lower limbs, in which it is stated he has lost sensation, who has a healthy aspect, no difference of temperature between the parts said to be paralysed and the rest of the body, perfect command over the rectum and bladder, pulse natural, temperature normal, no bed-sores, no marked lesion of nutrition, no flattening of the nates, no wasting of the calves of the legs; I venture to say, and that, too, without wishing in any way to dogmatise, that there is the total absence of those objective symptoms which we expect to find, and do find, in injuries to the spine of a severe nature, in patients who have not recovered months after accidents of this nature.

Let us hope, however, that the railway spine, if not already so, will soon become a thing of the past, and that the views I expressed in this JOURNAL so long ago as in the year 1867, will be now generally held to be correct by the profession, confirmed as I am again by Mr. Erichsen, in his work *On Concussion of the Spine and Nervous Shock*.

MR. ERICHSEN, 1875.

"Injuries to the spine and spinal chord occur not infrequently in the ordinary accidents of civil life. If, in these lectures, I speak more frequently of the injuries of the spine arising from this" (railway collisions) "than from any other class of accidents, it is not because I wish to make a distinction of injuries of the spine according to their causes, and still less to establish anything like a speciality of railway surgery" (p. 2). Again, he says, "I do not consider that these injuries stand in a different category from accidents occurring from other causes in civil life" (p. 5). He speaks of "railway injuries as peculiar, not different."

DR. J. C. HALL, 1867.

"The railway spine, as it is termed, I confidently submit, has no right to the peculiar place assigned to it. An injury to the spine, whether occasioned by a collision on a railway, or by a fall from a scaffold, can only be dangerous in proportion to the extent in which, at the time of the accident, or subsequently, the spinal chord or its membranes are affected."

It is quite impossible for a moment to associate the case of Mr. Harris with one of permanent injury to the brain or chord. At the time of the accident, there was no evidence of concussion, and, to use a homely proverb, at the worst, he was far more frightened than hurt. At the most, his could be, this November, but a case of hysterical paralysis, the traces of which must rapidly pass away. I find, after many railway accidents—which hardly deserve the name—patients give themselves up to despair, they lie in bed or on the sofa, take no exercise, and voluntarily resign themselves to an emotional condition, painful alike to themselves and to their friends.

Speaking of those who suffer from hysterical manifestations after comparatively slight injuries, in his recent very able work, to which attention is directed in the article in the JOURNAL, Mr. Erichsen writes, p. 203, "My experience of these cases leads me to consider the prognosis as much more favourable than might have been anticipated; or, than I was at one time disposed to consider it".

That they recover—rapidly recover—is certain; but, without a wish in any way to insinuate deception or feigning on the part of any who have been in a railway collision, every-day experience goes to prove that in such cases—and I have such a one under my care now—there is no modification of symptoms, no entire restoration to health and peace of mind, until the trial is over, and all the bitter fears and miseries of impending litigation have passed away. So far as I know, railway companies are ever ready to deal with all who may have suffered, fairly and most liberally. How much, then, of pain, sorrow, and anxiety would be saved, if the claimants would at once grasp the friendly hand held out to them, instead of enduring for months the anguish inseparable from the anticipation of the day on which they will have to appear as witnesses in a court of law: the trial over, then only to discover beyond doubt that, had they accepted the offer made to them, in every sense, pecuniary included, they would indeed have been gainers.

THE WHITECHAPEL TRAGEDY:

REPORT OF THE POST MORTEM EXAMINATION OF THE REMAINS.

By F. G. LARKIN, M.R.C.S. Eng.

ON Saturday, September 11th, 1875, I was called to the Stones End Police Station, about 5.30 P.M., where I was shown two parcels wrapped in American cloth. On opening them, I found one parcel to contain the trunk, and the other bundle the remaining portions, which collectively were the remains, beyond doubt, of a human female about five feet high, and about twenty-five years of age, and those of a thin person. The body had been very recently and most unscientifically dissected. It was in a very stinking and decomposed condition; some parts were more or less "mummified", whilst other portions were in a state tending to "adipocere". I have examined the remains several times, at first by myself, and subsequently assisted by Mr. Bond of Westminster Hospital. The body was, roughly speaking, divided into ten parts, as follows: two hands; two arms; two legs and feet connected (the left leg included part of the patella); two thighs, including portions of the pelvis (the right thigh included the patella, the left thigh included part of the patella); one trunk, excepting the front of the pelvis; one head and neck.

Hands.—The left hand (or rather the bone) had been broken off just above the wrist-joint; the right hand had been removed more carefully through the same joint; otherwise, both hands were entire. There were no signs of a ring having been worn, the decomposition having advanced so far as to prevent the possibility of such evidence (moreover, it is a known fact that these rings had been in pawn some months before death). The nails were easily removed.

Arms.—The head of the left humerus had been cut through. The limb was entire, excepting a small portion which was attached to the hand. The right arm was broken off just above the middle of the humerus, the upper part of which was still connected with the trunk; the remainder of the limb was entire down to the wrist-joint.

Legs and Feet.—The knees were smashed about, especially the right. A wedge-shaped piece had been cut out of the back of the left knee-joint. The left great toe was broken at the extreme joint. The nails were easily removed. A pair of boots proved to have been worn by the missing woman, I found to correspond to, and they could have been worn by, the feet of the deceased. The length of the feet was 8½ inches, and that of the boot 9 inches. There was an oblique scar from a burn, about one inch long, and three-quarters of an inch wide, very

much puckered, thickened, and fibrous, on the outer side of the right leg, somewhat in front, and about four inches below the centre of the knee-joint.

Thighs.—These were very much hacked about in severing them from the pelvis, fragments of which were attached; together with portions of the labia vaginae, which, with much difficulty, I managed to place *in situ*.

Trunk.—The upper part was more or less mummified; at other places, tending to adipocere. The mammae were quite invisible, the regions being flattened level with the remaining surface of the body. The head and neck had been separated between the sixth and seventh cervical vertebrae. The cartilages of the ribs were easily cut with a knife. The ossification of the sternum had advanced to such a degree that the third and fourth pieces were nearly united. The pelvis had been smashed up into innumerable pieces, especially in front; the sacro-iliac synchondroses were dislocated on both sides. The labia vaginae were lacerated in all directions, and very little hair was to be seen; it had the appearance of having been shaven off, but was probably removed by the lapse of time, etc.

Head and Neck.—The colour of the hair was light auburn; it was tied up with a piece of black velvet, half a yard long, and one and three-quarter inches wide, which was rotten. All features of the face were quite gone, a considerable portion of the flesh having been removed; there was, however, some remaining, on the right cheek more especially, but too decomposed to be of any use in identification. The cheek-bones were rather prominent. The eyeballs were in a very shrivelled-up condition, and retracted into the back of the orbits. The scalp was all torn off, excepting at the posterior and left side of the head. The ears were all gone, with the exception of a small portion of the left, which gave evident signs of having worn an ear-ring. The teeth were perfect, excepting the two central incisors and left canine of the upper, and the central incisors of the lower, jaw, which had been removed since death. The left upper and the right lower incisors, together with the left upper canine, having been found and replaced, the only missing teeth were the right upper and left lower incisors. All the wisdom-teeth were perfect, excepting the left upper, which was being cut. The front right upper bicuspid was decayed down to the gum, and it was the only decayed tooth, so far as it was possible to say in the absence of the two missing incisors. There were large quantities of congealed blood and dirt about the head generally, but more especially in the neighbourhood of the wounds, one of which, that of the cut throat, was a wound two inches in length, which extended from the *right* side of the median line, just above the thyroid cartilage backwards, and slightly upwards to opposite the angle of the lower jaw on the *left* side, and had divided all the structures in front of the third cervical vertebra. This wound must have been inflicted during life or immediately after death, as evidenced by the congealed blood on its surface, and also in the immediate neighbourhood, especially in the direction of the ear on the same side. This wound appeared to have been continued into the body of the third cervical vertebra, and extended in a straight line across the same, including the transverse processes, cutting it nearly half through. This injury to the bone appeared to have been more recent: its surface was fresher: which fact might be accounted for by the comparative absence of atmospheric influence by the closing of the incision into the vertebra, thus pointing to the probability of its having been done at the same time as the division of the softer structures. The frontal suture was absent, all others perfect. On the right temporo-parietal suture, posteriorly, there was a fracture about three-quarters of an inch long, and three-eighths of an inch wide, with its posterior part more depressed than its anterior; its direction was obliquely backwards and upwards. On the inner surface of the scalp in the immediate neighbourhood, there was a smooth layer of congealed blood, about two inches in diameter, and about one-sixteenth of an inch in thickness. On removing the skull-cap, I found a wound in the dura mater corresponding to the above fracture, in which were imbedded spicula of bone and slight haemorrhage. Finding the brain in a fluid and pulpy condition, I deemed it prudent to desist from any further interference in removing it; for, had I done otherwise, my evidence would have been unconfirmed in reference to the finding of any bullet; but subsequently, with the assistance of Mr. Bond of Westminster Hospital, I found two bullets at the base of the brain; one, which had entered by the fracture already described, had lodged itself (after having struck the posterior portion of the occipital bone) in the base of the cerebellum on the opposite side; the other bullet found within the skull was lodged in the sella Turcica, the clinoid processes of which had been broken by it; then, in following its course outwards, we found it had entered by an opening or fracture, just above and in front of the root of the right zygomatic arch. Here, also, there

was a considerable quantity of congealed blood and dirt. I also found, in the padding at the back of the head, a third bullet, very flattened, and which had evidently not entered the skull, its progress having been arrested by the innumerable hair-pins and padding. These hair-pins were bent and broken in all directions, some having been broken a long time, as evidenced by the rust.

Viscera.—These were in a very decomposed condition, with the exception of the uterus, which was very thin and wasted in substance, like all the other organs, but in a good state of preservation. The lungs were in a very small shrivelled-up state, almost as if they had never been inflated. The heart, also, was shrunken up into a very small mass, enclosed in a fair-sized pericardium. The liver was very distinct; likewise the stomach, which, on being opened, was found to be empty, with the exception of its surface being covered with what appeared to be decomposed blood, but which gave very doubtful evidence under the microscope: indeed, the time that must have elapsed, together with the action of the gastric juice, would go far to disintegrate the corpuscles; the colour, however, was very marked to the naked eye. The intestines were in a very different condition—viz., a confused mass, glued, as it were, together, so that it was perfectly impossible to separate one coil from another. I placed each viscus (with the exception of the brain, for the reason above stated), for subsequent inspection, in a separate glass jar of the purest quality, specially washed out with distilled water. The general appearance of the uterus was most inconsistent with virginity, which fact, also, was to a great extent borne out by the appearance of the skin of the lower part of the abdomen, which here and there amidst the decomposition showed one or two white lines in the hypogastric region, and other marks nearer to and in the inguinal region, of a darker colour, apparently the remains of the peculiar violet lines which, together with the above-mentioned *lineae albicantes*, are peculiarly characteristic when taken in conjunction with other evidence of delivery having taken place at some more or less remote period; and what seems to bear out this idea in my mind more strongly, is the fact that the decomposition had progressed more rapidly with the little *raised* portions of integument between the cicatrix-like lines than at any other part of the whole trunk, or upper part of thighs, where the surface of the skin is *even*. The dimensions of the uterus were in every way enlarged; its measurements, as near as possible, were: extreme length, 3 inches; width at fundus, $2\frac{1}{2}$ inches; cervix, upper part, $1\frac{3}{8}$ inches; lower part, $1\frac{1}{2}$ inches; thickness, $\frac{5}{8}$ inch; cavity: length, $2\frac{1}{2}$ inches; breadth between Fallopian tubes, $1\frac{1}{2}$ inches; centre, 1 inch; lower orifice, $\frac{1}{2}$ inch; cervix thickness, $\frac{3}{8}$ inch; width, $\frac{7}{8}$ inch; weight of uterus, 12 drachms.

This subject of pregnancy constituted the only point of difference in the medical evidence given by myself on behalf of the prosecution, and that given by Dr. Meadows for the defence. Dr. Meadows spoke of two things which guided him more especially in coming to an opposite opinion to that given by myself. In the first place, he commented on the *shape* of the uterus. Now, it is a singular thing that, when I first examined the organ, I was struck by the very opposite shape to that which he described in the witness-box; the uterus was so flaccid that, by the most trivial ingenuity, it might be altered in this respect; and I confess I did not think it worthy of any reliance whatever in this case. Next, he spoke of the thinness of the walls. He said "the walls were unusually thin"; I agree with him, as will be seen by my measurement, which coincides with what Dr. Meadows said ($\frac{5}{8}$ inch). Now, this "thinness", I will show, goes very far to prove, in this unparalleled case (and taken in conjunction with the other evidence, on which I rely as a whole, the appearance of the abdomen, the uterine measurements, and weight as given above), will suffice to convince any reasonable mind that this uterus was not nulliparous.

I cannot do better than quote from a letter which I wrote to Sir John Holker, the Attorney-General, on behalf of the prosecution.

"Dr. Meadows gave me one reason that the walls were very thin. We agree; but calm reflection reminds me of a most remarkable fact in reference to the walls of the bladder, which was as thin as or thinner than this paper (foolscap). Now, the bladder has been subject to the same influence as the uterus; and I should like to know why the muscular walls of the one organ should not follow the same rule of atrophy as the other. The stomach, too, and the other viscera, had also wasted in thickness; and why should the uterus be the only exception? True it is, that the uterus lasts longer than any other viscus; but that does not alter the possible fact of getting thinner in proportion with other organs; and, if my argument be sound, such a fact strengthens my undisputed evidence as to weight. Of course, the uterus would be heavier; and it now is inconsistent with virginity, as are the measurements; and I certainly observed the converse as to the shape of the uterine cavity as stated by Dr. Meadows; but this point, I confess, might vary in the present case."

THE WHITECHAPEL TRAGEDY:

NOTES OF A REPORT TO THE SOLICITOR TO THE TREASURY ON
THE POST MORTEM EXAMINATION OF THE REMAINS.

By THOMAS BOND, F.R.C.S.,

Assistant-Surgeon to the Westminster Hospital, and Lecturer on Forensic
Medicine.

50, Parliament Street, S.W., Sept. 16th.

SIR,—According to your request, I beg to report that I received this day from Inspector Fox the remains of a human body in a sealed coffin. I received, also, from Dr. Larkin, the pelvic viscera of the same body in a closed jar. The body was divided into ten pieces; and, when fitted together, proved to be the complete body of an adult female, in an advanced stage of decomposition. The length of the body was just under five feet. The woman had evidently been dead many months; but certain parts were well preserved where they had been exposed, apparently, to the action of chloride of lime. The division of the body was undoubtedly of recent date, as proved by freshly cut bone and muscle. The division appeared to have been accomplished in an unskilful and bungling manner, by an adze or chopper, and was probably done by the hatchet in possession of the police.

The face was decomposed, and all trace of features lost. The scalp was partially separated from the skull, especially on the right side; and, attached to it, was a quantity of curly auburn hair at the back, fixed with hair-pins to a pad; and, on the left side of the head, clotted with a dark substance resembling dried blood. The sutures of the skull were very distinct, with the exception of the frontal, which was obliterated. On the right side of the head, at the junction of the inferior and posterior angle of the parietal bone with the squamous portion of the temporal, there was a depressed fracture, of the size of a sixpence; and, at the back part of the depressed bone, there was complete penetration of the skull by a hole large enough to admit a small bean. The fracture must have been caused by a hard blunt substance striking in a direction obliquely backwards and inwards. The fracture was not of recent date, the broken surface being of a dark colour, and similar in appearance to the exposed portion of the skull. The scalp was detached over the fracture and around for a distance approximately of three inches, exposing the skull. There was a penetrating wound of the scalp, which, when drawn forward, corresponded to a point on a level with, but an inch posterior to, the fracture. The scalp around the wound was dark-coloured, and its substance infiltrated with blood to a depth of one-sixteenth of an inch on its under surface. The uninjured portion of the scalp was of a pale brown colour.

The dura mater was detached from the skull-cap, and entire at the upper part, and of a light grey colour; but exactly opposite the fracture it was torn through, and of a dark brown colour around the puncture, from infiltrated blood. The above injuries were, I have no doubt, inflicted during life. On passing my finger into the hole in the dura mater, I found two spicula of bone. On opening the dura mater and removing the decomposed brain, I found a flattened bullet lying in the left hemisphere of the cerebellum, and in the direct axis of the hole through the skull. This bullet, I have no doubt, caused the injuries I have described. On removing the dura mater and the soft pulpy brain-substance, I discovered a second bullet lying on the posterior clinoid processes of the sphenoid bone. This bullet was flattened on the top only, and appeared to have entered the skull by direct impact. Both spinous processes were fractured; and, on further examination, I found a hole in the skull exactly above the base of the zygomatic process of the right temporal bone, passing directly inwards along the base of the brain, in a line with the petrous portion of the temporal bone, to the position of the bullet on the sphenoid bone. In the substance of the brain, and in the axis of the wound, I found a large spiculum of bone, but observed no effused blood. I cannot say if this wound was inflicted during life; but, if so, it was sufficient to cause death.

The head was severed from the trunk between the sixth and seventh cervical vertebræ. A cut two inches long extended from the angle of the thyroid cartilage upwards to the left angle of the lower jaw, dividing the tissues down to the vertebræ. The surface of the wound was retracted and dried, and not flaccid and soft like the cuts separating the body. It must have been inflicted from the front upwards and backwards. At the bottom of the wound, there was a cut nearly dividing the body of the third cervical vertebra. I am of opinion that the wound was inflicted during life, or directly after death; but cannot say positively, as the cut in the vertebra appeared to have been done

recently. The hair over the left ear was much clotted with a substance like dried blood.

The teeth remaining in the jaws were perfect, with the exception of the first bicuspid of the right upper jaw, which was decayed to the root. The third molar of the upper jaw on the left side was still uncut. Four teeth were missing, having fallen out since death. The cartilages of the ribs were not ossified, and the bones of the skeleton were light and small. The cartilaginous ends of the bones were abundantly covered with articular cartilage. I am of opinion that the age of deceased was from twenty to twenty-five years.

I examined the uterus, which was much decomposed, and found the cavity large, but the walls thin; the os was transverse and broad, and the neck projected very little into the vagina. In my opinion, the deceased had borne children.

THOMAS BOND, F.R.C.S.

September 24th.—I re-examined the remains, by request of solicitor for the defence, in the presence of Mr. Aubin, who attended on behalf of the prisoner. It had been stated by Mr. Lane that his daughter had a scar on one of her legs, but he could not recollect on which one. I, therefore, examined each leg very carefully; scraping away the chloride of lime and earth which thickly covered most of the body. I first scraped the left leg completely, but discovered nothing except eroded patches on the skin, one of which Mr. Aubin cut out subsequently, under the impression that it was a scar. On scraping the right leg, I found an undoubted scar, exactly over the fibula, about four inches below the point of the knee. It was about the size of a shilling rather elongated, downwards and backwards. It was a hard fibrous scar, and one-eighth of an inch in depth. In front, the skin was healthy, but very much puckered; at the back, the skin was white, similar to the ordinary appearance found around the scar of a burn or scald. The epiphyses of the shoulder, thigh, and knee-joints, had united.

ON INFUSION OF MATICO AS AN INTRA-
UTERINE INJECTION.

By W. DRAPER, M.R.C.S., &c.,

Surgeon to the York Dispensary.

IN THE BRITISH MEDICAL JOURNAL of November 13th, Dr. Spender of Bath has a note on infusion of matico as an intra-uterine injection in cases of uterine hæmorrhage. Dr. Spender asks whether such an injection "has ever been tried in *post partum* hæmorrhage". In 1868, I published, in the BRITISH MEDICAL JOURNAL, some cases of hæmorrhage treated by intra-uterine injection; and I then mentioned strong infusion of matico as having been employed by me. Again, as recently as July of last year, I communicated to the *Obstetrical Journal*, a paper on intra-uterine injection in hæmorrhage. In this paper, a case, illustrating the use of infusion of matico as a styptic injection, was given. Some years ago, when, as resident obstetric officer to the Middlesex Hospital, I had ample opportunity for testing the relative value of different forms of intra-uterine injections, I gave infusion of matico a fair trial; but, after due observation of its action in several cases of *post partum* hæmorrhage, of which cases, unfortunately, I have no record beyond that which my memory retains, I could not consider it, or, indeed, any other injection which I tried, so prompt and decided in action as the solution of perchloride of iron, used after Dr. Barnes's method. In other forms of uterine hæmorrhage, I found strong infusion of matico a valuable hæmostatic.

I can hardly think with Dr. Spender that, in the use of intra-uterine injection, it is sufficient to inject the fluids into the vagina; for, although I do not deny that, when both the internal and external os uteri happen to be very patent, some fluid may find its way into the cavity of the uterus, still I think that one could hardly rely upon sufficient entering to act with certainty. The plan I have usually adopted in cases not connected with the puerperal state, has been to pass into the uterus a small silver tube perforated in all directions, and having a little plate at its proximal extremity. The plate prevents the tube from passing too far into the cavity of the uterus, and it also acts as a rest for the directing finger. This small tube is fixed to one end of a gum elastic catheter, to the other end of which an elastic bottle is attached. This simple little apparatus has always answered satisfactorily. I may here repeat what I have recorded in previous communications, that I have never experienced any accident from the use of iron injections; but in their use in *post partum* hæmorrhage, as Dr. Barnes has recently observed, it is highly essential to preserve a passage by the side of the injecting tube, sufficient to allow the free outflow of the injected fluid from the uterine cavity.

CLINICAL MEMORANDA.

THE USE OF ANÆSTHETICS IN EXTRACTION OF TEETH.

DR. J. LAUDER BRUNTON'S "Remarks on one of the Causes of Death during the Extraction of Teeth under Chloroform" in the *JOURNAL* of December 4th, resting on a sound basis of careful physiological research, are of the utmost value to the now anxious administrators of chloroform. For "the extraction of teeth", however, surely chloroform is a thing of the past; its successor, nitrous oxide, carefully prepared and administered, being equal to every requirement, and having almost a blameless reputation. My experience in the extraction of teeth extends over many years; and, till the introduction of nitrous oxide, I was daily extracting while chloroform was being administered. I therefore feel warranted in giving my opinion that, happily, chloroform is no longer necessary in any case for the painless extraction of teeth; and I am anxious lest it should be inferred from the title of Dr. Brunton's paper that its employment in such cases is still not unusual, and lest any should be led, because familiar with its use, to advise the inhalation of chloroform, rather than the nitrous oxide, by those patients. In every respect but one, nitrous oxide seems to me preferable to chloroform in the extraction of teeth; the exception being that, under the oxide, the operation must be over in one minute, while, under chloroform, it may occupy many minutes. But sixty seconds suffice to remove several ordinary teeth; and as cases of acute suffering seldom, if ever, arise from more than two teeth or roots, ample time is afforded for their extraction. When many teeth or roots have to be extracted to prepare for artificial teeth, as convenience alone urges their extraction at one visit under chloroform, the operator should not hesitate to object to its administration, insisting on their being extracted at sufficient intervals under the nitrous oxide.

A. STEWART, F.R.C.S.E., Surgeon-Dentist.

EXTRACTION OF TEETH UNDER CHLOROFORM.

DR. LAUDER BRUNTON has, no doubt, made out a case in support of the rule which he lays down for preventing death during the extraction of teeth under chloroform. I say rule; because the second of the rules which he mentions has been, I believe, long recognised and acted upon in the administration of chloroform. It has been the custom of most experienced chloroformists to administer the anæsthetic, in all but exceptional cases, to the patient in the recumbent position; but it has certainly not been usual in dental operations to render the patient so deeply insensible as to produce *total abolition of reflex action*. Although Dr. Brunton has made out a case in favour of his rule, still there is much to be said against it; and not the least objection consists in the fact that, in operations about the mouth, the more profoundly unconscious the patient, the greater the danger of entry of blood or foreign bodies into the glottis, and the less the power of the patient to resist their effects and to expel them. For Dr. Brunton's words of advice to those about to give chloroform in dental operations, I should like to substitute the one word—don't. Chloroform, undoubtedly, at the present state of our knowledge of its mode of action and our means of combating its deadly effects when they appear, is always dangerous to life; and the danger is so insidious in most cases, that it is impossible with certainty to guard against it. Now, the instances in which it is justifiable to risk life in an operation like tooth-extraction, are extremely rare; and even if no safer anæsthetic were available, the employment of chloroform would be, in my opinion, indefensible. But we have now an agent, the nitrous oxide gas, which, by physiological and practical experiment, has been demonstrated—to say the least—to be much less dangerous to life than chloroform; besides which, it possesses advantages over every other agent for the production of insensibility during tooth-extraction. It is extremely rapid in its action, and transient in its effect; from sixty to eighty seconds of inhalation sufficing to produce complete anæsthesia, and less than a minute being enough to allow complete recovery. It produces no excitement or struggling during exhibition, neither is it followed by nausea, vomiting, *malaise*, headache, depression, or any of the common distressing sequelæ of chloroform-anæsthesia. With it, also, it is always possible to fix the patient's mouth easily, safely, and firmly open, before the administration by the mere insertion between the teeth of a simple prop; whilst with chloroform, unless a cumbrous gag be used, or unless the patient be profoundly narcotised, the opening and fixing open of the mouth are frequently to be accomplished only with extreme difficulty.

HENRY SEWILL, M.R.C.S., Surgeon-Dentist.

REVIEWS AND NOTICES.

ZIEMSEN'S CYCLOPEDIA OF THE PRACTICE OF MEDICINE. Vol. x: Diseases of the Female Sexual Organs. By PROFESSOR CARL SCHROEDER. The English Translation edited by ALBERT H. BUCK, M.D. Pp. 575. Illustrated. London: Sampson Low and Co. 1875.

To all interested in the study of gynecology, the present volume, which forms one of Ziemssen's valuable series, will prove of much interest. It appears somewhat earlier than was originally intended, "in consequence of its great interest and importance, and in compliance with the expressed wish of many subscribers". It will doubtless be a source of regret to many that they cannot procure the work without subscribing for all the volumes, sixteen in number. For the comfort of those thus circumstanced, we may assure them that the recent works of Barnes, Graily Hewitt, Thomas, etc., which can be obtained separately, will amply compensate them for the loss of Schroeder, which, although a work of surpassing merit, is less calculated to supply the wants of the practitioner than either of the works we have indicated.

It is needless to speak of the general "get up" of the volume. It does credit to the publishers. The translation into English from the original has been undertaken by men fully competent for the task, and leaves little to be desired.

The illustrations—147 in all—are engravings from electrotypes of the originals, and are clear and distinct, although the figure of the outline is stiff and unnatural, and the illustrations in many cases purely diagrammatic.

The index at the end is of little use for reference, being chiefly occupied by proper names, which would have been far better grouped by themselves as an index of authorities. Some little ingenuity is necessary to find the name of any subject that may be desired. Dysmenorrhœa, for instance, has no place except as a subheading under Menstruation. Endometritis has to be sifted out of a long list under the head of Inflammation of the Mucous Membrane—a subheading of "Uterus, Diseases of the". The arrangement is inconvenient and irritating.

The bibliographical references at the heads of chapters are of much service, and in most cases very complete. German authorities naturally preponderate; but English are fairly represented.

The author, well known to us by his *Manual of Midwifery* and by his researches in the domain of gynecology, has endeavoured to make the work as comprehensive as possible, describing, and in many instances figuring, the most unusual forms of congenital defects and malformations: a veritable chapter for the curious in these matters, showing much literary research, and evidently the result of much labour. Hypertrophy of the cervix, in all its different phases and portions, is described at length, most elaborate diagrams being given to show the difference between supravaginal, median, and infravaginal hypertrophy.

The arrangement of the work will scarcely find much favour with the student or young practitioner, who is perforce obliged to start from the symptomatology of disease. Wishing, for instance, to determine the most frequent causes of menorrhagia, he will turn in vain to Schroeder, either to the index or to the heading, if he be lucky enough to find it, for any information on this subject. He must first learn gynecology thoroughly; a single page and a quarter is all that the author devotes to the subject of menorrhagia, and the student will turn from it disheartened. Again, take the subject of sterility. We find no notice of it anywhere, not even in the index, and it is scarcely even mentioned as a symptom under the various disorders that usually produce it. This is clearly a great defect. The majority of those who subscribe for the complete set are probably men who have no special training in gynecology, or whose opportunities of studying the subject are few and far between. They will naturally be disappointed in not being able to see at a glance the usual causes producing sterility, the means adopted for diagnosing the particular cause of the case in question, and in not finding any indications for treatment. It may be well to ignore symptomatology; but the mass of practitioners, we believe, will regret its absence in the present volume.

Nearly one hundred pages are devoted to diseases of the ovaries, including ovariectomy. The whole subject is treated very exhaustively, and we complete the perusal of it with much satisfaction, feeling that we have learned much from the systematic way in which the differential diagnosis of abdominal tumours has been presented to us, and the various methods of operating discussed.

Respecting the treatment of uterine diseases generally, the method suggested is essentially German in many of its peculiarities. Intra-

uterine injections, in place of applications, whether solid or liquid, filling the vagina with fluid through a speculum, so as to bathe the cervix or vaginal walls as the case may be, and other similar methods seldom employed in this country, are recommended. Few practitioners, we imagine, will be satisfied with the seven lines devoted to the treatment of acute vaginitis at pages 493-94.

The author, speaking of Graily Hewitt's cradle-pessary, asserts that "it is not only incorrect in principle, but experience shows that it is not well borne". He regards the method of treatment by intrauterine pessaries as very efficient in appropriate cases, and not particularly dangerous. He removes them during the catamenial flux, to avoid the risk of inflammation. The use of the chain-*lérascur* for the removal of intrauterine polyp "is by all means and altogether to be prohibited"; for "it is difficult of application, and is liable to amputate a considerable area of uterine mucous membrane". The single wire *lérascur* is the one recommended.

No mention is made of vascular growths in the urethra.

We have pointed out what appear to us a few defects in the volume; but, apart from these, the work is one of great merit, and does the author much credit. It is evidently the outcome of much honest and laborious work, and we have no wish to prejudice the professional public, who will not fail to appreciate its intrinsic merits. It is wonderful what an amount of information the author has succeeded in compressing into the space at his disposal; and, considering the rapid strides that have recently been made in the study of diseases of women, the reader will find that justice has been done to the subject regarded from a pathological point of view, and he will be glad to avail himself of the opportunity of making himself acquainted with the clear and concise view of these which the author has presented.

SELECTIONS FROM JOURNALS.

SURGERY.

REMOVAL OF OMENTAL TUMOUR.—Two cases of removal of omental tumour from the scrotum are reported by Dr. J. F. Miner in the *Buffalo Medical and Surgical Journal* for August 1875. The first case was that of a healthy young man, who from youth had been troubled with a scrotal tumour, which had been supposed to depend upon some affection of the testicle. When an attempt was made to remove the tumour, it was found to be omental. The omental mass had probably descended with the testicle in youth, and had increased in size as the patient had grown fleshy. It was firmly adherent on all sides to the inguinal canal. A short ligature was thrown around the mass at the lower end of the canal, and the omentum cut away with scissors. The mass when removed weighed two pounds and a half. The patient, after a somewhat troublesome convalescence, returned home in about a month. The second case was less successful. It was that of a man, sixty-five years old, who weighed three hundred and twenty pounds. Eight years before he consulted Dr. Miner, he began to notice an enlargement of the scrotum. The various physicians whom he consulted seemed to arrive at no satisfactory diagnosis. At the time of the surgical operation, the mass was found, as in the previous case, to be enclosed in a peritoneal envelope, and to be firmly adherent to the margin of the inguinal canal. A ligature was applied as high up as possible. The removed mass was several inches in length and width, and weighed three pounds and a half. In five days, the patient died of peritonitis. Dr. Miner remarks that it is frequently the case that large portions of omentum have to be removed in operations for hernia, but he is not aware of a report of similar cases to the two which he describes.

EXCISION OF A GALL-STONE.—Dr. A. Mödel describes in the *Ärztliches Intelligenz-Blatt*, No. 41, 1875, the case of a man aged about 50, who had for a year and a half suffered from pain in the abdomen, at first coming on at rare intervals, but afterwards more frequently and severely. There was no hernia. He was habitually constipated, and his skin was rather sallow. On examination, some swelling and redness were found in the right hypogastric region; and a little more than an inch and a half below and to the outer side of the umbilicus, in the centre of the redness, was a minute opening, from which a small quantity of yellowish viscid matter escaped on pressure. A small sound introduced into the opening came into contact with a rough gritty substance at the depth of about seven-eighths of an inch. The opening was dilated with a scalpel, and the substance was removed. It was a calculus of the size and shape of a nutmeg, with a rough crumbly surface, of a dark brown colour; its outer layer, which

was comparatively soft, presented numerous fine fissures. On physical and chemical examination, it was recognised to be a gall-stone, containing, *inter alia*, 47 per cent. of cholesterine. It had become encysted in the abdominal wall, lying in a cavity nearly as large as a walnut, lined with a smooth membrane, which contained also an abundant thin, fibrous, yellowish, nearly transparent secretion. No connection with the gall-bladder could be traced. The wound was dressed with charpie, and subsequently touched with nitrate of silver, and was quite healed in ten weeks. The patient has since continued in perfect health.

AMPUTATION AT THE ELBOW-JOINT.—Dr. George W. Say (*Boston Medical and Surgical Journal*, September 16th), alluding to amputation at the elbow-joint, says that two considerations have probably deterred surgeons from performing this operation: fear of ulceration of the cartilages, and a long, club-shaped, unwieldy stump. The first has been proved to be groundless. In many, if not in most cases, the flaps unite as readily over cartilages as over the sawn extremity of bone. Whether the second objection is of sufficient importance to overbalance the increased danger of higher amputation, is by no means proven. It is asserted by good surgical authorities, that the redundant size of the end of the bone becomes in time reduced, and leaves a very comely and useful stump. It is admitted by every one, that the less the part removed, the greater the chances for the patient's recovery. It is also admitted, that the more the sheaths of the muscles and the medullary cavities of the bones are interfered with, the greater are the dangers of pyæmia, osteo-myelitis, necrosis, profuse suppuration, etc. These are certainly strong reasons in favour of joint-amputations.

MEDICINE.

ECZEMA PRODUCED BY TINCTURE OF ARNICA.—Dr. Whittaker has (*Ohio Clinic*) lately encountered several cases illustrating the evils of the local application of tincture of arnica. One young man with orchitis applied it, and came to Dr. Whittaker with an extensive and profound eczema, which lasted for three weeks. Another man, having let a tenpin-ball fall upon his toes, applied it to relieve the pain, and had a violent eczema, which was not cured for two weeks. At the society at which this communication was read, Dr. Longworth mentioned the fact as something peculiar about this drug that the majority of persons may use it with impunity, but it will now and then act as a virulent poison producing an eczema, not limited to the seat of its application, but which becomes universal, and is often very obstinate to treatment.

HEMATURIA.—Dr. David Choate (*Boston Medical and Surgical Journal*, September 16th) reports the case of a man aged 40, who was affected with what seemed to be a purely idiopathic hæmaturia, the effect of the changes induced in the system by the lack of proper nutriment and excess of alcohol. Albumen was present, but only in quantity proportioned to the amount of blood, which was always intimately mixed with the urine, and was never passed by itself, either in liquid or in coagula. There was neither mucus nor pus present, and no casts could be discovered. The loss of blood continued for about seven months, the patient finally becoming excessively weak and anæmic. All the ordinary astringents were administered; the only one which had even a temporary effect being gallic acid in doses of from five to seven grains every two hours. Hypodermic injections of one-fifth to one-fourth grain of ergotin were commenced, and were continued for five days, when the stomach became irritable, vomiting occurred, and they were stopped. At this time, the urine suddenly became clear, and continued so. Twenty-four hours later, the patient had a sharp attack of pain in the course of the right ureter, followed by the passage of a small coagulum, apparently moulded by the ureter. The patient gradually recovered from the condition of extreme anæmia into which he had sunk.

MATERIA MEDICA.

FORMULA FOR THE COMBINED ADMINISTRATION OF COD LIVER OIL AND PHOSPHORUS.—Dr. Edward C. Meun (*New York Medical Record*, September 18th) has employed the following mixture with the happiest results, patients taking it readily who could not bear the plain cod-liver oil at all. B. Yolks of three eggs; cod-liver oil, 8 ounces; sherry wine, 4 ounces; phosphoric acid, simple syrup, of each an ounce; bitter almond water, 8 ounces; rectified spirit, a drachm. Rub the eggs up in a mortar, adding the oil spoonful by spoonful. Last of all, add the phosphoric acid.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, DECEMBER 11TH, 1875.

THE WAINWRIGHT CASE IN ITS MEDICO-LEGAL ASPECTS.

THE trial of the Wainwrights, which occupied the Central Criminal Court for the long period of nine days, adds another *cause célèbre* to the criminal records of England. For the intense public interest excited by this trial, we can find no parallel except in that of William Palmer, who was convicted in 1856 of murdering his friend, John Parsons Cook, by poison. Although these cases differ from each other in the mode selected for the destruction of life, they bear a strong resemblance in the cunning and treachery displayed by the criminals, as well as in the efforts made to conceal the crimes and defeat the ends of justice. Palmer and Wainwright were not of the ordinary class of criminals; they had planned the act of murder with coolness and premeditation, and each had taken, as he believed, such precautions as to render detection difficult, if not impossible; yet a small matter betrayed both, and brought their crimes to light. An ill-packed parcel of mangled human remains in the one case, and a missing pocket-book in the other, were the accidents by which their crimes were revealed. In the case of Wainwright, the murder was actually concealed for a year. The trials of the two criminals occupied the Central Criminal Court for an unusually long period; but there was not in the trial of Wainwright that conflict of scientific evidence which imparted such a great professional interest to the trial of Palmer. Although two medical witnesses were on the recent occasion called for the defence, their evidence was not such as to throw any doubt on the guilt of the accused, or to influence in any way the verdict of the jury.

We may here note another point in which these cases bear a strong resemblance, namely, that both criminals, in spite of the clearest proofs against them, strenuously denied their guilt. The criminal Palmer did not go so far as Wainwright in calling God to witness that he had not committed an act of murder. He refused to make any confession, and merely contented himself by saying, on his way to the scaffold, "Cook did not die from strychnia". The minds of some persons were no doubt influenced at the time by this stern refusal on the part of the criminal to admit his guilt, and they were inclined to take this reticence as a proof of his innocence. The fallacy of accepting any statement made by a convicted criminal as a proof of his innocence, is plainly illustrated by the case of Wainwright. This man, in the face of the most complete proofs of his guilt, from the medical and circumstantial evidence, and standing, as he said, "on the brink of eternity", affirmed in the most positive manner that he did not commit this act of murder, and that he neither buried nor exhumed the remains which were found in his possession!

The facts of this remarkable case have been brought so fully before our readers, that we need only refer in this place to the salient points of general interest, and to the medico-legal evidence on which the prosecution relied for conviction.

Henry Wainwright was indicted for the murder of a woman with whom he had for some time cohabited, Harriet Louisa Lane; and his brother, Thomas Wainwright, was indicted for aiding and abetting in the commission of this murder, and as an accessory after the fact. It may suffice, with regard to the last-mentioned prisoner, to state that

the jury upon legal grounds, properly convicted him as an accessory after the fact, so that his case will require no further notice here.

The evidence leading to a motive for an act of murder, showed that the prisoner, Henry Wainwright, a married man with a wife and five children, had formed a secret connection with the deceased Harriet Lane, and had had by her two children. He paid for their support, but with difficulty, as he was in embarrassed circumstances. In the autumn of 1874, this led to quarrels between the prisoner and the deceased. He became indifferent to her, and she fell into great distress. She was moved by the prisoner from one lodging to another, passing under a false name as the wife of the prisoner, who had also assumed another name. By an arrangement with the prisoner she left her lodging on September 11th, 1874. He had provided her with means to discharge all her debts, and she was then in good health and spirits. From that date she was never afterwards seen alive. Application was made to the prisoner by her friends for information respecting her, but his answers were not satisfactory. By his statements, and by the use of false letters and telegrams, he led the friends to believe that the woman had gone away with another man whom he named. This also was proved to be a falsehood, and the matter dropped, until September 11th, 1875, exactly a year after the disappearance of the deceased.

At this date, the prisoner was found removing from a grave on premises in the Whitechapel Road, of which he had the key, the remains of a body, which proved to be the body of a woman, and was alleged to be that of the missing Harriet Lane. It was further alleged, that, when she left her lodging on September 11th, 1874, she went in a cab to the premises in the Whitechapel Road where this body was found. She took leave of her friend and her children, and made a statement which, owing to the strict rules of evidence, was not admitted at the trial. It has now transpired, that she went directly by an appointment with the prisoner to these premises, and was never again seen alive. Other facts led to the conclusion that the prisoner had met her there, murdered her, and buried her body in a grave dug beneath the floor of one of the rooms.

In September 1875, these premises were likely to pass into the hands of others. This would have led to a discovery of the remains, and it rendered their removal a necessity. It was in thus transferring them to another hiding-place in Southwark belonging to his brother, that he was found in possession of parts of a mangled human body for which he could not reasonably account, and concerning which he made what was proved to be a false statement.

The body had been recently cut up, and when taken possession of by the police, the pieces were packed in two parcels of American cloth and corded. It was proved that, on September 10th, 1875, the prisoner had employed his brother to purchase for him a spade and a small chopper or axe. These articles were found on the premises, and had evidently been recently used. The chopper had upon it putrescent animal matter, and the spade clay mixed with lime. On the same day, Wainwright himself had purchased three yards of American cloth and a quantity of cord, similar to that used in tying up the remains.

The medical evidence given at the trial by Mr. Larkin and Mr. Bond was directed (1) to the cause of death, and (2) to the identity of the body as that of the missing woman, Harriet Lane. The cause of death was sufficiently obvious. It is thus concisely stated by the learned judge from the evidence given by these two medical witnesses.

"The woman was found with two bullets in her brain, and a third was found in a hair-pad at the back of the head. Besides that, there was a cut extending from the centre of the throat to the angle of the lower jaw, which had severed all the tissues, and which must have been inflicted with very considerable force. Such were the appearances; and, from them, there could not possibly be a doubt that the woman had been deprived of life by pistol-shots. There was reason also to think that the first shot was just behind the right ear; and the bullet was found to have caused extravasation of blood to three inches in circumference. Another bullet was found in the brain; and there was a cut in the throat; the other bullet having probably been fired when life was ebbing; and another had been flattened against a mass of hair-

pins which had no doubt prevented it from going into the head. Therefore, we have a fact beyond all doubt, that this poor woman, whoever she was, came to her death in that way; and the probability is, that the murderer came up from behind and fired the first shot from the back of the head. It is probable, also, that, finding the first shot had not taken effect, the person using the pistol had brought it round and fired it just behind the right ear; and then, not certain it would answer the purpose of destroying life, the third shot was fired. My own impression is, that the attack was made from behind.*

In reference to the cut in the throat, it is important to state that, it was a cut of old date, *i. e.*, it had clearly not been produced in the recent mutilation of the body; but, in the cautious words of Mr. Larkin, it must have been "inflicted immediately before or immediately after death". As the principal arteries of the throat were divided, it would have been sufficient of itself to cause death. It is probable, however, as the learned judge remarked, that the bullets were discharged first, and while the woman was dying from the effect of her shots, the throat was cut to make sure of her speedy death. It is most improbable that, with a severe cut of this kind in the throat, an assassin should have taken the trouble to fire three separate shots into the head.

The cause of death, therefore, although a year had elapsed, was clearly proved by the medical evidence. Then came the question, Could this have been an act of suicide on the part of the deceased while with the prisoner? Had the throat alone been found cut, and no bullet-wounds on the head, there might have been a difficulty in answering this question; but, taking these wounds together, the answer given by Mr. Larkin to a question put by the Attorney-General was perfectly justified by the medical facts. "It is perfectly impossible for the woman to have inflicted the wounds upon herself."

In referring to the theory of suicide, which was made a part of the elaborate defence, it was truly described by the Lord Chief Justice as a vague and even a wild suggestion; and, as he well observed, it involved the supposition that the deceased had dug her own grave. The propounding of a theory of this kind to account for the facts simply proved that there was no reasonable ground of defence. With such an admission, there would be no difficulty in allowing full credibility to the miracle ascribed to St. Denis.*

The cause of death, and the fact that it was an act of murder, were therefore clearly established.

We now come to the question of *identity*. Were these the remains of the missing woman, Harriet Lane? The answers to this part of the case were based partly on medical facts, and partly on the discovery of certain articles of dress in the grave from which the body had been removed. The features were not recognisable. The body had been irregularly cut up into ten pieces, and much mangled. It was decomposed; but, as a quantity of chloride of lime had been used in the burial of it, putrefaction had been in some degree retarded. Nevertheless, the medical witnesses agreed that the appearances were such as might be consistent with a twelvemonths' burial superficially in the earth.

The relatives could only speak generally to the slender form and stature of the body, and the smallness of the hands and feet, as points in which it resembled that of Harriet Lane. The colour of the hair (a light auburn), the absence of a tooth in the upper jaw on the right side, and the presence of a scar or cicatrix from a burn received many years before, and still remaining on the right leg below the knee, were also circumstances which strengthened their opinion. We may add to these proofs the discovery in the grave of some buttons and other articles of dress, such as those which were actually worn by the deceased on the morning on which she left her lodging to meet the prisoner on the premises. These were clearly identified by the relatives. The greater part of her dress had been destroyed by burning, and the ashes were found in the grave.

* This stupendous miracle, as it is described by Mrs. Jameson, consisted in the body of the martyr rising up on its feet after decapitation, taking up the head in his hands, and walking the space of two miles to a place called the Mount of Martyrs, known in the present day as Montmartre. (*Jameson's Legends*.)

The direct proofs of identity were: 1. The *age*. The age of the deceased was twenty-four. Judging by the wisdom teeth, three of which had appeared, this corresponded with the age assigned to the body. 2. *Stature*. It was inferred, but by no means directly proved, that the deceased was five feet and a quarter of an inch in height. The remains, when put together, represented a stature of four feet eleven inches and one-eighth of an inch. This made about an inch difference, which was accounted for by one of the medical witnesses, as a result of the shrinking of the intervertebral substance. This slight difference in measurement was made a strong point in the defence; it gave rise to much discussion, and, as it appears to us, much unnecessary cross-examination. Had the body been entire, there might have been some reason for dwelling upon this difference; but there would always be a great difficulty in taking the exact length of a dead body cut into ten pieces, and no two persons would be likely to agree in the measurement. A difference of an inch in such a case, assuming that the stature of the deceased had been accurately determined just before her disappearance, would be really unimportant in itself.* When the stature so nearly corresponded, a medical witness would be justified in saying that, considering the mutilated state of the remains and the date of interment, there was nothing inconsistent with the body being that of the deceased. 3. The *colour of the hair*. This is stated to have been slightly different; but the difference was consistent with the hair of the remains having been buried for a year in the earth, and exposed to the action of chloride of lime. Apart from this consideration, there are so many women in the world with hair of a similar shade or colour, that no great reliance can be placed on a resemblance of this kind in a disputed question of identity.

The medical points upon which the question turned were chiefly the presence of a scar or cicatrix from a burn in the right leg below the knee, and the state of the uterus as indicative of a woman having borne a child or children. With respect to the cicatrix of a burn, it is a significant fact that its existence was mentioned by the father of Harriet Lane before its presence had been discovered by the two medical witnesses. They removed the adipocere and other matter on the body which concealed such superficial marks, and then readily found it in the part indicated. It was distinctly puckered, and presented all the usual marks of a scar produced by a burn from a red-hot poker. The sister who dressed the burn, which had occurred many years previously, described the nature of the accident; and her evidence was corroborated by that of several relations and friends.

A medical witness, Mr. Aubin, who had examined the remains as an expert on the part of the defence, admitted the existence of a scar on the right leg, but stated that, on a subsequent examination, he discovered another scar on the left leg. In what way this discovery could have helped the case of the prisoner we do not quite see. It could not neutralise the positive evidence afforded by the cicatrix on the right leg, or have shown that this was not the body of Harriet Lane. It might well have happened that she had more recently met with another slight accident, of which the relatives were not aware. All doubts and difficulties on this point were, however, satisfactorily removed by the witness himself. He found the body much decomposed, and he would not swear positively that the dark mark which he described as a "scar" was not the effect of decomposition.†

* The stature of Harriet Lane was merely a matter of inference from a photograph taken of herself and a sister now living. They were taken side by side when girls, or at any rate some years before the date of Harriet's disappearance. The living sister, as a grown woman, measured five feet and one-eighth of an inch. Upon the basis of this photograph an additional eighth was assigned to the stature of Harriet. This is surely a very flimsy ground upon which to base a difference of eighths of an inch in comparing the statures of two grown women. Had the missing woman been measured shortly before her disappearance, and a difference of five or six inches found, there would have been some reason to argue from this that the proof of identity failed in one important particular.

† It is the first time that we have heard of a dark mark in the skin, such as might result from putrefaction, being mistaken for a cicatrix resulting from a wound or a burn. With any ordinary examination of a dead body, we believe such a mistake to be impossible. When the portion of skin was handed by Mr. Aubin to the Lord Chief Justice, he asked "Where is the scar?" It was then handed to the jury and Attorney-General. The latter tried to find the scar by the aid of a magnifying glass; but, judging by his cross-examination of this witness, he does not appear to

The other medical facts connected with identity referred to the condition of the uterus of the woman whose remains were found; *i. e.*, whether the appearances which it presented were such as to indicate conclusively that she had borne children. The missing Harriet Lane had had two children by the prisoner, the last having been born some time before Christmas 1873; therefore about nine months previous to her disappearance. From their examination of the uterus, Mr. Larkin and Mr. Bond came to the conclusion that this woman had borne a child. On the other hand, Dr. Alfred Meadows, who appeared as an obstetric expert for the defence, stated that, in his opinion, the woman of these remains had never borne a child. He qualified this opinion, however, by stating that he believed it to be impossible to decide this question in any case with absolute certainty. If this witness had been able to swear positively that the indicia of childbearing were absolutely certain, and could never be mistaken for a virgin or unimpregnated state of the uterus, his evidence would have gone far to show that this could not have been the body of Harriet Lane. The numerous facts establishing identity in other respects would have gone for nothing. He felt, however, he could not carry his evidence to such an extent, and the effect of it simply amounted to this: "I differ in opinion from the witnesses for the prosecution on the answer to this question. Nevertheless, those witnesses may be right, for I well know that there are no certain criteria by which the question can be positively answered in the affirmative or negative." This material qualification of his opinion was all that was really necessary to sustain the case for the prosecution. Mr. Larkin and Mr. Bond might be right in their conclusion. There was nothing to show that they were wrong.*

Another point, which scarcely requires notice, was whether, Harriet Lane having worn a wedding-ring and keeper like a married woman, there would not be some mark or furrow on the ring-finger. It is stated that there was no appearance on the fingers of the woman whose remains were found, to indicate that she had worn a wedding-ring. The learned judge, however, remarked that, as the fingers were small, slender, and not full, they would not be likely to show any mark or depression. There was, in fact, a similar condition of the fingers of Harriet Lane.† We may add to this observation, that the production of such marks will depend greatly on the length of time during which the ring had been worn, and the evidence left it clear that Harriet Lane had but for a short time before her death passed for a married woman. Besides, after the dead body of a woman of slender form had been buried for a year, there would be a shrinking or desiccation of the fingers, which might remove such an appearance even had it at any time existed, of which there was no evidence.

There was practically no defence to the great questions at issue in this case—the act of murder—the perpetrator and the identity of the murdered woman. That the crime had been carried out with premeditation, precaution, and some attempt at concealment, was amply proved. On September 11th, 1874, the prisoner had in his possession a revolver, which the bullets found in the head would fit. On September 10th, 1874, the day before he had made the appointment for her to go in a cab to his premises in Whitechapel Road, he caused to be purchased half a hundredweight of chloride of lime; this substance had been largely used in disposing of the remains; it was found in the grave and scattered over the body. Whether it was intended to accelerate decomposition of the dead body, or to destroy the effluvia likely to arise from it, does not appear. If with either object, it failed. The use of this substance appears to have somewhat retarded decomposition, and not to have prevented the escape of offensive effluvia. The

have been successful. Testimony like this—for it does not amount to evidence—should not have been given. Its tendency could only be to mystify the case, and raise a false issue. If the witness were not able to distinguish a mark from the effects of putrefaction from one resulting from local injury, he was not justified in describing it as a scar.

* The special reports of Mr. Larkin and Mr. Bond are published in another part of this JOURNAL. The reader will there find a full description of the appearances presented by the uterus.

† Harriet Lane did not wear a ring for some months before her death, as it had been pawned.

chloride of lime was provided, the joists of the floor cut, and a grave was dug beneath ready to receive the body of the woman before she had left her lodging! A year afterwards, when the necessity for its removal came, the prisoner caused to be purchased a spade, a chopper, American cloth, and cord, for cutting up and packing the remains. Yet this is the man who boldly stated, after his conviction, that he did not commit this act of murder, and had had nothing to do with the burial and exhumation of the body!

In our judgment, the defence set up for Henry Wainwright is beneath criticism. If, instead of dwelling upon trivial discrepancies in the evidence of the non-medical witnesses, as to their remembrance of persons whom they had casually seen, and events which had occurred a year before, the colour of a man's whiskers and moustache, etc., the learned counsel for the defence had been able to give a reasonable explanation of the purchase of chloride of lime in 1874, and of the spade, axe, and other articles in 1875, the jury might have been induced to take a different view of the case.

So, again, if he could have satisfied them on the medical evidence that suicide might have been committed by the woman first discharging the bullets into her head, and then cutting her throat, or *vice versa*, with a possible purchase of chloride of lime and the digging of her own grave, the verdict might have been different. He dealt, however, with what lawyers call the fringe of the case, and not its substance. The main facts, pointing to a most deliberate murder by the prisoner, were either not noticed, or in a manner to render the case against him more conclusive. Medical science was of great service on this occasion, and the two witnesses for the crown who conducted the examination of the body, acquitted themselves creditably. The witnesses for the defence were really, so far as their evidence went, witnesses for the prosecution; for there was no substantial point on which they could either contradict or nullify the medical evidence given on the part of the Crown. The only real approach to a conflict, was in reference to the opinion of Dr. Meadows, who, as an obstetric expert, could find no proof of child-bearing; but the summing up of the judge, and the unanimous verdict of the jury, can now, we should think, leave no doubt either on his mind or that of any man capable of estimating and weighing evidence, that the ghastly remains taken from the grave of the dark room in the Whitechapel Road were, beyond any reasonable doubt, those of the missing woman Harriet Louisa Lane, and that Henry Wainwright has been justly convicted of a foul and premeditated act of murder.

THE MEDICAL DEFENCE ASSOCIATION.

THOSE who, during the last twelve or fourteen years, have interested themselves in medical politics, must have noticed a deep and widespread desire on the part of medical practitioners to be protected from those who practise without legal qualification. It was hoped that the Medical Act of 1858 would be a very efficient agent in putting a stop to unqualified practice; but it has been found to fail in several instances, and its penal clauses are now rarely put into operation. Although the Medical Act is thus practically inoperative, the Apothecaries' Act remains in force, and supplies a comparatively summary and inexpensive mode of proceeding against those who illegally practise as apothecaries. Proceedings under this Act must be taken in the name of the Society of Apothecaries, and the consent of the Society must be obtained before an action can be brought against an unqualified practitioner for the recovery of the penalty of £20, to which such unqualified practitioners render themselves liable.

The Society itself never takes proceedings against unqualified practitioners; but it allows its licentiates to do so in certain cases in its name, provided that the action is brought without any expense to it. For obvious reasons, individual practitioners naturally shrink from incurring the expense and odium which attach to the prosecution of persons who are practising without legal qualification, and thus the Act has practically remained a dead letter. Pending an alteration of

the Medical Act, and the appointment of a public prosecutor, the only practicable plan of dealing with the question appears to be the formation of an association of registered medical practitioners, whose function shall be the prosecution of all clear cases of illegal practice that are brought under their notice. The formation of such an association was proposed several months ago in the columns of this JOURNAL by Mr. George Brown; and we are pleased to learn, from the large and successful meeting that was held at the rooms of the Medical Society of London last week, that the idea has met with a large amount of support from the members of the medical profession, and that there is every prospect of the Association being established on a firm basis.

From the report of the Provisional Committee, we learn that the primary object of the Association is "the suppression by every legitimate means of the practice of medicine and surgery by unqualified persons". This is an useful and a laudable object, and one that not only commends itself to the whole medical profession, but is also deserving of the sympathy and support of the public. The profession, doubtless, suffers somewhat from illegal practice, but this is an insignificant consideration in comparison with the injury that is done to the public by the ignorant and designing persons who assume the position and functions of medical practitioners. Numerous cases might be gleaned from the records of our coroners' courts where life has been sacrificed through persons having been called in to attend cases of severe illness who have had no professional education, and consequently have been unable to diagnose the disease or prescribe the proper treatment, while others show a course of life-long fraud and black mail.

The Defence Association has shown that it can accomplish some good. Already it has, we understand, prosecuted in three cases of illegal practice in the East End of London, and in each instance has recovered under the Apothecaries' Act a penalty of £20. Other prosecutions are being proceeded with, which will, we hope, be attended with similar success.

We shall watch the proceedings of the Defence Association with much interest; and, as long as it continues to use its influence in the exposure and punishment of imposture and deception, it will give us pleasure to extend to it our cordial support.

THE next International Medical Congress is to be held in Geneva in 1877.

M. DENUCE communicates to the Académie de Médecine of Paris, a case in which he successfully performed external hysterotomy on a woman, whose life was endangered by excessive hæmorrhage due to old-standing irreducible inversion of the uterus.

THE Academy of Medicine at a recent sitting, voted for a foreign corresponding member; the ballot showed 53 votes for Dr. Swann of Liege, 24 for Dr. Faget of New Orleans, 2 for Dr. West of London. Dr. Swann (a well-known histologist) was therefore elected.

THE Wainwright case is one which has involved some important questions in medical jurisprudence; and it will remain a leading case in the books. We publish an analysis of the evidence from the pen of an eminent authority; and furnish, also, by the courtesy of Mr. Larkin and Mr. Bond, the text of their reports, as well as some comments by Dr. Meadows at the Obstetrical Society, on some points raised by the evidence which he tendered to the defence.

THE announcement of the death of Mrs. Palmer from enteric fever in Grosvenor Square has naturally attracted attention, and caused some anxiety as to the sanitary condition of that wealthy quarter. We are glad, therefore, to be able to state, on the authority of Dr. Corfield, the medical officer of health of the district, that the disease was not contracted in that locality. Mrs. Palmer contracted the fever in the country, and was brought home ill with it. The proper sanitary precautions have been adopted.

FOOT-AND-MOUTH DISEASE.

WE are happy to be able to announce that the negotiations to which we recently referred as being in progress between the Royal Agricultural Society and the Committee of the Brown Institution, have been brought to a successful termination; the Council having, at their meeting on Wednesday last, agreed to devote a sum of money, not exceeding £500, for the carrying out of researches, under the direction of Dr. Burdon Sanderson, on the etiology, nature, and properties of pleuropneumonia and foot-and-mouth disease. Of these two epizootics, the former has a remarkable pathological interest as an infective, and, in all probability, communicable disease, localised in an important organ, and producing lesions which, although very characteristic, have been as yet very imperfectly investigated. The other disease derives its interest from its very extensive prevalence, and the great losses which it has recently occasioned in this country. We confidently anticipate that the Royal Agricultural Society, which has, in taking this step, exhibited an enlightened appreciation of the practical value of knowledge, will find themselves justified by the result. It is not, of course, to be expected that any new methods of cure will be discovered, but we believe they will find their reward in the greater efficiency of practical measures for the prevention of these plagues. We have had in the past examples enough to prove that whatever may be the value of the general principles of so-called "sanitary science", the only certain guide in the prevention of epizootic and epidemic diseases is the knowledge of the nature and tendency of the particular disease to be prevented.

SUPPLY OF SUBJECTS FOR DISSECTION.

IT will be some consolation to those interested in medical education to learn that the serious deficiency in the supply of subjects at the metropolitan schools, to which we called special attention last week, has not extended to at least one of the leading provincial schools. A correspondent informs us that the dissecting-room of the Liverpool Royal Infirmary School of Medicine continues to receive the usual ample supply of subjects which it has hitherto obtained. During the present session, the number of bodies sent for dissection since October 1st is fourteen, which, with one body preserved during the summer recess, makes a total of fifteen subjects for distribution amongst seventy students, the number actually engaged in dissection up to the present date.

PATRIOTISM *versus* HUMANITY.

THE *Allgemeine Medicinische Central-Zeitung* publishes the following letter to show that there are still some with whom hatred of Germany is a stronger feeling than even life itself, or at least regard for the lives of others. "Ingrande, October 29th, 1875. Gentlemen,—I have this morning received a printed circular, in which the use of the natural bitter water of Friedrichshall is recommended to me. In my beloved country, France, we have everything that we want—and everything much better too; mineral waters among the rest. Moreover, I would much rather let my patients die than order them to use anything whatever which your country produces. With best respects, Dr. F. Lannelongue, Doctor of Medicine." It might be hoped that there is some mistake about this.

THE RAINFALL AND PUBLIC HEALTH.

IN almost all parts of England, the rainfall during the eleven months of the present year already elapsed has been excessive. The year 1872 was one of the wettest years on record, but, at Oxford, the rain which had fallen before November 15th of this year exceeded the fall there in 1872. The rainfall in September, October, and the early part of November, was reported from nearly all recording stations as excessive. At Bristol, during the nine weeks ending November 20th, the total rainfall was 15.942 inches, the average quantity for the same period being 6.200 inches; consequently, the excess above the average was 9.742 inches in the nine weeks. In other localities the downpour was equally great. The result has been a series of disastrous floods in all the low-lying districts of the central parts of the country,

the nearest parallel to which occurred as far back as November, 1852, during the lying-in-state of the Duke of Wellington. Where drainage is good, wet seasons appear to be generally healthy; at any rate, in large towns, where some of the principal causes of disease and death are impurities in the atmosphere, drains, etc. And the reason of this is obvious. The rain in descending first washes the atmosphere, from which it doubtless carries off zymotic particles, and then mechanically cleanses the streets and sewers; consequently, an abundant rain usually coincides with a low death-rate in town districts. But, in low-lying and badly drained localities, where the water rises and enters the basements of houses, especially when the surface-water is added to the sewage of overflowing drains, diseases are wont to be rife. It is to be feared that the present wet season will not prove an exception to the rule. But for the statistics which will show the exact effect of the rains and floods upon the public health, we must wait until the Registrar-General furnishes his next valuable quarterly report. The weekly returns of deaths in the eighteen largest English towns do not as yet apparently exhibit any marked feature due to the prevailing wet. It is certain, however, that in many of the flooded districts, in which the houses have for days, and even weeks, had water lodged in the lowest rooms, much sickness will prevail, since the walls and floors will remain damp and unwholesome for weeks to come. To add to the misery of the inhabitants, who in the flooded districts almost all belong to the poorer classes, they have, by reason of the flood, lost in many instances a considerable part of their property; whilst the extreme cold which has set in at this early period of the winter, will greatly aggravate their troubles (at a time when they cannot afford to pay for extra coals), produce disease, and augment the death-rate. Under these circumstances, we are extremely glad to find the new Lord Mayor inaugurating his term of office by raising a national subscription for the relief of the sufferers; and we feel confident that nothing further is required to produce a sum sufficient for the relief of the distress and disease which are likely to prevail still further, than a true appreciation upon the part of the public of the really urgent need there is for help. We are pleased to observe, that the sum already subscribed exceeds £16,000.

TWO DEATHS FROM THE ADMINISTRATION OF CHLOROFORM.

MR. CHESHIRE of Birmingham favours us with the following report. An inquest was held on Saturday last, at the New Inn, Union Street, Smethwick, before Mr. E. Hooper (coroner), on the body of Evan Miles, aged 42, gardener, in the employ of Captain Thurston, Targate Hall, parish of Towyn, Merionethshire, who died on Tuesday, from the administration of chloroform. The deceased received a gunshot wound in his right eye, while beating for game, on the 16th ult.; and, the sight being endangered, he came from Wales to Smethwick, to the house of a man named Hughes, for the purpose of having an operation performed. Some time previously, the gamekeeper at Targate Hall had gone through an operation at Mr. Hughes's house for a similar accident. Mr. Cheshire of Birmingham, and Mr. W. F. M. Jackson, surgeon, of Smethwick, performed the operation upon Miles, who died from the administration of the chloroform. After Mrs. Miles and Mrs. Hughes (who had witnessed the operation) had given evidence, Mr. Jackson was examined. He said that he was asked to be present at the operation of taking out the eyeball of Miles, which Mr. Cheshire considered necessary for the safety of the sight of the other eye. He accordingly met Mr. Cheshire at the house of Mr. Hughes. Mr. Cheshire brought with him a two-ounce bottle, containing chloroform, quite full. While Mr. Cheshire was administering the chloroform, witness felt the pulse of the deceased, and found it quiet and regular. Miles was perfectly free from excitement. Mr. Cheshire examined the heart of the patient, and pronounced it sound. Altogether, the conditions appeared to be favourable to the administration. Mr. Cheshire poured forty or fifty drops of chloroform on a towel, and the deceased immediately became semi-unconscious. He then commenced the operation; but the deceased not being sufficiently under the influ-

ence of the chloroform, about forty or fifty drops more were administered, and the operation was resumed. Almost immediately that the operation began, witness noticed a failure in the patient's pulse. He at once seized the patient by the feet, and lowered his head for the blood to run through the heart. He afterwards practised artificial respiration, with the view of restoring him. Mr. Cheshire assisted him as much as possible, and applied a piece of wood from the fire to his breast, with the hope of producing animation. Other means were adopted, but all in vain. The patient died in about half an hour after the chloroform was administered. His own opinion was that Mr. Cheshire had administered the chloroform in a particularly careful manner, and every precaution had been taken with the view of ascertaining whether the deceased was in a condition to be subjected to chloroform. He had seen hundreds of cases in which chloroform was given, but had never before seen a case in which death had resulted. Mr. Cheshire informed him that, in all his experience, he had only known one death from chloroform.—The coroner remarked that there was little doubt that every precaution had been taken by the medical men, who were both practical surgeons, Mr. Cheshire being one of the most eminent oculists in the midland counties.—The jury returned a verdict of "Death from the effect of the administration of chloroform".—We hear of another death recently in London in the practice of a metropolitan hospital surgeon, on which no inquest has been held, and of which we have seen as yet no public notice.

THE SICK AND WOUNDED IN WAR.

THE Society for the Relief of Sick and Wounded Soldiers is about to send representatives to Cetigne, with the sanction of its patroness, the Empress of Russia, to relieve Bosnian and Herzegovinian families which have suffered from the effects of the insurrection. The Society is preparing a hundred beds for the sick, and will send four physicians, together with some Sisters of Mercy, apothecaries, and field-surgeons, for the care of the wounded. The monthly expenditure for the above hospital purposes is estimated at 10,000 roubles.

THE CHILDREN'S HOSPITAL.

WE have on several occasions drawn the attention of our readers to the important reforms which have been introduced into the out-patient department of the Children's Hospital. The following extract from the *Charity Organisation Reporter* shows what have been the results of the inquiry system during last quarter.

The Secretary read a summary of returns of Children's Hospital cases during the three months ending September 30th. He stated that 3,498 cases had been registered at the Hospital during that time; that was to say, 3,498 patients had received letters, and had been told that before a second attendance they must get a district committee to stamp them, in proof that the statements they had made as to earnings were correct. It appeared from the returns that 1,487 letters only were brought to the offices; of these, 1,213 were stamped, and in the case of 266 the stamp was refused.

MEDICAL PRACTICE IN SIBERIA.

THE *Gazette Médicale de Paris* extracts from the *Courrier Médicale Russe* an interesting description of the life of some practitioners in Siberia. Dr. N., says the narrative, having arrived at the shores of the Lena, applied himself to the discharge of the duties devolving on him. In the province where he was located—Yakutsk—the practitioner has to act as a hospital, district, town, and village medical officer, and even to compound his medicines. Very frequently he has also to act as director, *feldcher* (a sort of barber-surgeon), and steward of the hospital, although the names of persons supposed to perform these duties are borne on the official lists. In the course of ten months, Dr. N. travelled, in his professional visits, over 5,000 versts (about 3,385 miles); the weather being sometimes so cold that the spirit of wine froze in the thermometer. In travelling, he was obliged to carry provisions with him; for it was very often impossible to get any others. The warmest clothing is not always sufficient, and two of Dr. N.'s predecessors died of frost-bite of the lower limbs. At night, Dr. N. was obliged to rest

in the *iurtas*, a kind of hut having the walls and roof covered with dung, which freezes and produces so great a lowering of temperature in the *iurta*, that the air within is as cold as that without. Dr. N. has been unable to continue his nomad life, in consequence of the insufficiency of his pay. Besides attending to numerous patients, Dr. N. has published an excellent description of the medical topography of the country, and has described the pathogeny and symptoms of two diseases called in Siberia *prokava* (probably a modification of elephantiasis) and *miriatshilitshestvo*.

PRIZES OF THE ROYAL COLLEGE OF SURGEONS.

SOME of our readers may care to be reminded that the time for sending in essays for the Jacksonian Prize of the Royal College of Surgeons has been altered from Christmas Day to Friday, the 31st instant. The subject for the present year is the Use of the Galvano-caustic in the removal of Morbid Growths; and for the succeeding year, the subject is the Treatment of Cancer of the Rectum, particularly as regards the possibility of curing or relieving the patient by excision of the affected part. Essays for the Collegial triennial Prize are not due until December 1876; the following is the subject, viz., the Radicles of the Lymphatic System in relation to the external and internal surfaces of the body. This prize consists of the John Hunter medal, executed in gold, to the value of fifty guineas; or, at the option of the successful author of the dissertation, of the said medal executed in bronze, with an honorarium of £50.

ROYAL COLLEGE OF SURGEONS.

IN addition to the names already published in this JOURNAL of the candidates for the new Board of Examiners in Anatomy and Physiology, the following gentlemen, already members of the Court of Examiners, were nominated at a meeting of the Committee on the 2nd instant, viz., Messrs. John Birkett and John Cooper Forster, of Guy's Hospital; Luther Holden and William Scovell Savory, F.R.S., of St. Bartholomew's Hospital; and Timothy Holmes, of St. George's Hospital; and we understand that Messrs. Arthur Trehern Norton, of St. Mary's Hospital; Henry Power, of St. Bartholomew's Hospital; and William Thomas, of Queen's College, Birmingham, have also been nominated. We share the opinions, and add our wishes to those of many of our correspondents, that a provincial representative may be added to the Board of Examiners. A meeting of the Committee was held on Thursday, the 9th instant, for determining the list of Fellows to be recommended to the Council, which, we believe, will meet shortly.—In last week's JOURNAL, the date of Mr. Edward Bellamy's Fellowship was by error stated to be 1870 instead of 1867.

THE LATE MR. ACTON.

WE regret to announce the death of Mr. Acton, which occurred suddenly, at his residence in Harley Street, on Tuesday morning last. The deceased gentleman occupied a prominent position amongst London practitioners in his special department. He was the author of numerous well known works concerning the diseases of the urinary and generative organs, prostitution, and allied subjects. He had lost his father and his wife this year, and spent the early part of the late vacation in Scotland, where he seemed to be in tolerably good health, except that he complained of pain at the lower part of the sternum upon taking exercise. At the end of September, he was seized with faintness in Bond Street; and was then seen by Dr. Murchison and Sir James Paget, who found him suffering from feebleness of the heart's action. Mr. Acton, at various times, consulted also Dr. Quain and other physicians. His principal symptoms were the sternal pains produced by exercise, and great flatulence after taking food. He saw his patients as usual on Monday, and entertained some guests at his house at dinner that evening. Next morning, as he did not make his appearance at his usual hour at the breakfast table, his family became alarmed; and he was then discovered in his bath-room, lying against the outside of the bath, and dead. A *post mortem* examination revealed the fact that death had resulted from fatty degeneration of the heart,

the muscular fibres of which were found, beneath the microscope, to be largely replaced by fat. There was also extensive atheroma of the aorta and larger vessels.

THE CORONER FOR CENTRAL MIDDLESEX.

IN connection with the death of Mr. Acton, we hear of an unnecessary display of energy upon the part of the coroner for Central Middlesex. It appears that Dr. Hardwicke decided to hold an inquest upon the body, and communicated notice of his intentions at once to the family of the deceased gentleman. Dr. Quain and Dr. Murchison both expressed the opinion that an inquest was quite unnecessary, as the death was exactly such as might be anticipated from the symptoms exhibited during life. Dr. Murchison further made, in conjunction with Dr. Cayley, a *post mortem* examination of the body, and found the fatty condition of the heart and atheromatous state of the large vessels which might have been expected, and which fully accounted for the mode of death. He then wrote a certificate to the effect that he had attended Mr. Acton, that he had seen him for the last time on October 4th; and that he had died suddenly on Tuesday morning of fatty degeneration of the heart, as verified by *post mortem* inspection. This report, however, was not sufficient to stay the proceedings of the coroner, who held his inquest on Thursday morning, when a verdict of death from natural causes was returned. We believe that the affair is likely to be made the subject of complaint to the Home Secretary.

THE HARVEIAN LECTURES.

NOTWITHSTANDING the severity of the weather, a large number of members of the Harveian Society, and others interested in the subject, assembled on Thursday, the 2nd instant, to hear the delivery of the first Harveian Lecture by Dr. Sibson at the rooms of the Harveian Society. The lecture was principally devoted to the consideration of arterial tension in Bright's disease, and will shortly be published in its entirety in these pages.

AMERICAN OTOLOGICAL SOCIETY.

AT the last meeting of this Society, held in Newport, Rhode Island, July 21st, 1875, it was voted, that the Committee on an International Congress, be empowered by this Society to issue a call for an International Otolological Congress, at such time and place as they shall see fit. In accordance with this vote, the Committee have called a Congress, to be held in New York City, on Friday, September 15th, 1876, at 10 o'clock, A.M., the place of the meeting to be announced later. Members of the medical profession who take an active interest in aural surgery, are cordially invited to be present, and take part in the Congress.

RECENT URBAN MORTALITY.

DURING last week, 5,085 births and 3,899 deaths were registered in London and twenty other large towns of the United Kingdom. The mortality from all causes was at the average rate of 26 deaths annually in every 1,000 persons living, and in the various towns was as follows:—Norwich, Portsmouth, and Hull, 22; Sheffield and Nottingham, 23; Sunderland, 24; London, Birmingham, and Manchester, 25; Dublin and Leeds, 27; Newcastle-upon-Tyne, 28; Edinburgh and Liverpool, 29; Glasgow, Bradford, and Bristol, 30; Wolverhampton, 31; Leicester, 33; Salford, 34; and Oldham, 35. Scarlet fever showed fatal prevalence in Bristol, Salford, and Bradford; measles in Portsmouth, and fever in Sheffield. In London, 2,072 births and 1,628 deaths were registered. The births were 262, and the deaths 85, below the average of the week. The annual death-rate, which in the two previous weeks had been equal to 24.3 and 22.8 per 1,000, rose last week to 24.7. The 1,628 deaths included 59 from measles, 104 from scarlet fever, 16 from diphtheria, 54 from whooping-cough, 29 from different forms of fever, 13 from diarrhoea, and not one from small-pox: in all, 275 deaths, or 6 below the average of the week. No death from small-pox was recorded in London during the last twenty weeks. During the fifteen days ending last Saturday, cold

weather continuously prevailed; the mean temperature during that period being but 33.7 deg., and 8.0 deg. below the average. Notwithstanding this low temperature, the fatality from diseases of the respiratory organs continues comparatively low. The deaths referred to this class of diseases were 391, or 74 below the average of the week; 228 resulted from bronchitis, and 111 from pneumonia, numbers differing but slightly from those in each of the two previous weeks. In outer London, the general and zymotic death-rates were 16.7 and 2.5 per 1,000 respectively, against 24.7 and 4.2 in inner London. At Greenwich, the mean reading of the barometer last week was 29.72 inches. The mean temperature of the air was 30.9 deg., or 10.9 deg. below the average of the week; it was lowest on Saturday, when the mean was 27.5 deg, a defect of no less than 14.4 deg. The general direction of the wind was north-east and north. Melted snow was measured to the amount of .41 of an inch.

WESTMINSTER HOSPITAL.

THE long talked-of improvements in the sanitary condition of this hospital have at length assumed a definite form. On the 16th of March last, a subcommittee, consisting of Sir Rutherford Alcock as Chairman, Dr. Basham, Mr. Brooke, Mr. Cowell, Mr. Davy, Dr. Dupré, Dean Stanley, Mr. Charles Hood, Mr. Helmore, and Mr. William Gilbert, was appointed to consider the whole question. This Committee has, with the valuable assistance of Mr. Hunt, C.B., and of Mr. Stephen Salter as architect, recently presented a full and exhaustive report, which was on Tuesday last accepted by the House Committee, and will be finally considered by a general board of the governors in January next. The recommendations of the subcommittee are briefly as follows: the addition of octagon towers in front, and angle buildings behind, by which the whole of the sculleries and water-closets will be placed outside the building, with a connecting lobby entered from the several wards and cross-ventilated; the addition of consultation and retiring rooms to the operation theatre; the erection externally, so as to be entered from each ward corridor, of bath and lavatory rooms; the addition of a new floor to part of the building to provide wards for the accommodation of infectious and delirious patients; a complete system of ventilation by perpendicular tubes in each ward; besides many other improvements, such as alterations in the out-patient department, painting and colouring the hospital throughout, improving the mortuary, etc. These important alterations are estimated to cost nearly £8,000, and will, it is hoped, be carried out next summer. The towers and buildings outside can be constructed first, so that the hospital will not require to be closed for more than six or eight weeks.

THE BROWN INSTITUTION: LECTURES.

DR. BURDON SANDERSON announces as the subject of the annual course of lectures, which will this year be delivered at the University of London, the Pathology of Inflammation. The course will consist of two parts. The first lecture (December 15th) will be devoted to the development of the doctrine of inflammation, with particular reference to the influence exercised by the observations and writings of John Hunter. In the succeeding lectures, an account will be given of recent researches relating to the three great phenomena of inflammation; viz., determination of blood and congestion, exudation, and textural changes as exhibited in non-vascular structures. The lectures will be given, as before, on alternate days, at five o'clock.

ANGLO-SAXON SKELETONS.

AN Anglo-Saxon burial place has been discovered on the banks of the Avon, about a mile from the town of Warwick. The indications from the remains at present exhumed seem to show that it was not a place of regular interment, or a Saxon cemetery, but a somewhat hurried burial after a battle or skirmish in the immediate neighbourhood; for though some of the bodies were laid east and west, with their heads eastward, others were not so. Many of the skeletons were found indiscriminately upon the others—a circumstance which in other cases has given rise to the supposition that these were either prisoners taken

in battle, or slaves sacrificed as a propitiation to the gods. With respect to the bodies themselves, one of the most perfect of the skeletons was that of a powerful young man, who was upwards of six feet high, and about twenty-three or twenty-four years of age. His teeth were perfect, and the chin was somewhat more pointed than usual. This pointed chin marked all the lower jaws of which there was an opportunity for examination, for many of the skeletons fell into dust, or were broken by the workmen, in removing them.

SCOTLAND.

DR. JAMES A. SIDEY has been elected Medical Officer to the Edinburgh County Prison, vacant by the resignation of Dr. James Simson. There were eleven candidates.

THE number of students matriculated at the University of Edinburgh is 13 more than last year, reaching the high figure of 1,884. Of these, 744 are medical, 758 arts, 325 law, and 57 divinity students.

THE first case heard at Dumbarton under the Food Adulteration Act of 1875, came up in the Sheriff Court on the 20th ult. A dairyman was charged with having sold sweet milk adulterated with 30 per cent. of skimmed milk. He pleaded not guilty, and the Sheriff dismissed the case as not proven, but refused costs.

CRIEFF DRAINAGE AND HOSPITAL ACCOMMODATION.

AT a special meeting of the Crieff Local Authority, the Committee appointed to make arrangements with the several landowners in regard to outlets for the sewage of the borough, reported that they and their engineer had had a meeting with the landowners in question, and that all parties were prepared to give outlets on their respective lands. The engineer was instructed to prepare plans and specifications, with the view of proceeding with a thorough drainage scheme for the borough. A letter was read from Lord Aveland, in which he stated that the Baroness Willoughby and he, seeing that a general wish was expressed for the erection of a hospital for infectious diseases only, would give their donations for that purpose, but wished that accommodation should be provided for the parishes of Crieff-Conine, Mongiessaird, and Nuthill.

MEMORIAL TO THE LATE DRs. ADAMSON AND BELL OF ST. ANDREW'S.

AN influential meeting was recently held in the Town Hall, St. Andrew's, to consider a proposal to erect a memorial to perpetuate the memory of the late Drs. Adamson and Bell. The chief speakers were Principal Tulloch and Principal Shairp; and resolutions were passed to the effect that some permanent memorial should be proceeded with at once, taking the form either of placing the Cottage Hospital on a more permanent basis, or carrying out some other useful and appropriate object. A Committee was appointed to collect subscriptions, and take all necessary steps.

ROYAL COLLEGE OF PHYSICIANS IN EDINBURGH.

ON Thursday, December 2nd, at the usual meeting of the Royal College of Physicians of Edinburgh, the following office-bearers were elected for the ensuing year. *President*: Dr. Alexander Keiller. *Vice-President*: Dr. Robert Paterson. *Council*: Dr. Halliday Douglas, Dr. Paterson, Dr. Matthews Duncan, Dr. Rutherford Haldane, Dr. George W. Balfour, Dr. Douglas Maclagan. *Treasurer*: Dr. J. A. Smith. *Secretary*: Dr. John Wyllie. *Librarian*: Dr. George W. Balfour. *Curator of Museum*: Dr. T. A. G. Balfour.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

THE following gentlemen were elected office-bearers for the ensuing year, at the meeting on Dec. 1st. *President*: Dr. Gillespie. *Vice-Presidents*: Dr. G. W. Balfour, Dr. Littlejohn, Dr. Keiller. *Councillors*: Dr. Clouston, Mr. G. H. Gilruth, Dr. Moinet, Dr. P. A. Young, Dr.

Batty Tuke, Dr. James Carmichael, Dr. Hardie, Dr. Affleck. *Treasurer*: Mr. Joseph Bell. *Secretaries*: Dr. Muirhead, Mr. Chiene.

GLASGOW LYING-IN HOSPITAL.

At the annual meeting of the directors of the Lying-in Hospital of Glasgow, the medical report was read, stating that the number of women confined there during the year was 304, and the number attended at their own homes 927, making a total of 1,231. The hospital during the year had been in a healthy condition, though there had been two fatal cases of fever. A large number of medical students had attended the hospital during the year. The financial statement showed that the income for the past year was £807, and the expenditure £683. The directors are anxious to secure sufficient funds to build a new hospital, and are hopeful of success.

ILLEGITIMACY IN SCOTLAND.

THE Registrar-General's Report for the last quarter shows, as usual, a very great difference existing in different parts of Scotland with regard to the proportion of illegitimate to legitimate births: thus while over the whole country the percentage of illegitimacy is 8.75, in the large towns it is only 7 per cent., but rises in the mainland rural districts to 10 per cent. The difference between counties in this respect is very peculiar; thus Ross and Cromarty show the rate as low as 3.5, Fife to 6.5, Inverness 10, Aberdeen 13.7, and so on in gradation, until the list culminates in Wigtownshire, with the very high rate of 18.8. This is not a solitary instance, as the county of Wigtown is usually at or near the head of the list. The *Scotsman* thus comments on the fact: "The returns show that in the county . . . almost every fifth child is born out of wedlock. If to that were added the number of children, the first of each marriage, who escape that category only by a few weeks or days, the proportion would be largely increased. In one of every four of such cases, which registrars must enter as legitimate births, there is said to be in Wigtownshire justification for O'Connell's cruel and clever parody directed against the South of England peasantry:

'The marriage baked-meats do coldly furnish forth the christening tables.'

THE WEATHER AND THE DEATH-RATE IN EDINBURGH.

THE death-rate of Edinburgh has risen during last week to an annual mortality of 30 per 1,000; this great rise being due to the continued severity of the weather, and its variability, there having been constant variations between frost, snow, sleet, and hail. The increased mortality is most marked among persons over sixty and under five years of age, the intermediate ages remaining near the average. The number of deaths from zymotic diseases is rather less than for the three previous weeks; but scarlatina is still prevalent, being credited with twelve out of the twenty-one deaths due to this class of disease.

IRELAND.

DR. MILLER has been re-elected, without opposition, Mayor of Londonderry.

THE WATER-SUPPLY OF LURGAN.

At a special meeting of the Lurgan Town Commissioners held last Monday, the question of a proper supply of water for this town was under discussion. The report of the committee appointed for the purpose of considering the matter stated that the Government were agreeable to lend the sum of £10,000, payable by a sinking fund in fifty years by an annuity of 5 per cent. interest and principal, if application were made before the termination of this year. Some difference of opinion exists as regards where the water should be obtained from, one authority suggesting Lough Neagh, whilst two others recommend that it should be taken from wells sunk in limestone in a locality adjacent to Lurgan. It was moved that the conditions mentioned by the Government should be accepted, which was carried by the casting vote of the chairman.

ZYMOTIC DISEASES IN DUBLIN.

A PARLIAMENTARY paper moved for by Sir Arthur Guinness furnishes a return of the number of deaths caused by zymotic or preventable diseases, during the ten years ended December 1874, in those urban sanitary districts in Ireland which have a population of 10,000 inhabitants and upwards. The deaths in the Dublin District from these affections amounted to 19,412, or upwards of six in every 1,000 of the population. The most fatal was fever, which caused 3,215 deaths, then scarlatina, to which 2,793 were ascribed, while to diarrhoea 2,410 were attributed, and to small-pox 1,562 persons fell victims.

HEALTH OF IRELAND: QUARTERLY REPORT.

DURING the quarter ending September, there were registered in Ireland 32,585 births, being equal to an annual birth-rate of 24.5 in every 1,000; and 19,289 deaths, representing an annual mortality of 14.5 per 1,000. The birth-rate was somewhat under, and the death-rate slightly over the average for the corresponding quarter of the past five years. The deaths from scarlatina, though numerous, continue to decrease, and there has been a considerable decline in the mortality from small-pox. The deaths from scarlatina occurred principally in Ulster, and small-pox was almost entirely confined to Connaught. The deaths of nine persons stated to have been 100 years old and upwards were registered during the quarter.

THE MEDICAL COMMISSIONSHIP OF THE IRISH LOCAL GOVERNMENT BOARD.

WE understand that this office, which is now vacant by the resignation of Dr. John McDonnell, will be shortly filled up, and that the Government have wisely decided not to make any attempt to abolish it. The report that Dr. McDonnell's resignation would be taken advantage of to abolish the office was not without substantial foundation, as many attempts have been made in non-medical circles to underrate the importance of the office. We think it not improbable that, in the working of the new Sanitary Act, the Government have found the necessity of a medical head for the Public Health and Poor-law Medical Service of Ireland. We have good reason to know that, had the Government relied upon, and in some instances sought the advice of, the Medical Commission, fewer mistakes would have arisen, and many medical grievances would have been avoided. In the determination of the Government to fill Dr. McDonnell's office, we see a step in a direction which, if followed up, will lead to important results not only to our profession, but also to the Irish public.

THE MAYORALTY OF DUBLIN FOR 1876.

DR. OWENS, J.P., who was nominated in July last Lord Mayor of Dublin, has unanimously been elected Chief Magistrate of the City of Dublin for 1876. Dr. Owens has been for many years a member of the Municipal Council, and has shown himself to be a gentleman of the highest principle and integrity. He is Chairman of the Dispensary Committee of the South Dublin Union Board, in which position, "so far as in him lies", he acted in the most kindly and considerate manner to the members of the profession who serve as dispensary medical officers. We congratulate Dr. Owens upon the honour the citizens of Dublin have conferred upon him, and upon his opportunity for promoting much needed reforms.

THE DUBLIN BARRACKS.

WE regret that, owing to a statement which appeared in the *Times* of Saturday last, it is our duty again to refer to the question of the sanitary condition of the Dublin barracks. The Dublin correspondent of the *Times* accuses us of inaccuracy. The statement in the *Times* implies ignorance on the part of the gentleman who furnished us with the information we published on the 27th instant; and takes a great deal of trouble to contradict statements about the unhealthiness of certain barracks which our informant did not describe as unhealthy. There was no charge of *general* unhealthiness made against the Dublin barracks; on the contrary, our informant specially mentioned the

healthiness of Portobello, Aldborough, and Pigeon House. The *Times* Dublin correspondent also implies that our informant is ignorant of the fact that Linen Hall and Aldborough are not usually occupied by troops; whereas our informant specially stated that "Linen Hall is not much used, and unfit for use as a barrack". The *Times* correspondent seems to have forgotten, in great part, the well known fact of the unhealthiness of Beggar's Bush Barracks, which had to be emptied and overhauled. There can be no doubt that a number of cases of enteric fever occurred at Beggar's Bush; an attempt was at first made to deny that these were connected with the barracks; then a further attempt was made to gloss the matter over; finally, the authorities gave up, and admitted that the place was unhealthy, and reconstructed all the sanitary arrangements. The drainage of Beggar's Bush barracks was not "remedied twelve months ago", as stated by the *Times* correspondent, but only at the end of April last. All details with reference to Beggar's Bush will be found in the *Sanitary Record* for April 17th of the present year; in which journal a very disgraceful state of things is shown to have prevailed in those barracks. With reference to the Royal Barracks, we have to state that, on careful inquiry, we find that, in October, a patient was admitted into Cork Street Fever Hospital, suffering from enteric fever; and that, when admitted, the military authorities informed the resident medical officer of the hospital that the girl contracted the fever from the family of an officer in the Royal Barracks suffering from the disease. The case was a severe one; and the patient died in the hospital ten days ago. The military authorities, on the 30th of November, applied to the Government to have a better water-supply for Island Bridge barracks, on the ground of "numerous cases of enteric fever having taken place among the troops there stationed". We do not think that the term "numerous cases", as used by the military authorities, is consistent with the term "two cases", used by the *Times* correspondent. With reference to the Richmond Barracks, we believe, if it do not now drain into a cesspool, it did very recently. The *Times* correspondent can hardly have inspected the Camac (not Carnac) stream, or he would know that it is not a "natural and effective sewer". It is a filthy open river, which receives the drainage of the district in the neighbourhood of the Richmond Barracks; it has been much complained of by the inhabitants; and its state was even the subject of a Local Government Board inquiry. Our informant made all due allowance for the filthy and unhealthy state of Dublin; but the *Times* correspondent gives us no credit for our informant's statements on this head, while quietly adopting it, and using it as if it were original, and then as quietly makes use of it against us and our informant. Every statement our informant made is substantially correct, including those with reference to the treatment of cases of enteric fever from, not in, barracks, and that about the Lord-Lieutenant's household. It must be remembered that our statements refer to matters which have existed, in varying degrees, for about two years. It is quite possible that it is the unhealthiness of Dublin that causes unhealthiness of the troops there stationed; but this is a cause for increased alarm, not for congratulation, as the *Times* correspondent seems to imagine.

MANAGEMENT OF PREMATURE CHILDREN.—Dr. Ahlfeld, in the *Archiv für Gynäkologie*, Band viii, says that cases occurring in the practice of others and in his own have proved to him that premature infants ordinarily regarded as non-viable may, under favourable circumstances and assiduous care, live and thrive. He gives examples in which children born at the twenty-sixth week were preserved alive. Immediately after birth, the child must be wrapped in cotton and placed in a warm bath, so as to impart to it the heat which it is unable to produce in sufficient quantity. The baths, which should be somewhat warmer than usual, must be frequently repeated. Great importance is attached to awaking the child regularly every one or two hours in order to feed it. As long as it does not suck, milk (woman's milk is the best) must be given to it by a teaspoon. With a view to the better development of the lungs and the movement of the thoracic muscles, it should be excited to cry by slight irritation. It is dangerous to bring such children into the open air for several months after birth, as their air-passages are readily affected.

NEW BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

WE have the pleasure to announce that a preliminary meeting of the members of the Association residing in Edinburgh and the district was held on the 30th ult., with a view to forming a Branch of the Association for Edinburgh and the Lothians. A resolution was passed to the effect that it was desirable that a Branch should be formed; and a Committee was appointed, with Dr. Matthews Duncan for its Chairman, to draw up a code of laws and report to an adjourned meeting. The meeting was well attended.

THE CONJOINT SCHEME.

THE members of the conference whose names have been announced in former numbers of the *BRITISH MEDICAL JOURNAL*, held a meeting at the College of Surgeons on Friday last, for the further consideration of some modifications in the proposed conjoint scheme. We understand there was an unanimous feeling on the part of all the delegates as to the importance of taking such steps as will be necessary for bringing the scheme into operation. The meeting was adjourned until the 23rd instant.

ACCIDENTS CAUSED BY THE FROST IN LONDON.

THE dangerous condition of the streets of the metropolis during the recent frost is painfully exemplified by the following reports from the various hospitals kindly furnished by the house-surgeons of the respective institutions.

ST. BARTHOLOMEW'S HOSPITAL.—Mr. J. Macready (House-Surgeon) observes that the following is the list of the injuries treated in this hospital that occurred in consequence of the frost. No mention is made of the numerous sprains of the wrist and ankle that were treated in the out-patient department, for none of them were severe. *Cases of Fracture treated as In-Patients.*—Fracture of thigh in lower third in a man; fracture of both bones of the leg in lower third, two males; fracture of the tibia in lower third in a man; Pott's fracture in two males, and Pott's fracture in a woman, with Colles's fracture on the same side (left); fracture of fibula in lower third in a woman; fractured patella, one man and one woman. *Cases treated as Out-Patients.*—Fracture of upper third of the humerus in a man; two Colles's fractures; fractured clavicle in a man.

CHARING CROSS HOSPITAL.—Mr. James Cantlie (House Surgeon) reports that, during the first and second days of the frost, a great number of accidents were brought in; during the last few days, however, the number of accidents has decreased to a minimum. The following is a list of the more important casualties. Two cases of sprained wrist, with effusion into the sheaths of the flexor tendons; two cases of fractured radius (Colles). These four cases were all treated between 5.30 and 6.30 P.M. on December 1st; one fracture of the acromion; a lacerated wound over the patella; a fracture of the humerus in the upper third; sprained ankle; separation of the epiphyses at the lower end of the humerus; dislocation of the little finger; dislocation of the shoulder (subcoracoid); fracture of the pelvis, with effusion into the hip-joint; compound comminuted fracture of tibia and fibula; fracture of fibula (Pott's); compound fracture of radius and ulna, and temple, fracture of the upper third of humerus, also a wound on the scalp in a man whose horse had fallen and rolled over him; extensive scalp-wound, with concussion. No deaths occurred from any of these accidents, and the patients were all doing well on December 8th.

GUY'S HOSPITAL.—Mr. J. Farrant Fry (House-Surgeon) reports, that the accidents due to the recent frost admitted were—five cases of simple fracture of tibia and fibula, all of which were treated with a back and two side splints, and swung in a cradle; two cases in which the fibula alone was fractured. In these cases, the limb was kept between sandbags a day or two until the swelling had disappeared, and then put up in the Bavarian splint. One case of fractured thigh, which was transverse just above the condyles, with a vertical split through them—a back splint was put on to get a fixed joint, the patient being old and infirm; one case of fractured patella, treated by the back splint and raising the limb; one case of concussion, in which unconsciousness lasted three days. In the surgery, there were four Colles's

fractures, two fractures of the olecranon, two fractures of the radius, two of the humerus, and very many lesser injuries.

ST. GEORGE'S HOSPITAL.—Mr. William H. Bull (House-Surgeon) sends the following list of the accidents brought to the hospital between November 29th and December 7th, which were caused by the state of the weather: fracture of the forearm, 8; fracture of the arm, 1; injury to the shoulder, 8; injury to the arm, 3; injury to the hand and fingers, 5; injury to the thumb, 3; sprained wrist, 6; sprained thumb, 1; scalp-wound, 5; fractured nose, 1; injury to ribs and side, 5; fractured ribs, 4; injury to back, 3; injury to hip, 2; sprained knee, 7; injury to the leg, 2; fracture of the leg, 5; injury to the foot and ankle, 3.

UNIVERSITY COLLEGE HOSPITAL.—Mr. Taunton reports that there was, during the past week, a considerable increase in the number of fractures treated, especially those of the upper limb; six cases of Colles's fracture headed the list. One of the most troublesome cases was that of an old woman, aged 82, who was admitted with subcoracoid dislocation of the humerus and fracture of the surgical neck. The dislocation was reduced under chloroform by Mr. Bayly, one of the house-surgeons; the fracture was then treated with a shoulder-cap in the usual manner.

MIDDLESEX HOSPITAL.—Nothing very unusual occurred here. Mr. Scott treated four cases of transverse fracture of the patella, and five or six of Colles's fracture.

ROYAL FREE HOSPITAL.—Mr. F. G. Hamilton writes, that fractures of the forearm and dislocations of the humerus were, surgically speaking, the most serious results of the frost in the neighbourhood of Gray's Inn Road.

ST. MARY'S HOSPITAL.—Mr. Gawith (Senior House-Surgeon) admitted a compound fracture of the leg, two simple fractures of the leg and one of the thigh, besides treating several fractures of the forearm and minor casualties as out-patients.

GREAT NORTHERN HOSPITAL.—Mr. Herbert F. Chapman (Junior House-Surgeon) states, that the following accidents treated in this hospital were the result of the frost: fracture of the surgical neck of the humerus, put up in a gutta-percha shield; dislocation of the foot backwards without fracture, reduced under chloroform and admitted; two sprained ankles; eye bruised by a snowball; four contusions; one scalp-wound.

THE WAINWRIGHT CASE:

DR. MEADOWS ON THE POST MORTEM DIAGNOSIS OF A MULTIPAROUS UTERUS.

DR. ALFRED MEADOWS, in a communication to the Obstetrical Society at their last meeting, remarked upon the extreme importance of being able to diagnose *post mortem* whether or not an uterus had borne a child; and on this point he invited the opinion and experience of the Society. In the case referred to (that of the woman for whose murder Wainwright is to be hanged), he thought it was not too much to say that, if any absolute test existed whereby a positive opinion in the negative could have been given, the whole case for the prosecution must have failed on the first indictment; for it was well known that the person alleged to have been murdered had borne children. He, however, knew no such test; nor did he think it could be affirmed, on the contrary, that the uterus had ever been gravid, so far as appearances went. The thinness of the uterine wall, which in this case barely exceeded a quarter of an inch, and the distinctly convex shape of the internal aspect of the uterine wall, induced him to the opinion that it was a nulliparous uterus. Accordingly, the evidence which he gave at the recent trial was to the following effect. 1. As a general rule, no absolute certain opinion can be given by *post mortem* examination only, even under the most favourable circumstances, on the question whether or not a woman has borne a child. 2. On the question of probability, some reliance may be placed on the internal appearance of the uterine walls, especially with reference to their convexity. 3. So far as this particular uterus was concerned, there was certainly no proof that it had borne a child; but, on the contrary, the evidence, doubtful and unreliable as it was, tended rather in the opposite direction, and justified an expression of opinion to that effect. Dr. Meadows then referred to a very delicate question of a medico-ethical character; viz., as to whether a scientific witness is at liberty to allow his private judgment on the general merits of a case to influence his opinion on a purely scientific question. Upon this point also he invited the opinion of the Society. The discussion was adjourned to the following meeting.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

M. Broca's Essay on Craniology. — Clinical Teaching in Paris.

THE last volume of the *Mémoires* of the Anthropological Society of Paris, which has just been published, is one of the most interesting volumes the Society has been favoured with since its foundation. Out of deference to M. Broca, the Society has exclusively devoted the volume to his "Instructions Craniologiques et Craniométriques". The memoir is, in short, an *exposé* of the principles of craniology and craniometry, and constitutes a most valuable contribution to these branches of science. It would be invaluable alike to the anatomist as to the anthropologist. In order to give an idea of the comprehensiveness of the subjects of which it treats, I may mention that forty-two pages are devoted to the osteology alone of the skull, and a complete index of seven pages of small print shows the extensive scope of the work. There are two exceedingly good articles on the determination of the age and sex of the skull, which would deeply interest the medical jurist. The distinction of the male and female skulls in the dry state is, according to M. Broca, not so easy to determine as would at first sight appear, as the distinctive characters do not belong more absolutely to one than to the other skull. "There is," adds the author, "in every race a masculine and a feminine type, which any observer even of limited experience can distinguish at first sight, and which may be found depicted on the skull; but there will always be found a certain number of individuals whose skulls partake of the characters of both the types". Even in the living subject, this confounding of the sexual characters may be observed; for, setting aside the genital organs, the various external characters which distinguish man from woman are different only in degree, for many women may be seen who present the masculine type, and men who are more or less effeminate.

M. Broca's instructions for measuring the capacity of the cranial cavity are not the least interesting part of the work, and he applies the term "stéréométrie" to this branch in contradistinction to "craniométrie". He obtains this by ascertaining the quantity or volume of the liquid or solid substance with which he fills the skull, and then taking the cubic measure of that substance. Different substances are employed in the stereometric measurement of the skull, such as an emulsion of lime, gelatine, water, mercury, sand, seeds or grain, shot, etc.; but M. Broca prefers No. 8 shot, as affording the most correct results. For fragile skulls, however, he employs mustard-seeds, and gives the preference to the white mustard, owing to its hardness and more perfect roundness.

In treating of the deformities of the skull, M. Broca divides these into pathological, artificial, and posthumous. The first of these forms may be produced by causes to be found in the brain ("encéphaliques"), or in the cranial bones themselves ("ostéologiques"). The encephalic causes may produce either an increase or a diminution of the size of the skull, and the deformities of osteological origin are attributable to disturbance in the development or in the nutrition of the osseous tissue. M. Broca's remarks on hydrocephalous heads are extremely interesting; and, in reference to microcephalia, he states that this deformity is owing to some defect in the development of the brain, and not, as taught by Virchow, to the premature union or obliteration of the sutures. This condition, however, is sometimes met with in these deformities, in which case M. Broca looks upon it as the effect, and not the cause of microcephalia. At the last meeting of the Anthropological Society of Paris, M. Broca presented a living specimen of this deformity, in the person of a female child four months old, the youngest microcephale on record; and the condition of this child's head fully corroborated the statement made above, that the premature obliteration of the sutures in microcephalous heads is the exception, and not the rule. In the case under notice, the sutures and fontanelles were normal; but the size of the head, and indeed of the whole body, was not greater than that of a child a few days old. The child weighed only 1,800 grammes, or a little over 2½ lbs. Another peculiarity about this child was, that its anus was imperforate, and the intestinal dejections passed through the vagina. M. Broca stated at the meeting that he proposed to remedy this infirmity by an operation, to which M. Giraudeau, whose death is noticed in the last number of the JOURNAL, made the following remark: "If you operate, the child is sure to die." M. Broca did operate—that is, he perforated the anus, and closed the recto-vaginal fistula—and, when I last saw the child, two days ago, it was in a dying state, and is perhaps now dead.

In speaking of plagiocephalous heads, M. Broca stated that this deformity may be produced spontaneously or artificially, and he referred

to an observation made by M. Guéniot a short time ago, that infants made to lie always on the same side, or carried always on the same arm, are subject to the deformity in question, which is produced by the flattening of the parietal protuberance of the corresponding side of the skull. Generally speaking, the deformity is not of a permanent character; the head recovers its normal condition soon after the child begins to walk, though it may persist until adult age, or as a permanent deformity, as has been met with in some rare cases. This ought to be a good lesson to mothers and nurses; and obstetric practitioners would do well to bear this circumstance in mind, so that, by their timely advice, they might prevent a deformity which may have serious consequences in after-life.

With reference to the remarks made in my last letter on the inefficiency of clinical teaching in Paris, that measures were in contemplation to effect a reform in this direction, I have now to inform you that the committee that was appointed to investigate the subject has since sent in its report, and the following is a summary of its conclusions:—New chairs to be created for the following special subjects: syphilis, diseases of the skin, ophthalmology, otology, mental diseases, and odontology, which will be established at the different general hospitals already in existence, and be placed under the direct control of the Faculty, which will have the right to appoint its own professors. These latter may be selected not only from the list of *agrégés*, but from that of all the hospital physicians and surgeons. The appointment is for ten years, with the power of re-election, and the salary attached to it to be 5,000 francs (£200) *per annum*. For the Odontological Chair, however, all doctors of the Faculty are eligible. Thus it will be seen that specialism is now officially recognised by the Faculty of Paris; and indeed it could hardly be otherwise, when it is considered that it is simply impossible for any clinical professor to do justice to these various branches of medicine and surgery. It has been remarked that diseases of the throat and urinary organs have not been included in the schedule; but it is anticipated that ere long the utility of these branches will also be officially recognised.

ASSOCIATION INTELLIGENCE.

WITH a view to giving increase of prominence to the scientific proceedings of Branches, and to the improved classification of matter, we propose henceforth to report only the official and administrative business of Branches under the head of Association Intelligence, and to transfer their medical and scientific reports to the columns in which are recorded the proceedings of Societies generally. We shall be much obliged if the Honorary Secretaries will kindly arrange their MSS. accordingly.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT MEETINGS.

A MEETING of the members of this district was held at the Royal Pavilion, Brighton, on Wednesday, November 24th, Dr. HENRY MOON, in the Chair. Twenty-six members present and two visitors.

Dr. MOON gave an introductory address.

Communications.—Sir CORDY BURROWS related a Case of Hip-joint Disease occurring in a young lady. The most remarkable feature in the case was the passage of urine through a fistulous opening resulting from the formation of an abscess which had formed below the trochanter margin. Perfect recovery ultimately ensued.—Mr. HOLMAN of East Hoathly and other members mentioned cases of facial matters passing *per urethram*.

Mr. F. WALLIS, of Bexhill, related the case of a Most Severe and Extensive Burn in a young lady aged 23. His object was to elicit the opinion of members as regarded some dressing which, while it checked the profuse discharge, would relieve the extreme pain.

New Member.—Mr. F. Dulton of Newhaven was proposed for membership of the Association and of this Branch.

Notice of Motion.—Mr. BRANWELL of Brighton gave notice, "That, in view of the very inadequate results arising from the working of the British Medical Association, he would move at the next meeting, that a committee be appointed to inquire into the objects, organisation, policy, and measures of the Association, and into the general plan and conduct of the JOURNAL."

The Dinner took place at Markwell's Hotel under the presidency of Dr. Moon. Twenty-two sat down.

The Next Meeting was appointed to be held at Tunbridge Wells on March 9th, 1876; Mr. W. Wallis of Hartfield to be invited to take the Chair.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

THE fifty-eighth meeting was held in the Library of the County Hospital, Canterbury, on Thursday, November 11th; FRANK WACHER, Esq., in the chair. Seventeen members and visitors were present.

Next Meeting.—Dr. WILKS of Ashford was chosen Chairman for the meeting at Ashford on March 9th, 1876.

Ethical Committee.—The SECRETARY reported that he had received from the Secretary of the Branch the following resolution, which had been carried at the last meeting of the Executive Council.

"That the communication on the subject of the formation of an Ethical Committee in East Kent be acknowledged."

Mr. REID brought up a report from the Ethical Committee, in which the following resolutions were embodied.

1. "That it be recommended that the tariff of the Shropshire Ethical Branch be adopted for the guidance of the members of the East Kent District meetings, and that copies be purchased and issued to the members of the district."

2. "That it be recommended that the medical men of the East Kent District should, as far as may be, discountenance the conventional custom of attending funerals of deceased patients; and let it be known in their neighbourhood that they do not attend funerals except in their private capacity as friends, nor accept the usual complimentary gifts."

These recommendations were carried unanimously.

Papers.—1. Mr. CLEMENT WALTER read a paper on Diabetes.

2. Mr. RIGDEN read a paper on the Comparative Birth-rate and Number of Conceptions at different Periods of the Year at Canterbury.

3. Mr. RIGDEN also read a paper upon the possibility, and therefore the advantage, of Turning in Extreme Cases of Shoulder and Arm-Presentation by means of the Craniotomy Forceps, in preference to Eviscerating the Thorax.

4. Dr. HORNSBY WRIGHT read a Case of Empyema treated by Aspiration.

Dinner.—The members afterwards dined at the Fleur-de-Lis Hotel.

THAMES VALLEY BRANCH: ORDINARY MEETING.

THE first meeting was held at Richmond on November 17th; Dr. LANGDON DOWN in the Chair.

Five New Members joined the Branch.

Next Meeting.—It was decided to hold the next meeting at Surbiton in February 1876.

Papers.—Papers were read by Dr. Milner Fothergill, Dr. Donkin, and Dr. Wiltshire. On account of shortness of time, Dr. Fenn's paper was postponed till the next meeting.

Dinner.—The members and visitors, to the number of eighteen, dined at the Greyhound Hotel. The numbers attending the meeting and dinner would, no doubt, have been greater but for the badness of the weather.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, DECEMBER 7TH, 1875.

G. D. POLLOCK, F.R.C.S., President, in the Chair.

Molluscum Contagiosum.—Mr. JONATHAN HUTCHINSON showed some drawings illustrative of this disease, the peculiarity in each case being the copiousness of the eruption, and the fact of its occurring in adults. No history of contagion could be got at, though carefully inquired for. In one case, that of a man aged 50, the eruption was over the whole body. It resembled lichen at first sight, the spots being very small; but on the back it was more typical, and the true nature of the disease was at once apparent. Mr. Tay had seen a case at the Skin Hospital, Blackfriars, some time since. In this instance, the eruption had come out gradually, and had occurred over the whole body, except the face and scalp. There was no history of contagion, and no tendency to disappear spontaneously. In reply to Mr. Pollock, Mr. Hutchinson stated that the usual treatment was to excise them; but, in these cases, the eruption had been too extensive to allow this treatment. In one case, however, at the patient's own request, he had snipped off upwards of two hundred of these tumours. Microscopically, they consisted of collections of sebaceous material in hypertrophied sebaceous glands.—Dr. COUPLAND drew attention to two memoirs in which the authors, Boeck and Lukomsky, working separately, had

arrived at the conclusion that these cysts were due to alterations in the upper layer of the rete Malpighii, and consisted of so-called molluscous bodies within the epidermic cells, which had been by some mistaken for spores and by others for altered sebaceous products.

Dilatation of Bile-Ducts.—Mr. MORGAN showed a liver with its bile-ducts considerably dilated. There was a perforating ulcer of the duodenum, to which the bile-duct was adherent; and at this point was an inflammatory thickening, with stricture of the duct. The liver was large and distended; its surface was marked by a number of projecting cysts, but between these it was quite smooth. There was also extensive fatty degeneration of the heart.

Congenital Deprivation of Common Bile-Duct.—Dr. WICKHAM LEGG brought forward a case. The child was brought to St. Bartholomew's Hospital. It was 7 weeks old; was jaundiced, and had been so since birth. There had been no hæmorrhage from the navel when the cord dropped off. It died five months later, its liver and spleen having meanwhile considerably increased in size. At the *post mortem* examination, the portal vein, round ligament, and hepatic artery were found to be natural. The cystic and hepatic ducts opened into a cyst of the size of a marble, between which and the duodenum passed a membranous band. Followed up to the liver, the right duct was found much dilated and then thickened. The left duct was thickened throughout, and almost impervious. The liver was granular on its surface, and of a dark olive-green colour. The spleen was very large, and the Malpighian bodies prominent. Dr. Legg considered that the cirrhosis was secondary to the dilatation, because of the rarity of cirrhosis in children, and because ligature of the bile-duct in animals led to similar changes. There were only eleven recorded cases: two in the *Transactions of the Society*, one by Dr. Wilks and one by Dr. Nunneley. Dr. Nunneley's case lived seven months, Dr. Legg's case five months. He believed that a similar condition probably existed in cases where there was hæmorrhage from the umbilicus, though, of the eighty-four recorded cases, only in seven or eight was there any mention of this circumstance. Dr. West had also adopted this view, and pointed out the hereditary tendencies of this malformation.

Aneurism of the Aorta.—Dr. ROBINSON showed a case of aneurism situated just about the central cusp of the aortic valves, and pressing on the pulmonary vein. It was taken from a soldier, aged 46, who had seen eighteen years' service. It was not suspected during life. There had been a soft systolic *bruit* over the aortic valves, which at times was so low as to be almost inaudible. He seemed to improve under treatment, but died suddenly one night. On *post mortem* examination, the aneurism was found; its walls were thin, and it contained layers of decolorised clot. There was no communication between the aneurism and the pericardium; the latter, however, contained some blood-stained fluid. It was interesting clinically, from the absence of all those symptoms which suggest aneurism. The man had had a slight attack of syphilis twelve years previously, but appeared to have recovered completely. Dr. Robinson believed in several exciting causes rather than dogmatically in one, and placed intemperance as the most important of all.

Obliteration of the Superior Vena Cava.—Dr. HABERSON related the case. It occurred in a coalwhipper, who had appeared quite well until about 30 years of age, and had been doing very hard work. At this time, about seven years before his death, great swelling of the face, and congestion of the face and upper extremities, with distension of the superficial abdominal veins, came on. Some intrathoracic tumour was suspected. He ultimately died from dropsical effusion into the abdomen. At the *post mortem* examination, the superior cava was found obliterated, its entrance into the right auricle being marked by white puckering of the endocardium; the innominate veins ended in a *cul-de-sac*, and large compensatory veins passed in front of the pericardium into the mammary and azygos veins, through which the blood passed into the inferior cava. The pulmonary valves were imperfect, there being but two; the third, which was rudimentary, was placed on a lower level. Dr. Habershon considered the obliteration to be congenital, and thought that the condition of the pulmonary valves rather supported this theory. Had it not been congenital, there would also have been more evidence of an opening into the auricle. In reply to Dr. Douglas Powell, he stated that there was no history of cyanosis in early life.

Chronic Ulcer in Duodenum.—Dr. HABERSON exhibited a case of ulcer in the first part of the duodenum. The patient had died of hæmatemesis, and *post mortem* it was found that the ulcer had opened into the vena porta. There were evidences of inflammation in the course of this vein, and abscesses in the liver. The gall-duct was partially destroyed, and opened into the abscess cavity.

Disease of the Pulmonary and Tricuspid Valves.—Dr. ALEXANDER MORISON related a very interesting and rare case, in which the disease

was confined entirely to the right side of the heart. A man, aged 20, though known to have heart-disease, had enjoyed fair health until 18 years of age. At this time, a medical man had allowed him to play cricket, shortly after which his troubles began. He had a systolic *bruit* close to the left side of the sternum, not traceable towards the left side; there was also a harsh grating double murmur audible in the second left intercostal space, close to the junction of the third rib to its cartilage. There was bulging in the precordial region, with a visible systolic pulsation, especially in the second and third left spaces; and tactile *frémissement*. Respiration was hurried. There was albuminuria, with granular casts and blood in the urine. There was also well marked angina pectoris of the right side. At the *post mortem* examination, there were found valvular obstruction and regurgitation through the pulmonary semilunar valves, which were altered and distorted by warty growths. The tricuspid valves were also altered from the same cause. Both the right ventricle and auricle were hypertrophied and, the former especially, dilated. On the suggestion of Dr. Greenfield, the specimen was referred to the Morbid Growths Committee.

Cirrhosis of Liver in a Child.—Dr. GRIFFITHS showed a liver taken from a child aged 10. She came of healthy parents. There was no suspicion of syphilis. She came under his care four years ago, at which time the liver was greatly and uniformly enlarged, reaching as low as on a level with the umbilicus. The heart and lungs appeared healthy. There was no albumen in the urine; no dropsy nor anasarca. The child was not rickety or tubercular, and she had not taken alcohol. At the necropsy, the liver was found hard and tough; it weighed 15 ounces. Microscopically, it consisted chiefly of areolar tissue with atrophied liver-cells.—Dr. MURCHISON looked on the case as interesting, not only on account of its rarity, but also as showing that true cirrhosis may occur without alcoholism. In a case that had been under his own care, he finally found out that the child had a craving for drink, which it had been able to satisfy, as its father was a publican. He then referred to the danger of taking alcohol in small quantities, as being more liable to produce cirrhosis.—Mr. PARKER said that a boy, aged 9 years, had been in the Hospital for Sick Children, in whom this condition was diagnosed by Dr. Dickinson. The lad had been accustomed to take his father's dinner to a cab-stand, and had regularly partaken of his father's glass of grog. The symptoms in this case were ascites and a retracted liver.

Syphilitic Gummata in Spinal Arteries, &c.—Dr. GREENFIELD exhibited fresh specimens which had been removed from a woman who had died in St. Thomas's Hospital rather suddenly, after an attack of left hemiplegia, with spasm in the affected muscles. There was disease also in the cerebral arteries, which he proposed to describe at a future meeting of the Society.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, NOVEMBER 10TH, 1875.

D. RUTHERFORD HALDANE, M.D., President, in the Chair.

Treatment of Nevus.—Dr. JOHN DUNCAN read a paper on the treatment of nevus, of which the following is an abstract. The "natural history" of nevus was interesting. It was not always congenital, but might make its appearance a few weeks after birth. The after-growth was characterised by fits and starts. Thus, at the first dentition, about one-third of all these cases retrogressed, either disappearing, degenerating, or becoming cystic. Two-thirds, or fewer, increased at the second dentition, and at puberty more diminished, either by the *vis medicatrix nature*, or by the efforts of the surgeon. In the former case, the port-wine stain was left, and likely to remain. Those left now become deforming to the patient, or they might ulcerate or bleed. There was little alarming in the two last-mentioned results. In the former, a cure generally resulted; and, in the latter, any hæmorrhage could easily be controlled. In those causing deformity, the two classes of stationary and spreading could be recognised. In the former, puncture with a needle dipped in nitric acid was the best plan. Pressure might be applied, but it did little good. Painting the nevus with collodion was one means of doing so. In the spreading navi, the remedies could be divided into those avoiding, and those leaving, a scar. The first should be used in prominent situations; the second in places that were covered. Dr. Duncan then considered the various methods, showing where each was most applicable, and where any special method was contraindicated. The best coagulating fluids were perchloride of iron and carbolic acid. They should, however, never be used unless the part treated could be isolated. It was difficult so to regulate the dose as to avoid sloughing, and yet not do too little. In electrolysis, he used three to twelve cells of Weiss's Smee's battery, and insulated needles. The conclusions at which he had arrived as to

this method were the following. 1. In a large number, there was no untoward result. 2. In two cases, alarming pallor was probably due to chloroform. 3. There was never sloughing nor suppuration. 4. With perseverance, a cure was always obtained. 5. It was extremely tedious.—The PRESIDENT expressed his opinion that the Society were much indebted to Dr. Duncan for his excellent paper. He admired the account given of the natural history of the disease, and of the rules deduced therefrom as to the propriety of interference. Dr. Duncan had given a choice of treatment, and clearly laid down the reasons of selection.—Mr. JOSEPH BELL supposed it was because nævus was a surgical, and not a medical disease, that the physicians present did not rise to express their views on the subject, and thus commence the discussion. Dr. Duncan had, indeed, left little scope for criticism; for when a man who was thoroughly master of the subject—indeed, an acknowledged authority on it—had taken the trouble to arrange his ideas with accuracy, to go over the whole subject concisely and without redundancy, what more could be said except to thank him? His own experience had taught him much the same lesson as that of Dr. Duncan. He found the ligature almost universally applicable in parts not exposed to view; and, even in the face, a properly applied ligature left very little mark. He described a case of nævus under the eyelid, of the size of a fourpenny piece, cured by ligature, in which, six months afterwards, no trace of a scar could be found. On the whole question of electrolysis as a mode of treatment of large nævi, Dr. Duncan could say of it, "Cujus pars magna fui"; as he was not only a great authority on the subject, but he put his advice and assistance at the service of his colleagues. He believed the members of the Society would be able to appreciate the value of the paper when it was published, as it soon would be.—Mr. CHIENE thought that Dr. Duncan had hardly laid sufficient stress on, or done sufficient justice to his use of, the elastic subcutaneous ligature in the treatment of nævi. His use of a metal button was most original and valuable.—Dr. G. W. BALFOUR, though a physician, and not much in the way of treating nævus, had listened with much pleasure to Dr. Duncan's paper. The logical deduction as to the treatment of nævi from a consideration of their natural history, would have delighted a former president of the Society, whose loss they all deplored. He thought, as this was the first occasion in which the Society had met since the death of Professor Hughes Bennett, they should record on their minutes the profound sense of the great loss they had sustained by his removal from amongst them.

External Uses of the Hydrate of Chloral.—Dr. CRAIG read a paper on this subject. After a brief note on the discovery and chemistry of chloral, he alluded to Keen's experiments on it as an antiseptic for dissecting-room purposes; and then detailed a series of experiments he had made in preserving tumours, organs of animals, fishes, etc. He then detailed cases illustrating its value as an antiseptic dressing for wounds, ulcers, and skin-diseases. He concluded by reading a letter from Dr. Heron Watson, who had used chloral as a dressing in various ways in his wards during six months, and has been much satisfied with the results. He believed it to be superior in its antiseptic properties to carbolic acid, and less irritating; and, by its absorption by wounds, it deadened pain. Dr. Watson used it in four forms as a dressing: 1. In a solution of five or ten per cent. in water for cleansing wounds, sponges, instruments, etc.; 2. As an ointment made up with paraffin, wax, and almond-oil, spread on linen cloth, and applied to wounds or ulcers; 3. Lint soaked in a solution of chloral (one drachm to one ounce) in water; 4. Lint soaked in a solution of chloral in olive-oil of due strength. This made an excellent material for stuffing cavities after resection of bones or joints. Dr. Watson had never met with any disagreeable results from absorption of the remedy.—The PRESIDENT felt sure that the Society were much indebted to Dr. Craig for his important practical paper, and much credit was due to him for his experiments. The specimens showed the advantages possessed by chloral-hydrate in not hardening the tissues, as was done by spirit, or removing the colour.—Dr. JOHN DUNCAN remarked on the practical nature of the paper, and related an experience of his own as to the use of chloral-hydrate as an antiseptic dressing. He had tried it as a dressing in the manner described in Dr. Watson's letter, in the hope that it might prove less irritating than carbolic acid; but found, with a twenty per cent. solution as dressing, and used as spray, that the wound did not remain sweet. He tried, next, a twenty per cent. solution of chloral as a spray, which proved exceedingly pungent and disagreeable, causing both himself and his dressers to sneeze violently. He then dressed the wound with lint soaked in a saturated watery solution of chloral. The patient was very comfortable after the operation; in the evening, he was drowsy; and, next morning, was found in a state of absolute narcotism, from which it was impossible to wake him for twenty-four hours. The state was a most alarming one; and though the patient eventually came out of it, it was only

after the use of various stimulants, injections of strychnia, etc. He believed that if chloral were used in sufficient strength to be a reliable antiseptic, it would prove a dangerous narcotic; while, in less strong solution, it was not reliable as an antiseptic, and would do more harm than good.—Dr. CRAIG replied that he had always found that it removed putrescence in the surgical cases in which he had tried it, but that he had had no experience in major operations.

Jaborandi.—Dr. CRAIG read a paper entitled notes on jaborandi. After a note on the history of its introduction into Europe, Dr. Craig alluded to an experiment he had made on himself in January 5th, 1875, the first in Scotland; and then proceeded to give the general results of a number of other experiments he had recently made on the drug. The strained infusion of one drachm of the leaves produced, in twenty minutes, a salivation which lasted from five to six hours, and which was very profuse, but attended by no pain in the salivary glands, with a profuse perspiration, which passed from the forehead to the trunk and limbs, and also was lasting. The same effects followed its use as an enema. The active principle of the drug seemed to be an alkaloid, which had been named pilocarpine; and did not reside either in the volatile oil which gave its characteristic odour, nor in an acid also present in the leaves. One grain of pilocarpine seemed to equal in power the infusion of one drachm of the leaves. Dr. Craig had tried the effects of the drug against the dry tongue and mouth of fever with good result. It had also been of use in removing pleuritic effusion. The author concluded by a disquisition into the botanical source of the drug.—The PRESIDENT, after thanking Dr. Craig for his paper, said that as yet no sufficient experiment had been made to determine the therapeutic value and application of this interesting drug.—Dr. BRAKENRIDGE stated that he could, from experience, confirm Dr. Craig's opinion as to the value of jaborandi in pleurisy. In one case, a single dose had removed a pleuritic effusion; and, on its returning, a second dose had again removed it. He had tried it, also, in post-scarlatinal nephritis, and also in a case of post-scarlatinal dropsy, with anasarca, ascites, and albumen in the urine. Digitalis, purgation, and local applications, had failed to remove it; œdema of the lungs came on, followed by numerous convulsions. Jaborandi, first in ten-grain, and afterwards in thirty-grain doses, during fourteen days, gradually overcame the anasarca, and now the boy was quite well. The urine steadily increased during its use, diminishing again when it was stopped.—Dr. MUIRHEAD related three cases in which he had used the drug with no good result; but in none of them had its physiological effect been obtained.—Dr. CRAIG briefly replied.

SOUTH OF IRELAND BRANCH.

SECOND GENERAL MEETING, SATURDAY, NOVEMBER 20TH.

W. J. CUMMINGS, M.D., President, in the Chair.

Extroversion of the Bladder and Epispadias.—Dr. R. ATKINS exhibited a specimen of extroversion of the bladder and epispadias taken from the body of a man, aged about 53, a patient in the District Lunatic Asylum. The parts presented the characteristic appearance of this peculiar species of defective development; the anus was situated in the perinæum about one inch behind the posterior surface of the scrotum.

Chronic Phthisis.—Dr. R. ATKINS showed the thoracic viscera from a case of chronic phthisis. The left lung was almost completely destroyed, while the right organ, although infiltrated with tuberculous matter, had not yet commenced to break down. The heart was exceptionally small, measuring on its anterior surface from the root of the aorta to the apex $3\frac{1}{2}$ inches, in the transverse direction at the broadest part $3\frac{1}{4}$ inches, circumference $7\frac{3}{4}$ inches, and it weighed $6\frac{3}{4}$ ounces. The veins on its surface were dilated, and its valvular apparatus and substance were perfectly healthy.

Scirrhus of the Pylorus.—Dr. CREMEN exhibited a specimen of scirrhus of the pylorus. Although the patient, a female, had presented the symptoms of the disease, yet vomiting was often absent for several days together.

Traumatic Tetanus.—Dr. GREGG read the report of an interesting case of traumatic tetanus which occurred in a lad, aged 13, after a lacerated wound of the finger, who had been treated successfully under his care in the South Infirmary, with Calabar bean and subcutaneous injections of morphia. The total quantity of Calabar bean administered amounted to 180 grains of the extract, extending over a period of twenty-five days, while only four injections of morphia were given of one-eighth of a grain each. The tetanic symptoms were well marked; the temperature never rose higher than 99 degs., and usually stood at 98.5 degs. The pulse came down under the influence of the drug from 104 on October 14th (the day of admission), to 40 on November

1st. The pupils were affected very slightly on October 20th, and he was discharged cured on November 7th, 1875.

Accidental Concealed Hæmorrhage.—Dr. CRIMEN read the report of a rare case of accidental concealed hæmorrhage which had occurred in his practice. He was called to see a multipara, and, from the size and shape of the abdomen, diagnosed twins. The os was slightly dilated, and the pains weak. About an hour afterwards she fainted, and looked blanched. Fearing internal hæmorrhage, he summoned a consultant, who agreed with him that such was the case, and, in view of the undilated condition of the os uteri and the weakness of the pains, a stimulating and expectant plan of treatment was adopted. Soon afterwards, however, she again became faint, was seized with a convulsion, and almost immediately expired. He at once laid open the cavity of the uterus through the abdomen, and found the diagnosis correct. The womb was full of blood, and contained two children, females. The placentæ were placed laterally; one was completely separated; the other was still adherent. He removed the children, and found the one which had been attached to the separated placenta dead and blanched; the other breathed for a few seconds. This was the only case of this nature that he had seen, and if he were to meet another similar he would adopt the following plan of treatment; dilate the os with Barnes's bags, and deliver as speedily as possible, avoiding the rupture of the membranes until he was in such a position as to be able to apply the forceps immediately. Dr. Crimen brought forward some statistics regarding this form of hæmorrhage, and remarked that the complication of twins added to the difficulty of the case.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

WEDNESDAY, NOVEMBER 10TH, 1875.

ROBERT ROSS BROWN, Esq., in the Chair.

Excision of the Elbow.—Mr. A. W. NANKIVELL related a case of excision of the elbow in a lad aged fifteen, for compound comminuted fracture of the humerus involving the joint. The patient was exhibited to the meeting. The skin and soft parts were extensively lacerated, causing sloughing; and severe bleedings occurred from the granulating surfaces, endangering the safety of the limb. The hæmorrhages were subdued by the application of the undiluted tincture of ergot of the *Pharmacopœia*. A woman, whose elbow had been excised for disease by Mr. Nankivell eight years ago, was also exhibited. The elbow was freely movable, and the arm strong and useful.

Abscess of Thigh: Extension: Rupture of Artery.—Mr. A. W. NANKIVELL related a case of recent abscess of the thigh and ham in a boy aged 8, in which extension was made to rectify malposition, and in which rupture of an artery occurred (deep branch of anastomotic?). Immediate amputation was found to be necessary, after the failure of exploratory incisions. The blood-vessel was supposed to be in a diseased condition, through sloughing of the adjacent tissue. The popliteal artery appeared to be intact.

Neuro-hæmatic Lesion.—Mr. ROBERT COBB related a case of neuro-hæmatic lesion running a protracted course (five months), and presenting great variations of temperature (low evening, high morning). Recovery took place under the use of eucalyptus globulus and physostigma.

Central Placenta Prævia.—Mr. ROBERT R. BROWN related a case of placenta prævia centrally implanted, that terminated fatally. The patient, aged 41, in her ninth pregnancy, declined the use of the plug in the initiatory stages. On attempting delivery, the placenta was found to be so much separated as to come away entirely on endeavouring to clear the front portion. The head came down with the pains, but receded soon afterwards, and allowed the elbow to protrude, together with gushes of blood. Turning was immediately performed. There was no more hæmorrhage; but collapse occurred, and the patient died in one hour and fifty minutes after delivery. The uterus continued firmly contracted for eighty minutes, then became rather flaccid, and some external hæmorrhage took place. The restlessness of death set in before the uterus lost its tone. This case was attended by Drs. John and Frederick Brown, in connection with the narrator. Death must be attributed to excessive loss of blood in the initiatory stages, and to trusting to the pains after the removal of the placenta for ten minutes, without immediate turning. Chloroform was used on commencing delivery, and ergot was given. The pains improved under these agents.

Intermittent Fever.—Dr. JAMES V. BELL reported a case of intermittent fever with paroxysms every fifth day, complicated with lung-congestion, diarrhoea, vomiting, and petechial-looking erythematous rash. The patient recovered under the use of quinine.

Stomatitis, etc.—Dr. JAMES V. BELL narrated a case of stomatitis followed by obscure symptoms of enteric fever (without rose-spots),

with erythema nodosum, pericarditis, and double pleuropneumonia. There was apparent recovery; but, after six weeks' abeyance of symptoms, cerebral disease became developed, and proved fatal in three weeks.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETING.

THURSDAY, NOVEMBER 11TH, 1875.

F. WACHER, Esq., in the Chair.

Comparative Birth-rate and Number of Conceptions.—Mr. RIDEN read a paper on the comparative birth-rate and number of conceptions in Canterbury at different periods of the year, showing that the highest average birth-rate, viz., 35.65 per 1,000 inhabitants, was in December, and consequently the greatest number of conceptions occurred in March; the lowest birth-rate, viz., 30.27 per 1,000, was in June, and, consequently, the least number of conceptions was in September. Also, when the birth-rate was at the lowest, the male births were in excess of the females; while, in December, when the birth-rate was high, the females were in excess. April and May also produced an excess of conceptions, while comparatively few conceptions occurred in October and November. The excess did not seem to be determined by the marriage-rate, inasmuch as the excess of marriage-rate in Canterbury was in October, November, and December. He suggested that the excess appeared to depend upon increased vitality in the spring months of March, April, and May.

Turning in Shoulder and Arm Presentations.—Mr. RIDEN read a paper upon the possibility, and therefore the advantage, of turning in extreme cases of shoulder and arm presentations by means of the craniotomy forceps in preference to eviscerating the thorax. This might be effected by grasping the foot with the forceps, while the left hand might be used to lift up the shoulder. The paper was illustrated by a case in which the right arm had been prolapsed for fifteen hours at the least. The foot, and if possible the opposite foot to the arm, might often be reached by the forceps, but could not be held by the hand of the surgeon, and room might yet remain in the vagina for his left hand.

CORRESPONDENCE.

CLINICAL TEACHING.

SIR,—A few days ago, I met a once active member of our profession, now retired on a competence obtained by well directed industry and intelligence. Among other subjects of conversation, he made some remarks on the general condition of professional knowledge at the present time compared with that of his own day. He is not an unfair *laudator temporis acti*, and I thought much that he said was true. There is one point on which it would be interesting to hear the opinions of some of the readers of the JOURNAL, and that is the general state of practical knowledge among the rising generation. To go to this point at once, we may ask whether there is any substitute for that kind of instruction which, under the old system of apprenticeship, was afforded by good general practitioners to those placed under their care as apprentices. There is, no doubt, a system of teaching the elementary branches of medical education which is decidedly superior to that of the past; but this has been brought about by the effect of examinations. So far, of course, as a knowledge of chemistry, botany, anatomy, and materia medica is concerned, an examination is the best test; but we all know that, when we use the term "a practical knowledge" of our profession, we mean something more than our present system of examination can secure, and, indeed, which is not to be obtained by such a system.

Now it appears to me that, if we are to look to anyone in particular to supply the place of the practical teaching to which I have alluded, it is undoubtedly to the clinical teachers at our schools of medicine. There is no doubt we shall in time have some change in this branch of medical education; but those changes will be brought about by external influences, and not by internal efforts. Such is always the case, and there is no reason to believe that the eminent men who are now engaged nominally as the teachers of clinical medicine and surgery in London will resist the reasonable demands of those who are interested in this subject; and I would ask whether it is not one of the greatest importance to society and to our profession.

There are some who would take a commercial view of this subject. They would say it is unjust that the teaching of medicine and surgery, or, as it is usually called, hospital practice, should be the most expen-

sive part of medical education, and, as a rule, the worst attended to. A free-thinking and independent student might say to the dean of his school: "I paid you fifty guineas to be taught the most useful part of my profession—that by which I hope to live and support myself some day. But, as far as teaching goes, I am indebted very little to you. The hospital provides the patients and everything else, and you take fees for allowing me a privilege that is not really yours to give." And it would not be easy to reply to this charge. It is undoubtedly a difficult thing to define the liabilities of an indefinite bargain of this kind; but there are moral responsibilities involved in it which cannot be avoided. If we take only a superficial view of this question, it is unlikely to lead to any results. Suppose we assume that there is truth in the statement that clinical teaching is very insufficiently carried on, considering the price which is paid for it. There is some reason why that attention which ought to be given to it by every member of a hospital staff is not given, and why those responsibilities are not properly recognised. There are indeed some examples in London of unselfish devotion to the teaching of clinical medicine and surgery, and the reward obtained is by no means what would be expected. Labour and thought, and neglect of practice, are necessary for such instruction; and when those who neglect their duties share equally with those who perform them, there is more loss than gain by devotion to them.

It might be asked whether an appointment to the full staff of a hospital is regarded by some as a reward for past services; for such an idea might justify the neglect of those duties imposed on clinical teachers. If this be so, nothing more can be said. The system must be altered entirely before improvement can take place. It may be replied that clinical teaching is more systematic now than it ever was, and that regular lectures are given by each of the staff. Such lectures do not supply the place of bedside instruction; they are not an equivalent in any sense, and ought not to be considered so. The remarks I have made may, I hope, be so favourably received by you as to be brought under the notice of the readers of the JOURNAL. Some advantage must follow from the consideration of the subject, and will be appreciated by many an one who is, like myself,

AN OLD STUDENT.

SUGAR IN URINE.

SIR,—In his brevity, your reporter has conveyed an incorrect representation of my communication to the Royal Medical and Chirurgical Society on the 23rd inst. I made the remark, as given, that sugar is found to occur in urine as a transitory condition more frequently than is generally supposed; but this referred to sugar present to such an extent as to be at once recognisable by the copper-test, and to amount, as quantitative examinations have shown me, and as I mentioned, to some few grains to the fluid ounce. The product exhibited at the meeting of the Society was not obtained from urine of this description, but from urine which failed to give a reaction on being tested in the simple and ordinary way. I took scrupulous care to state that every sample of urine, before being treated for obtaining the product, was tested with the copper-solution, and was only employed when found to give a negative reaction. The object I had in view in exhibiting the product was to carry conviction throughout the profession that sugar must be ranked as a constituent of healthy urine, although such urine may not betray its presence (from the minute extent to which it exists) under the ordinary mode of testing. I was led to adopt the course I took from the unsettled state of opinion upon the subject. In the interest of medical science (for the question, I consider, has an important bearing in this direction), I should be glad if you would make the correction, so that the readers of your JOURNAL may not remain under the impression that the sugar exhibited had anything to do with a transitory condition.

Nov. 30th, 1875.

Yours faithfully, F. W. PAYV.

EXTRACTION OF TEETH UNDER CHLOROFORM.

SIR,—In his able paper on "One of the Causes of Death during the Extraction of Teeth under Chloroform", Dr. Brunton has shown his usual acumen both in interpreting the intricate physiological processes which may induce death by shock, and in his plausible hypothesis *ex hypothesi* to account for death during a minor operation under chloroform, by supposing that, in such cases, too small a quantity of the anæsthetic has been given. We have, alas! too many well authenticated cases of death after small doses of this dangerous agent, wherein "shock after operation" could not possibly form a factor in the case. (Only last week, we see recorded the death of a lady in her bed after a comparatively small dose of chloroform.) That shock may, in a few isolated cases, be the cause of death after a minor operation, I do not deny, although I have never heard of a case of even temporary stoppage of the heart's

action after the extraction of a tooth; but it would lead to a very dangerous course of practice were we to assume that, in cases of death after the administration of chloroform, too small a quantity of the anæsthetic had been used. I am, etc., A. H. H.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE Town Council of Southampton have increased the salary of Dr. Henry Falk, Medical Officer to the Borough Police, from £50 to £100 *per annum*.

POOR-LAW MEDICAL APPOINTMENTS.

GREEN, Edward F. S., M.B., appointed Medical Officer and Public Vaccinator for the Bentham District of the Settle Union, *vice* E. Tatham, M.B., deceased.
HYATT, James T., L.R.C.P. Ed., appointed Medical Officer for the First Division of the Shepton Mallet Union.
M'KELVIE, Robert B., M.D., appointed Medical Officer to the Lorne Combination Poorhouse, and Medical Officer for the Parish of Kilmore and Kilbride, Argyllshire, *vice* G. M'Gillivray, M.D., deceased.
MARKBY, Thomas, M.R.C.S. Eng., appointed Medical Officer for No. 5 District of the Royston Union, *vice* J. Balding, M.R.C.S. Eng., resigned.
MAYBURY, William A., M.D., appointed Medical Officer and Public Vaccinator for the Second Ward District of the Colchester Union, *vice* G. Brown, M.D., resigned.

MILITARY AND NAVAL MEDICAL SERVICES.

DR. ANDREW H. LEITH, of H.M. Bombay Medical Service, late Inspector-General of Hospitals, and President of the Government Sanitary Commission in that Presidency, has lately died at Etherton Lawn, near Tunbridge Wells.

LOSS OF STORES AT ALDERSHOT.—We understand that the Board, whose recent appointment to adjudicate a disputed point in connection with loss of stores at Aldershot, have recommended that the deficit shall be borne by the public. We are not in a position at present to say more than a word of congratulation to the Army Medical Department on this satisfactory decision, which we hope may be fully endorsed by the Horse Guards and Secretary of State for War.

FORAGE ALLOWANCES.—A War-Office circular has just discontinued the customary allowance of forage to officers as an allowance according to rank. Forage allowance is only to be given in future on condition that the keeping of a horse or horses is absolutely necessary for the performance of the officer's duties, and that the horses used are *bonâ fide* the property of the officers using them. This circular will materially curtail the allowances hitherto given to all the higher grades of army medical officers by virtue of their relative rank.

OBITUARY.

WILLIAM RAWLINS BEAUMONT, M.D., F.R.C.S. Eng.

THERE are many members of the profession in this country, especially old Bartholomew's men, who will regret to hear that this distinguished and estimable surgeon died on October 12th last, at Toronto, Canada, where he obtained the highest appointments and had practised for many years.

Dr. Beaumont was born in London in 1803. After a sound preliminary education, he entered on his professional studies at St. Bartholomew's Hospital, where he soon became a great favourite, especially with his illustrious teacher, Abernethy, who testified that he "did very assiduously prosecute his professional studies, for a more than ordinary length of time"; he completed his anatomical studies in Paris, under Amussat, who recognised in him "un zèle et une aptitude rare". On his return to England, he presented himself for examination, and obtained the diploma of membership of the Royal College of Surgeons on December 22nd, 1826. In 1844, the College recognised his claims for the honorary fellowship, which was conferred on him August 26th of that year. He commenced the practice of his profession in this metropolis, and for some time was surgeon to the Islington dispensary. He proceeded to Toronto in 1841, and soon afterwards graduated as M.D. in the university of that city. In 1843, he was elected Professor of Surgery in the University of King's College (now the Uni-

versity of Toronto), an appointment he held for ten years. His clinical lectures on surgery, at the Toronto General Hospital, were greatly appreciated. In 1872, he was elected Emeritus Professor of Surgery in the University of Trinity College, Toronto. He invented, and himself made, several surgical instruments of great ingenuity and utility; one of which, an instrument for passing sutures in deep-seated parts, as in the operation for cleft palate, which was examined and admired by Brunel, the great engineer, and was considered by Tirmann, the surgical instrument maker in New York, to have been the origin of the Singer sewing machine, an opinion shared by Sir James Paget and communicated by him to the late Dr. Fraser of Toronto. An account of this invention was published in the *Medical Gazette* of 1836, and also in the *Medico-Chirurgical Transactions*. Our friend, Mr. T. M. Stone, of the Royal College of Surgeons, who was a frequent correspondent of Dr. Beaumont, claims this discovery for his friend, stating that long before the sewing machine was known, Dr. Beaumont had shown, and subsequently presented to him, the instrument which he gave a few years ago with others to the College of Surgeons, in furtherance of the wishes expressed by Sir William Fergusson to form a collection of surgical instruments for the museum of that Institution. It may be there seen, described in the catalogue by Professor Flower as "D IIIA. Another instrument for applying sutures to cleft palate. Mechanism resembling modern sewing machine. Presented by Mr. T. M. Stone." Other instruments illustrating the great mechanical skill of Beaumont were presented by him to the same collector, to which he was a valuable contributor. The *Canada Medical and Surgical Journal* deservedly states that Dr. Beaumont was a gentleman of a quiet and retiring disposition, a sound surgeon and an instructive lecturer, and his memory will be held in veneration by all with whom he came into contact.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—M.D. Examination, 1875.

Crocker, Henry Radcliffe, B.S., University College
Duncan, Andrew, King's College
Easton, Thomas (Gold Medal), Guy's Hospital
Philpot, Joseph Henry, King's College
Sturge, William Allen, University College
Yeo, Isaac Burney, King's College. (Obtained the Number of Marks qualifying for the Medal.)

Logic and Moral Philosophy only.

Hoar, Charles Edward, King's College
Houghton, Walter Benoni, B.S., University College
Leech, Daniel John, Manchester Medical School
Lewtas, John, University of Edinburgh and Netley Hospital
Lowe, Walter George, St. Bartholomew's Hospital
Nicholson, Arthur, King's College
Rigby, James Arthur, Guy's Hospital
Taylor, Herbert, St. Bartholomew's Hospital

M.S. Examination.—Logic and Moral Philosophy only.

Gould, Alfred Pearce, University College

B.S. Examination. Pass List.

First Division.

Hullard, Jean Arthur, B.Sc., University College
Maclean, Thomas Edwin, University College
May, Bennett, Birmingham General Hospital

Second Division.

Hobson, Lewis John, University College
Jameson, Leander Starr, University College
Rose, William, King's College
Voelcker, George Henry, University College

Examination for Honours.

First Class

Hullard, Jean A., B.Sc. (Gold Medal), University College
May, Bennett, Birmingham General Hospital } equal
Rose, William, King's College

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 2nd, 1875.

Broome, Stephen Bernard, 89, Camden Street, N.W.
Elcum, Donald, Warwick House, Cheltenham
Houchin, Edmund King, 12, High Street, Steppney
Whitfield, William Clarke, St. Owen Street, Hereford

The following gentlemen also on the same day passed their primary professional examination.

Bailey, Henry Frederick, University College
Gairdner, John, University College
Rean, William Henry, London Hospital

MEDICAL VACANCIES.

The following vacancies are announced:—

ADDENBROOKE'S HOSPITAL, Cambridge—Dispenser. Salary, £60 per annum. Applications on or before December 15th.

ARDWICK and ANCOATS DISPENSARY, Manchester—Resident House-Surgeon.
BERKS COUNTY ASYLUM, Maidenhead—Assistant Medical Officer. Salary, £200 per annum, with board, fuel, light, and washing.
BOOLE BOROUGH HOSPITAL, Hulse, S. Devon—Salary, £200 per annum, with board, furnished apartments, and washing. Applications to the Honorary Secretary.
CARMARTHEN UNION—Medical Officer.
CHORLTON ON MEDLOCK, KUSHOLME, and MOSS SIDE DISPENSARY, Manchester—House-Surgeon.
DENBIGHSHIRE INFIRMARY—House Surgeon. Salary, £85 per annum, with board, washing, and residence.
DUMFRIES and GALLOWAY ROYAL INFIRMARY—Assistant House-Surgeon. Board and washing. No salary. Applications on or before December 15th.
GENERAL HOSPITAL and DISPENSARY FOR SICK CHILDREN, Pendlebury, near Manchester—Superintendent. Salary, £120 per annum, with everything found.
GLOUCESTER INFIRMARY—Surgeon and Assistant Surgeon. Applications before January 27th, 1876.
HAMBLEDON UNION, Surrey—Medical Officer. Salary, £75 per annum, with extra fees. Applications on or before December 15th.
HUDDESFIELD INFIRMARY—Physician.
INFIRMARY FOR CONSUMPTION, Margaret Street, Cannon Square—Visiting Physician. Applications on or before December 15th.
LEEDS UNION—Medical Officer. Salary, £75 per annum, with unfurnished residence, coal, gas, water, and rates. Applications on or before December 25th.
MOFFAT HYDROPATHIC ESTABLISHMENT—Medical Man to take charge. Applications to Messrs. Bruce and Kerr, W.S., Edin., 1875.
PARKIN of LISMORE and APPIN, Lettermore—Medical Officer. Salary, £200 per annum. Applications to the Rev. D. Dewar, Mause, Appin, Argyll.
ROTHERHAM HOSPITAL—Resident House-Surgeon. Salary, £120 per annum, with board and furnished apartments. Applications on or before December 25th.
ST. PANCRA'S and NORTHERN DISPENSARY—Resident Medical Officer. Salary, £150 per annum, with residence, and £20 for services to the poor.
SHEFFIELD GENERAL INFIRMARY—Physician. Applications on or before January 5th, 1876.
STROUD GENERAL HOSPITAL—House Surgeon. Salary, £60 per annum, with board, furnished rooms, attendance, and washing.
THARSLY MINES, Province of Biscaya, Spain—Medical Practitioner. Salary, £250 per annum. Applications to the Secretary, 157, West George Street, Glasgow.
TONGUE and FARR, District of, County of Sutherland—Medical Officer. Salary, £150 per annum, and house.
TRINITY COLLEGE, Dublin—Professor of Botany. Applications on or before January 20th, 1876.
WANDSWORTH and CLAPHAM UNION—Resident Medical Officer. Salary, £150 per annum, with furnished apartments, rates, washing, gas, and coal.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BARLOW, Thomas, M.D., appointed Assistant-Physician to Charing Cross Hospital, *vice* G. V. Poore, M.D.
BOODLE, Robert M., M.R.C.S. Eng., appointed House-Surgeon to the Rochdale Infirmary, *vice* W. H. E. Burke, M.R.C.S. Eng., resigned.
CRESWELL, John, M.R.C.S. Eng., appointed Resident Medical Superintendent of the Hoxton House Asylum, *vice* W. J. Hunt, M.D., deceased.
HAYWARD, W. T., L.Q.C.P.I., appointed House-Surgeon to the Liverpool Infirmary for Children, *vice* A. James, M.B., resigned.
***JAGIELSKI, A. V., M.D.,** appointed Physician to the Margaret Street Infirmary for Consumption, *vice* Gilbert Smith, M.D., resigned.
JAMESON, Benjamin, L.R.C.P. Ed., appointed House-Physician to the North Staffordshire Infirmary.
MILNER, E., M.R.C.S. Eng., appointed Surgeon to Out-patients at the Lock Hospital, *vice* B. Shillitoe, F.R.C.S. Eng., appointed Surgeon.
PURCELL, Ferdinand A., M.D., appointed Physician to the Westminster General Dispensary.
QUINTON, K. F., M.D., appointed Resident Medical Officer and Secretary to the Newark-on-Trent Hospital, *vice* W. A. Maybury, M.D.
***SHAWEN, Alfred, M.D.,** appointed Assistant-Physician to the Metropolitan Free Hospital.
***SHILLITOE, Benjamin, F.R.C.S. Eng.,** appointed Surgeon to the Lock Hospital, *vice* J. R. Lane, F.R.C.S. Eng., resigned.
WALTER, William, M.B., appointed House Surgeon to the North Staffordshire Infirmary.
***WINSLOW, Lyttleton S. F., M.D.,** appointed Lecturer on Psychological Medicine at the Charing Cross Hospital, *vice* W. J. Hunt, M.D., deceased.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the communication.

BIRTH.

BARNES—On December 4th, at 45, Leather Street, Carlisle, the wife of *Henry Barnes, M.D., of a daughter.

MARRIAGE.

WILSON-COWAN.—At 12, Mount Street, Aberdeen, on December 7th, by the Rev. Matthew Galbraith, M.A., John S. Wilson, M.R.C.S. Eng., L.R.C.P. Ed., F.R.C.S., Greenock, to Isabella Henderson, daughter of William Cowan, Esq., Locomotive Superintendent, Great North of Scotland Railway.

DEATH.

***DANIELL, William Cole, M.R.C.S. Eng.,** of Calverton Limes, Stony Stratford, son of the late Edward Daniell, Surgeon, of Newport Pagnell, Bucks, aged 40, on December 6th.
GRAHAM, George Young, Esq., Surgeon, at Stockport, aged 71, on December 2nd.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY** Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
- TUESDAY** Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
- WEDNESDAY** .. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
- THURSDAY** ... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.
- FRIDAY**..... Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
- SATURDAY** ... St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY**.—Medical Society of London. Dr. Henry Lawson will exhibit M. Hayem's new mode of estimating the amount of Blood-Corpuscles. Dr. Alfred Freer, "A Case of Impalement, with *post mortem* Results four years and a half afterwards".
- TUESDAY**.—Royal Medical and Chirurgical Society. 8 P.M.: Ballot. 8.30 P.M.: Mr. Marsh, "Case of Abdominal Section for Intussusception in an Infant"; Dr. Fage and Mr. Howse, "Case of Abdominal Section for Intussusception in an Adult"; Mr. J. Hutchinson, "Case of Operation for Intussusception into the Colon".
- FRIDAY**.—Quekett Microscopical Club (University College), 8 P.M. Mr. Henry Davis, F.R.M.S., "On a Larval Cirripede"; Mr. John E. Ingpen, "On the Measurement of Angular Aperture".—Medical Microscopical Society, 8 P.M. Dr. U. Pritchard, "A New Form of Freezing Microtome"; Mr. J. Needham, "Specimens".

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor: those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

MEDICAL EDUCATION.

SIR,—Will you kindly allow a senior student space for a few words on this subject? I have read with interest the letter of a Graduate in Medicine. His remarks and suggestions are admirable, and evidently result from careful and impartial observation on medical education; but is he not mistaken in saying that at most schools the lecturers are paid at fixed stipends? I strongly agree with your correspondent, that compulsory attendance at lectures is, under any circumstances, bad. Nearly all students with whom I have conversed on this subject—and their name is legion—agree that the majority of students learn little or nothing from lectures, but derive the knowledge necessary for their examinations entirely from other sources. Now, if this be the case, there must be something radically wrong. Is the fault in the students? Is it in the lecturers? Is it in the system? Perhaps in all three; certainly in the last. I am afraid that medical men are often induced to lecture more to further their own interests than from any disinterested conviction of their fitness for teaching. Many lecturers fail to acquire, and few possess naturally, that clear, explanatory, fluent address, which is a *sine qua non* in a good teacher. There are, I fear, more lectureships than men well qualified to fill them. Practical work is most important; but the more time students spend in attending lectures, the less they have in the wards or dissecting room. It is hard for students who are devoting all their energies to preparation for one examination to be compelled at the same time to attend lectures on subjects for another and more distant examination; yet this often happens. If the compulsory system were abolished, good lecturers would not find the students' attendance seriously diminished, while students would be spared the humiliation (which I have undergone for a certificate, forsooth) of hearing a man blunder and stammer through a so-called course of lectures with an oratory that would disgrace a nursery governess.—I am, etc.,

GLYNN WHITTLE.

Liverpool, November 29th, 1875.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

ANESTHETICS FOR THE MILLION.

WE have seen with regret Mr. Ellis's letter in the *Times* on the case of Mrs. Childers. The main lesson which was taught by that sad event is the danger of the self-administration of anaesthetics. Their danger is not to be overcome by the use of any known mixtures. All tend to produce delirium and drowsiness, and to render the patient more or less unfit to take care of himself. We know of nothing which authorises Mr. Ellis to represent his mixtures as anaesthetic, and we can but regret that he should have taken the occasion of a very sad calamity to enforce a moral which is not, we think, conducive to the public safety, or in consonance with skilled opinion in the profession.

DR. M. (Royal Navy) makes a suggestion that recipients of the gold medal of Sir Gilbert Blane, being members of the London College of Surgeons, should have some distinguishing mark in the calendar of the College, similar to that in the Navy List. This seems to us deserving of notice by the authorities. No doubt the Calendar might be made still more valuable and interesting by publishing the honours obtained by so many of its Fellows and Members, as M.P., J.P., Vict. Cross, Jacksonian and Collegiate Prize Essayists, F.R.S., B.A. or M.A. Oxon., Cantab., or Lond., Graduates in Medicine of Universities in the United Kingdom, etc.; but this might possibly involve official difficulties.

LEITER'S HYPODERMIC SYRINGE.

SIR,—In to-day's JOURNAL, under the heading of New Inventions, appears Leiter's Hypodermic Syringe. We beg to inform you that we have for some time past made hypodermic syringes with spring, etc., as therein described, but possessing the additional advantage of injecting the solution immediately after the puncture. By simply pressing a small trigger, the spring is released, the needle inserted, and solution injected simultaneously. The instrument is known as Arnold's self-acting hypodermic syringe.

Apologising for trespassing on your valuable space, we remain, sir, your obedient servants,

35 and 36, West Smithfield, November 27th, 1875.

* * * We have seen one of the syringes in action, and it seems to us a very neat and satisfactory instrument. Messrs. Millikin inform us that they have made for some time a similar instrument.

PROFESSIONAL ETIQUETTE.

SIR,—I should feel much obliged if you will let me know your opinion of the following case in your next issue, if possible. One of the surgeons of this town had a patient living in the country, who went on a visit to a friend, a patient of mine. While there, she was taken seriously ill. I was sent for, and attended, with the parents' consent, and also met their family medical man in consultation, who approved of my treatment, and left the case in my hands. In the course of some weeks she was sufficiently recovered to be removed home, where I was given to understand that I should continue my attendance; but it happened that the family medical man was attending on others in the same street, so the parents called him in as he was passing, and he took on the case without letting me know. Was that professional? and, if not, how should I act?—I am, sir, yours truly,

L. D. Y.

* * * We think the natural course of events was followed, and see no ground of complaint against the family medical attendant. The parents may have shown some want of courtesy.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following is a copy of the paper on pathology, therapeutics, and surgery, submitted to the candidates at the written examination for the Fellowship on Saturday, Nov. 27th. It was necessary to answer all four. 1. Describe minutely all the changes observed in the vessel, its branches, and its contents during the repair of a large artery after ligature. 2. What are the causes of non-union after fracture of a long bone? Describe the treatment you would adopt to obtain union. 3. Mention the conditions, local and general, coexistent with fracture of the skull which would guide you to a decision as to the propriety of trephining. 4. A man is the subject of strangulated inguinal hernia, with well marked symptoms. Taxis is applied, and the rupture passes back into the abdomen. Four hours afterwards, when the man is seen again, there is still urgent vomiting, and no relief to the other symptoms. Explain fully the view you take of the probable nature of the case, and the treatment you would adopt.

A MISPLACED ANNOUNCEMENT.

A CORRESPONDENT forwards the following from the *Belfast News Letter* of Thursday, November 4th, which we read with regret.

"The Belfast Hospital for Sick Children, 25, King Street.—Yesterday, a child, sixteen months old, was brought to this institution in the most dreadful agony, and evidently at the point of death. After a rapid examination, Dr. Fagan operated for lithotomy, successfully removing a foreign substance of remarkable size, and affording immediate relief to the poor infant. The case is very unusual in one so young, and reflects the greatest credit on Dr. Fagan's promptitude and skill."

MEDICAL PRACTICE IN HAMBURG.

M.B., L.R.C.S.E., writes:—I have an inclination to practise my profession on the continent, in either Hamburg or Bremen, both free towns. I want to know if I can go there and begin at once? If not, what examinations are necessary? Are the fees in general above or below those in Scotland?

ABSORPTION OF THE LUNG.

SIR,—I am able to corroborate the statement of Dr. Cottew regarding the occasional occurrence of entire absorption of one lung, without binding down or flattening against the vertebral column. Many years ago, I made a *post mortem* examination of a young male epileptic patient, an inmate of the old St. Peter's Lunatic Asylum, Bristol. In this case, the right cavity of the thorax was filled with perfectly limpid straw-coloured serum, entirely unmingled with purulent matter or shreds of lymph. All the tissues of the right lung had undergone absorption under pressure of the fluid gradually effused into the sac of the pleura. The shrivelled remnant of the lung hung free on the apex of the cavity of the pleura. At the time, I remarked to my pupils that all that remained of the lung was about the size of, and much resembled in appearance, a black kid glove, partially inflated, and afterwards crumpled and compressed.—I am, sir, yours obediently,

HENRY OXLEY STEPHENS, M.D., M.R.C.P., etc.,

lately Medical Superintendent of the Bristol Lunatic Asylum at Stapleton.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

FROGS IN SANDSTONE.

At the Shieldmuir pit, near Motherwell, Ayrshire, belonging to the Summerlee Iron Company, an extraordinary discovery, says the *Times*, has been made. Mr. Wilson, manager, while superintending the driving of a mine through sandstone, was surprised to find from thirty to forty live young frogs issue from the centre of a mass of the stone that had been drilled. The level in which the frogs were found is three hundred and thirty feet under the surface, and the mass of stone was fully a hundred yards from the pit bottom. No crevice or fissure could be observed in the stone; and all who were present are positive that the frogs came from a cavity in the centre of the block. The frogs, apparently quite fresh after their imprisonment, at once made for a pool of water, in which element they were of course quite at home.

MODERN CURIOSITIES.

J. M. H. forwards us two cuttings from the advertisements of a medical contemporary, which, placed in juxtaposition, he not unnaturally describes as "really curious". One runs thus:—"To Medical Practitioners.—Female Dispenser.—A young woman, aged thirty, is desirous of securing a situation in a private surgeon's as dispenser." The other:—"Special.—Wanted, by a Gentleman, a situation as Companion to a single Medical Gentleman. Can dispense, keep books, knows the regular routine of surgery work; can attend an ordinary midwifery case. Could, if required, take the entire domestic management. Salary not so much an object as a comfortable home."

MIDWIFERY EXAMINATIONS.

SIR.—I am a young country practitioner, and most of the examinations I attend are half-guinea and guinea cases. I have been very much annoyed for some time past by women engaging me to attend them, and then getting it over with the aid of a nurse without sending for me. I have several times been afraid to take a couple of days' holiday, as I had so many engagements; and perhaps only two out of a dozen have sent. In this way, one gets little money, none of the easy, and all the bad cases. Can you, or some of your readers, inform me, through the *JOURNAL*, whether I can make these people who do not send for me pay? Is it not a contract binding on both parties?—Yours truly, H.

. It has, we believe, been decided more than once that, under such circumstances, the practitioner can recover his fee.

THE EDUCATION OF DEAF-MUTES.

We have before us an account of the very valuable exertions made by Mr. Van Praagh in this country to perfect the methods of instructing the deaf and dumb; they have been largely carried out under the auspices of benevolent members of the Jewish community. New and spacious buildings for the Jews' Deaf and Dumb Home have been opened in Walmer Road, Notting Hill. The institution was originally founded by the Baroness de Rothschild, and the success which attended the system of lip-reading practised in it was so great as to lead to the establishment of the Association for the Oral Instruction of the Deaf and Dumb of all classes and creeds. The association has its school for daily tuition in Fitzroy Square, under the management of Mr. Van Praagh. The Home in Walmer Road is under the direction of Mr. Schonheil, from the great institution of a similar kind in Vienna, where a hundred and fifty children are educated together. In Walmer Road, children born without the sense of hearing, or deprived of it by illness, are taught to read and speak not only English, but Hebrew, and to gather from the movements of the lips, unassisted by gestures or alphabetical signs, all that is said to them. Great care is also bestowed upon teaching them drawing. The girls learn needlework, and help in preparing meals. It was part of the proceedings at the opening of the Home that two little pupils—Phoebe Solomon and M. Jacobs—should recite addresses; and it was easy to catch the meaning of the words they uttered, though spoken in a foreign accent, and without the light and shade of expressional intonation. It was evident, from the manner of the children, that their intelligence had been remarkably brought out by good training; and they could be seen, and sometimes heard, chattering to each other by means of their lips with great volubility. The Chief Rabbi and the Rev. I. Samuel consecrated the building by prayer; and addresses were delivered by Mr. F. D. Mocatta, Professor Marks, Dr. Hermann Adler, the Rev. P. Magnus, and the Rev. Llewelyn Bevan. Dr. Richardson said, on the point of hygiene, that he had been through the Home, and could testify to its excellent sanitary arrangements. Mr. H. L. Cohen bore witness to the exertions of the Countess d'Avigdor and other members of the Ladies' Committee. Mr. Isaac Seligman, the treasurer, announced a deficit of £1,600, which was afterwards considerably lessened. Among the original subscriptions were £250 from Sir Francis Goldsmid, M.P., on condition of three like amounts being found; an anonymous gift of the required £750, through the Rev. Professor Marks; £500 from Baron Lionel de Rothschild; donations from Mr. Samuel Montagu; Mr. Lionel L. Cohen, and others.

A THEORY OF CONSCIOUSNESS.

OUR existing knowledge about the physiology of sleep does not go much beyond the fact, that the phenomenon in question is invariably associated with a comparatively bloodless condition of the brain. Pilgler attempts to take us a step farther by constructing an elaborate hypothesis of a physico-chemical order (Pilgler's *Beitrag*, vol. x, quoted in *Practical Medicine*, London, November 1875). Starting from the view that the functional activity of any organ, and more especially of a nerve-centre, depends upon a dissociation of living matter, which is itself only a modified form of albumen, the author goes on to speculate that the chemical potential energy which is used up in the formation of every molecule of carbonic acid is transformed into heat. In other words, the atoms of which this molecule consists are thrown into a state of very active vibration. These intramolecular explosions are propagated in all directions along the nerves to the muscular and glandular systems, which are in structural continuity with the nerve-centres. Frogs, deprived of oxygen, are thrown into a state of apparent death, precisely similar to sleep; from this they may be roused by a fresh supply of oxygenated blood. A certain proportion of intramolecular oxygen in the nerve-centres is thus essential to the waking state, since it enables a given number of explosions to occur in an unit of time at a given temperature. But, during the waking state, the energy of chemical affinity is used up much faster than the intramolecular oxygen of the grey matter of the brain can be replaced; consequently, the formation of carbonic acid steadily diminishes; and when the number of explosions per unit of time sinks below a certain minimum, sleep ensues. The entire energy of the brain is never really used up, but it sinks to a point at which, in the absence of all external stimuli, it is incapable of maintaining functional activity. This theory may be so developed as to explain most of the phenomena of ordinary sleep, such as its periodicity, etc.

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Mr. F. H. WALT (Springfield)—"University of Berlin," is a sufficient address.

A HOSPITAL SUGGESTION.

MR. W. MACKENZIE, C.E., Bank Savings of Dundee, makes a novel suggestion. He says:—"Were a large hospital site found in a protected and conspicuous place at the entrance-gates of infirmaries and hospitals, containing the names of the patients, and after these had been read in a few words, the condition of their health, I feel confident that greater interest would not only be taken in these institutions, but that more contributions would be placed in them by the general public."

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The *Hastings and St. Leonard's News*; The *Belfast News-Letter*; The *Sheffield Daily Telegraph*; The *Chester Guardian and Record*; The *Hereford Times*; The *Bristol Daily Post*; The *Statesman*; The *Birmingham Morning News*; The *Cork Constitution*; The *Newcastle Weekly Chronicle*; The *Worcester Journal*; The *Hobart Town Mercury*; The *Weekly Times*; The *Mid-Weekly Hampshire Independent*; The *Lincolnshire Herald*; The *Sunderland Daily Echo*; The *Co-operative and Financial Review*; The *South Wales Daily News*; The *Macclesfield Courier*; The *Glasgow Herald*; The *Croydon Advertiser*; The *Glasgow News*; The *Hastings and St. Leonard's Chronicle*; The *Metropolitan*; The *Londonderry Sentinel*; Saunders's *News-Letter*; The *Tenby Advertiser*; etc.

. We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

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BOOKS, ETC., RECEIVED.

Selections from the Records of the Government of India: Foreign Department. No. 100. India and Sanitary Report for 1874. Calcutta: Printed at the Foreign Department Press, 1875.

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Experimental Investigation of the Action of Medicines. By T. Lauder Brunton, M.D. F.R.S. London: J. and A. Churchill, 1875.

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Archives of Dermatology. By L. Duncan Bulkley, A.M., M.D. Sampson Low and Co. 1875.

CLINICAL LECTURE

ON
THE SCOPE OF DENTAL SURGERY.*Delivered at King's College, London.*

BY HAMILTON CARTWRIGHT, M.R.C.S.,

Professor of Dental Surgery at King's College, and Lecturer at the London School of Dental Surgery.

THE duty which devolves upon me of giving you a course of clinical lectures and demonstrations on dental surgery is a peculiarly pleasant and congenial one, inasmuch as I have to address a body of gentlemen who are studying medicine and surgery in a general hospital, upon a subject which has been looked upon too much in the light of a specialty, more separate than other specialties from medicine, and which I fear, as a rule, does not meet with that measure of attention which is its due; although, if you would give even a very small proportion of your time, in comparison with that allotted to your other studies, to its consideration, I am certain that you would thereby render yourselves good service in a future day. I fear that there are too many not only of those who are without the ranks of that branch of surgery which I profess, but also of the less highly cultivated practitioners within them, who seem to think that the practice of dentistry merely implies the filling or extraction of teeth; and I must confess that I have often been surprised at the ignorance of intelligent members of our profession in relation to diseases of these organs. Feeling strongly as I do, as a surgeon, the *rapproch* existing between this specialty and general surgery, I shall attempt to show you to-day, in this Introductory Lecture, the necessity, on the one hand, that the dental practitioner should not only be a fully qualified but also an intelligent surgeon, and, on the other, that the general surgeon, aye, and the physician too, may derive some benefit from studying those diseases, direct or indirect, which have their origin in morbid or abnormal conditions of the dental structures. You all recollect the fable of Menenius, wherein he pointed out to the dissident plebeians the harmony existing between the various parts of the human frame, applying the moral of his story to their divisions with the patrician body of the state. Now, the teeth are in as intimate relation with the body generally as is the eye or ear, and their morbid conditions can only be treated rationally upon such acknowledgment. The oculist and the aurist are fully qualified practitioners. The dentist should be so also, and it seems to me ridiculous that men should cavil about their status and position in the social scale, if they do not choose to educate themselves as other specialists are educated. The teeth must not be looked upon as mere pegs or nails inserted into living structure, but as organs having the most important relation to the whole system; and I think that I shall be able to prove to you that there is not a period in life when some knowledge concerning their development and condition may not be of service to you in any branch of practice, whilst the special objects of my future demonstrations will be to give you practical illustration of the treatment and diagnosis of cases quoted here, and to show you those operations which, having for their object the relief of pain or the arrest of disease, may be especially useful to those in country practice, or to those about to be engaged in the naval and military service of their country.

Firstly, consider, with me, the position of the maxillary bones, in which the teeth are implanted. Consider with how many nerves, with their attendant ganglia and plexuses, those teeth have connection. On each side, the oral cavity is in close proximity to the internal and external ear. Above, it is in near relation to the orbits and that oft-troublesome cavity the antrum, which is again in contiguity with the nasal fossæ, the contents of which are frequently affected as a result of dental disease; whilst, finally, the continuation of the oral aperture leads to the stomach, in which arise, should assimilation be imperfect, the first causes of faulty structural development, or in which are produced, if dyspepsia exist, those acids which, being eructed into the mouth, constitute a local source of dental lesion; whilst the unhealthiness of the mucous membrane of the gums may serve as a valuable means of diagnosis in various morbid conditions of the gastro-intestinal mucous track.

The necessity of some knowledge of dental surgery to the general surgeon, and of medicine to the specialist, is shown from the earliest period of existence. Caries and imperfection of tooth-structure are to a very great extent, I regret to say, diseases of civilisation; and my

experience as a traveller in many parts of the world has taught me how much influence climate and *modus vivendi* have, not only upon the condition of the teeth, but upon the body generally.

As a rule, the savage or aborigine scarcely suffers from dental lesion, save in those instances where the conditions of his life are peculiarly adverse to constitutional integrity. The freedom of the aborigine from disease undoubtedly depends, to a great extent, upon the healthy life he leads. His hours are regulated by the rising and setting sun, whilst his occupations all conduce to health; but, when the country is notoriously unhealthy, his system is affected by the existing factors of disease; thus it is remarked that, on the eastern side of the Rocky Mountains, where the climate is healthy and bone-forming food abundant, caries is unknown; whereas, on their western boundary, where animal food is very scarce, and the vegetable diet deficient in those elements which are the chief ingredients of osseous tissue, disease is not unfrequent. Mine has been the same experience in relation to the Zulu and Bosjesman tribes in Africa, and also with regard to various parts of China. If you ever happen to be near Hythe, in Kent, and will visit the old church there, you will see hundreds of the skulls of our Anglo-Saxon progenitors, and will find that their maxillæ are well developed and firm in structure, with not a tooth decayed in young or old; and in this specimen, at least two thousand years of age, found in a sarcophagus during excavations made at Cumæ some short time since, you see another proof that the changed conditions of modern life present important factors in the induction of disease. If you will examine more modern skulls, a very different story will present itself, decay revealing its ravages on every side. The causes of this disintegration of tissue are numerous. Change of climate may alike produce or arrest disease; thus when the healthy Irishman or Scotsman quits his home for another habit, where potatoes and oatmeal, rich in bone-material, are not abundant, in a few years he suffers from disease alike with those amongst whom he has sought another home; whilst, on the other hand, another person may regain new health in another clime, and the tendency to disease may cease. The argument from these facts is that, inasmuch as it is proved that a constitutional condition can exist in which the teeth may be free from caries, there is no reason why, if we discover the conditions of this immunity, we should not be able, in the course of a generation or two, to bring about a like result; for all evidence tends to prove that there are constantly recurring changes of waste and repair taking place in the dental tissues as in other parts, though naturally their structure forbids these being as rapid as in other tissues. I am confident that the prevalence of dental disease in the present day is in no small proportion of cases a direct consequence of the way in which our food is overrefined and prepared, so much so, that it is too frequently almost entirely deprived of those elements which are most requisite for the formation of firmly knit bones and healthy muscle; and I fear that parents will never be taught to understand, until they are instructed in the elements of physiology and hygiene as a part of their education, how often they are unwittingly responsible for the sufferings of their offspring. The bread of our Anglo-Saxon progenitors was prepared of crushed meal, in which the husk and the flour were mixed up together, so that all the necessary constituents for tissue-formation were retained, with such results as those to which I have alluded. The pregnant mother should be enjoined to make use of food containing an excess of nitrogenous material, so as to counterbalance the extra demands upon her blood for those inorganic particles which are necessary to build up the framework of her child. The child being born—and it is after birth that the greater portion of the bony framework is deposited—its digestion and its powers of assimilation must be carefully considered in determining the character of its food; whilst, in later years, it should be amply supplied with ossificient material, such as eggs and potatoes, and, above all, if its assimilative powers be intact, bread made with the bran. But the treatment of the child ought to commence with that of the parent during her pregnancy; and, to make her submit to this, she must be taught the responsibility which her condition imposes upon her in regard to the welfare of future generations. Could this be done, in a generation or two, many constitutional defects might be blotted out, and notably diseases like rickets, scrofula, and caries. I have had the good fortune to have some few children under my care from early childhood; and, by judicious attention to their digestive and assimilative powers, I have been enabled to arrest those ravages which, I am convinced, would otherwise have maintained their sway until nearly every tooth had been destroyed.

Let me next consider the subject of teething, a period so fraught with danger to the child, that no less than 5 per cent. of the deaths under one year, and 7 per cent. of the deaths between that period and three years, are ascribed to dentition. At this epoch, when the spinal predominates over the cerebral system, the slightest sources of irritation may lead to fatal results; for that which causes a shud-

in a certain way produce a contraction in the orbit. The symptoms of dental irritation may be connected with a condition of inflammation of the brain and its membranes, and in such cases a rational diagnosis might be of serious import. Whilst cursorily alluding to the maladies which are dependent upon the eruption of teeth, the eruptive stage, I cannot but draw your attention to the practice, in often exhibited in lancing the gums, that favourite method of treatment for actual or supposed dental irritation. There is little doubt that the gums are not only lanced during those periods of repose which characterise evolution, or when the osseous structure of the maxilla still remains unabsorbed over the advancing tooth, but that, as a rule, this operation is performed simply because, in a few cases, the relief of tension in congested tissue has sufficed to relieve an attack of convulsions. Where the tooth is just beneath the gum, or where there is manifest congestion, the incision of the parts may be productive of much benefit, but otherwise it is a procedure not only useless but barbaric. Retardation in development of the teeth is also a means of indicating future disease; for example, when their eruption is delayed beyond nine months, there is every reason to suspect that the child is suffering from rickets, a valuable means of diagnosing that disease for which we are indebted to Sir William Jenner. Next I must mention some of those diseases connected with the teeth which characterise a later period in life, than which none is of greater importance to the practitioner than neuralgia. If you will recall to mind the extensive sympathetic connections of the trigeminal or fifth nerve, it will not seem strange to you that the teeth should be often connected with reflex phenomena leading to simple spasm, neuralgic pain, or even epilepsy, whilst, in nine cases out of ten in which neuralgia attacks the upper extremity, a dental lesion will be found to be the exciting cause of irritation. This disease has the epithet "idiopathic" far too often applied to it; for in nearly every case a cause exists, though it may be concealed from us, whether it has its origin in the filament of nerve ensnared by cicatrix, in a hidden splinter or a lurking parasite. Doubtless, you are all familiar with a case quoted by Sir Thomas Watson, of a well known physician who was forced to relinquish an extensive practice and a distinguished position through the terrible agonies he suffered as a consequence of tic douloureux. Every remedy was tried in vain, until death revealed the cause, which existed in a small osseous excrescence upon the falciform process of the dura mater. If I could lay down an axiom with regard to the treatment of neuralgia, it would be, "Never rest until you have found the cause"; for it will often discover itself when least expected.

[Mr. Cartwright here related a case under his care, in which he found severe neuralgia of the parts supplied by the cervical and brachial plexuses to be due to the presence of a small piece of glass in a swelling over the third phalanx of the second finger of the right hand; the removal of which permanently cured the neuralgia.]

Like sources of irritation exist very frequently in diseased or abnormal conditions of the structures of the teeth, and my experience teaches me that this is a fact not sufficiently appreciated by medical men. The ordinary treatment of neuralgia is far too often empirical. One specific is tried after another with varying success, until all fail, whilst the oral cavity, so rich in explanations of reflex pain, is quite forgotten or overlooked. Caries is by no means the most frequent source of neural pain; for it is often to be found in exostosed cementum, or as a result of secondary dentine formed within the pulp; whilst, yet again, an osseous excrescence growing from the dentinal wall may, by its pressure on the nerve, be an exciting cause, as in the case of this beautiful and unique specimen prepared and kindly lent to me with others by Mr. Salter. It is sometimes difficult to discover the offending member; but a gentle tap, the alternate use of hot and cold water, or, if the pulp be sphacelated in a non-carious tooth, the appearance of opacity on exposure to a strong light, will make the culprit doff its disguise, and reveal a traitor in the camp.

Amongst my notes, I have recorded the case of another patient who had long been the subject of intractable neuralgia in the head and face. She had been in the hands of celebrated physicians, of quacks, of homœopaths and hydropaths, but with no relief. The pain invariably had its origin on the left side of the face, just over the malar bone. On examination, all her teeth seemed perfectly sound, and the tests mentioned above suggested no intimation of disease. One day, knowing my suspicions that the teeth might be the source of her trouble, he told me that she had an "undefined sensation" in one of the teeth, but she could not point out whether it was the canine or the bicuspid on the left side of the superior maxilla; but the renewal of the tests gave no sign of pain. After various experiments, I resorted to the use of a galvanic current, which made her say that she was certain that the canine was the tooth which had a different feeling from the others. Warned that the loss of the tooth would very probably not effect a

cure, she begged me to extract it on the chance of relief being afforded thereby. I did so, and, if you will examine this preparation of the tooth under the microscope, you will see that the cause existed in an almost total ossification of the pulp. After a week, her pain entirely ceased, and not long since she described herself to me as sitting at an open window on a cold day at the seaside—a thing which she had not dared to do for several years. Of such cases I have seen many; and the immediate relief which occurs upon the removal of the exciting cause of pain makes me somewhat question the correctness of the late Dr. Anstie's view in relation to neuralgia, that the seat of pain is invariably situated in the posterior roots of the spinal nerves, and that an essential condition of the tissue of those roots is atrophy. Then, various diseases of the ear, the nose, and antrum, and even amaurosis, have had their origin in diseased conditions of the teeth, so that an oversight as to the source of mischief might lead to the loss or impairment of the functions of at least three of the organs of special sense. Mr. Hancock, of Charing Cross Hospital, mentions a very remarkable case of amaurosis dependent upon nothing more than an overcrowded condition of the teeth. Four of these were removed with such good effect, that the sight, which was nearly entirely lost, improved at once, and was again perfect within ten days. I could quote many similar cases, many of which have occurred in my father's practice, some few in my own, but would refer all of you who are interested in the subject to Mr. Salter's valuable work on *Dental Pathology and Surgery*.

It must not be forgotten that the teeth are not only the sources of, but that they are not unfrequently the objects of, sympathetic irritation themselves, and have, doubtless, in the absence of adequate knowledge as to the cause of pain, been often condemned for the faults of other members, like certain unfortunate officers in a recent naval inquiry. Thus I have frequently seen a constipated condition of the bowels induce pain in the teeth; and in another case an attack of gout is always ushered in by intense dental suffering, which a dose of colchicum relieves at once; whilst I have long had a patient under my observation, who, suffering from hæmorrhoids, always has acute pain in his upper molar teeth when these become congested, which invariably ceases when an attack of hæmorrhage relieves the engorged vessels. Many of the tumours which afflict the maxillæ have their origin in a diseased root or an impacted tooth, these varying from the simple abscess to the cyst or odontome, in which latter tumour an appreciation of its character renders its removal the simplest of operations. A swelling occurring in connection with the unexplained absence of a member of the normal dental series should always suggest a hint in such cases, and it will be found that this class of tumour is invariably encysted, so that the removal of a little superficial bone will permit these growths to be enucleated with little loss of tissue.

Again, in a very large proportion of examples of abscess or neuroses connected with the maxillæ a local source of irritation exists, such as may be found in a wisdom tooth attempting fruitlessly to take its position where there is want of space, or, more often still, in the remnant of a fang over which the gum has grown. Such errors in diagnosis are frequently made with regard to patients of strumous and scrofulous diathesis, in whom the history of the case and the swollen glands too frequently mislead the unwary practitioner. Wherever there are sinuses in connection with the glands about the jaw, search for an errant root. You may have much trouble in discovering it; but, if you be successful, its removal will not only instantly cure the patient, but prevent that terrible disfigurement which is a result of abscesses in this position. I have witnessed the cure of long-standing suppuration diagnosed as scrofulous again and again by the extraction of a root, the presence of which was unsuspected by patient or practitioner.

Finally, every surgeon practising in the country or abroad, in places where special aid is not at hand, should be able to arrest pain and disease in the teeth, at least temporarily, whilst he should have some knowledge of the treatment of the milk-teeth, which he is often called upon to remove; indeed, with regard to the latter subject, his appreciation of the simple rule, never to remove a temporary posterior molar or canine without urgent reason, would alone prevent many subsequent deformities of the permanent denture.

Think how many teeth might be saved by the aid of a little special knowledge concerning their diseases. Such knowledge would be useful to all, but especially to those who are about to devote themselves to the preservation of the health of those who maintain England's glory and good name *per mare, per terras*. The agony which I have seen soldiers, and especially sailors, suffer from their teeth has been terrible, and in too many cases without a chance of satisfactory aid, unless it be by the extraction of the offending organs. By such unnecessary losses men are incapacitated before their time, and it is from a feeling of pure humanity that I would insist upon the necessity of army and naval officers devoting a short period to the study of diseases

of the teeth, thereby arming themselves with another weapon with which to combat pain and suffering. In future lectures, I shall hope to have opportunities of showing you examples of those direct and indirect results of dental lesion to which I have alluded to-day, whilst I shall especially demonstrate to you those operations necessary to alleviate pain or to arrest disease, whether temporarily or permanently, by more complicated means. My task will be a labour of love, if I can impress upon you the importance of my subject when considered in its highest *rappports*; whilst I shall feel that, in disseminating amongst you what little knowledge I possess, I shall be contributing in some small way towards the lightening of those burdens, and the assuagement of those many ills to which flesh is heir.

CASE OF GRAVE LESION OF BOTH CORPORA STRIATA;

RECOVERY FROM HEMIPLEGIA; EXTENSIVE CEREBRAL DEGENERATION; DEMENTIA; DEATH TWELVE DAYS AFTER RUPTURE OF INTRATHORACIC ANEURISM.

By W. JULIUS MICKLE, M.D.,

Medical Superintendent, Grove Hall Asylum, London.

E. B., a private in the 19th Regiment, was admitted into Grove Hall Asylum on May 10th, 1873, having previously been under treatment in India and at the Royal Victoria Hospital, Netley. He was single, aged 37; had seen eighteen years' service, sixteen of which had been passed in India. The attack of insanity for which he was admitted was stated to be the first, to be of about six months' duration, and was supposed to be the result of hereditary predisposition and tropical climate. A brother had been insane, and formerly under care in the lunatic wards at Netley. While still serving in India, E. B. suffered from an attack of hemiplegia in March 1872, but was said to have "recovered" from that, and to have subsequently become the subject, in succession, of rheumatism, of debility, and of mental derangement. Previously to his admission here, he had been fussy, childish, forgetful, demented, and, at times, confused.

On admission, his height was 5 ft. 5 in., his weight about 10½ stones. He was much bronzed by exposure to sun; the skin of the face was of a greasy parchment-like appearance; his hair was short, thin, and streaked with grey. The pupils were slightly irregular, the ocular fundus hazy. There was faintly marked right facial paralysis, and occasional very slight dragging of the right heel in walking; the grasp of the hands was about equal. His speech was low, mumbling, indistinct, but not stammering or tremulous. There was the scar of an old bubo in the right groin. The mental symptoms enumerated above still continued; there was great loss of memory, and the manner was childish and silly. He did not at all know how long he had been here, stated that he was forty-five years of age, and that his father had died two years before at the age of forty-six, and so on.

Double ophthalmia appeared during the earlier period of his residence here; but, after a few months, the traces of hemiplegia became even still less, and he seemed rather brighter, took exercise regularly, played interminable games of cribbage, etc., with his intimate companions; and his general health seemed to improve for a time under tonics. He made no special complaint of pain, or of any chest trouble, or of any symptom which might give rise to a suspicion of aneurism; but, on December 24th, 1874, it appears to have been noted that there was some cough, that the vesicular murmur generally was defective, that laterally there were large sonorous *râles*, and posteriorly some dulness. He was as usual until December 29th, when sudden profuse hæmoptysis occurred after he had retired to bed. The pulse was rapid, and there was irritable hacking cough. Absolute quietude was ordered; and ergot, gallic acid, and small doses of Dover's powder were administered. Profuse hæmoptysis recurred the same night at 3 A.M.; and, next day, there were dulness on percussion, distant respiration, and indistinct crepitation over the back of the left lung, and, in front, dry *râles* and feeble respiratory murmur, followed on the ensuing day by cooing expiratory *râles* at the front and side, and distinct crepitation and dulness posteriorly. On January 2nd, decided pleuritic friction-sound replaced the latter sign, and the dulness about the base and back was increased. Pleuritic creaking and percussion dulness continued to increase over nearly the whole posterior and lateral surfaces of the left lung, where, also, vocal resonance and fremitus were diminished or lost. But not only was there large effusion evidently present in the left pleural cavity; much of the lung, also, was consolidated; in various parts over the upper and anterior portions were increased vocal

resonance and fremitus, blowing, bronchial, or tubular breathing, with occasional large sonorous *râles*. There were exaggerated respiration; and compensatory expansion on the right side; and, throughout, the measurements of the halves of the thorax were about equal. The urine, became dark and smoky; dyspnoea came on, and gradually increased; the temperature was high throughout, the sweating profuse, the mind of its usual degree of clearness. The respiratory symptoms became more urgent day by day, and he gradually sank and died on January 10th, 1875. During this illness, the pulse and respiration on the successive days were: Pulse, 92, 100, 105, 114, 100, 108, 110, 120, 120, 128; respirations, 22, 25, 25, 30, 34, 32, 44, 42, 54, 60; temperature (third day), 102 deg.; last two days, 102.8 deg., and 103.6 deg.

NECROPSY, twenty-one hours after death.—*Head*: The vessels at the base were healthy. Much serum drained away during removal, etc., of the brain. The arachnoid and pia mater were thickened; the latter was œdematous. There was a considerable amount of sub-arachnoid serum over the frontal and parietal lobes, especially on the left hemisphere, filling up the wide and rounded sulci, and more particularly collected about the sulcus præcentralis, sulcus interparietalis, and fissure of Rolando. The membranes were but very slightly opaque, stripped off readily, and left scarcely any shreds in the sulci. There was moderate atrophy of the frontal and of the parietal gyri, with grooved indentation, and some wasting, of the inferior surface of the right occipital lobe. The cortical grey matter was rather thin, and of ordinary consistence and colour; its stratification was fairly marked, and its minute vessels unusually obvious. The medullary substance had a cribriform appearance from numerous dilated vascular channels; its consistence and sanguineous points were ordinary. The specific gravity of many of the convolutions was tested; but it need only be stated here that the departure from health in this respect was in two directions: firstly, the specific gravity, generally speaking, was .002 lower in the left than in the right hemisphere; and, secondly, the specific gravity of the posterior region more nearly approximated that of the middle and anterior than is usual in the healthy brain. The fornix was firm. The ventricles contained a moderate amount of serum; their ependyma was thick and firm. The choroid plexus and velum interpositum were adherent to the optic thalami; the third ventricle was dilated; the grey commissure absent. Certain areas of the intraventricular aspect of both corpora striata were softened, collapsed, shrunken, and of a drab yellowish or greyish tint. This change was more extensive in the left corpus striatum, the upper surface of which presented a patch of it, coarsely triangular in shape, of about the size of a sixpence, commencing a quarter of an inch behind the anterior border of the corpus; behind this, again, was a rounded and smaller area of *ramollissement*. There was, also, a patch of the same change on the intraventricular aspect of the right corpus striatum, similar in extent to the larger of those just described in the left ganglion, but placed more posteriorly and externally. On section, the softening and disintegration in the left corpus striatum were found to extend throughout the whole length of that body, and passed half an inch behind the level of the posterior border of the obvious change upon the superior surface; the two portions of softened, atrophied, and discoloured tissue, above described, jutting upwards, as it were, from the main body of the lesion, and cropping upon the intraventricular surface. On transverse section, the depth of the naked-eye change was found to be half an inch in the inner and middle thirds, and a quarter of an inch in the outer third. On section of the right corpus striatum, a similar lesion was seen, half an inch in depth, but less extensive, and situated slightly further back than that of the left side. In both, there appeared to be many vascular connective tissue-bands, the interstices of which were filled with diffuent material, which exuded on pressure. The optic thalami were slightly shrivelled. There were two small, firm-walled, cavities in the medullary substance, containing fluid *débris*, and traversed by minute bands, the larger of which lay immediately above the body of the left lateral ventricle, and the smaller above the anterior horn of the right. The average specific gravity of right corpus striatum was 1032½. The weight of the entire encephalon (*i.e.*, with two inner tunics, etc.) was 43 ounces; of the right cerebellum, 18½ ounces; of the left, 17¾ ounces; of the cerebellum, 4½ ounces; of the pons Varolii and medulla oblongata, ¾ ounce.

Microscopical Examination.—The vessels of the right optic thalamus, examined when fresh, were fatty, and the right corpus striatum was strewn with oil-molecules and large granular cells; there were granular and fatty deposits on its vessels. Prepared sections of the left corpus striatum exhibited fatty molecules, amyloid bodies, granular masses, and *débris*, twisted and broken nerve-fibres, fatty vessels, and points of much wavy connective tissue. In other sections, fatty-like molecules were still more prominent, and occurred either in aggregations, or widely strewn, or in fat-laden cells. The vessels of this corpus striatum pre-

sented a variety of alterations; such as the walls thickened, or covered by fatty molecules, or with dark granular intramural deposits. In places, there was bulging of the walls where they were thickened or replaced by the granular or the fatty deposits. The lumen of some was blocked by *débris*, others were tortuous, or kinked, or presented deposits at the bifurcations. In the fresh cortical substance, the capillaries were thickened, and dark granular masses were apparent in their walls; their outlines were irregular, and, at points, very slightly moniliform. In prepared sections from the left ascending parietal convolution, were rounded compound granular masses. The pyramidal nerve-cells were small, some granular; their fine angular outlines had disappeared, and their nuclei were rounded. There were also small round or oval cells containing granular matter, and some of the vessels were fatty or tortuous. In the first left frontal gyrus, were granular degeneration of the nerve-cells; granular collections on, and fatty like degeneration of, the walls of some of the vessels, whose outlines were thereby rendered irregular; some dilated perivascular spaces and points where shrunken vessels lay within their sheaths. In the tip of the left occipital lobe, the nerve-cells were small and granular; the vessels tortuous, thickened, or their walls bulging with deposits, mainly of a granular character.

The ax.—The feature of great interest here was an aneurism of the descending aorta, where its coats were extensively atheromatous. The aneurism was of the size of a large orange, was situated just below and behind the root of the left lung, and had grown forwards and to the left side; it had ruptured and still contained loosened masses of firm laminated fibrine covering its walls, and projecting at the rent. The sac was adherent to the spine, to the root and internal surface of the left lung, and was surrounded by large dark clots. The lower half of the internal surface of the lung was hepatised, and was deeply burrowed into, and irregularly excavated, by the aneurism and by the extravasated blood, which latter had passed through the disintegrated pulmonary tissue, and opened into some of the bronchial ramifications. The rest of this lung was inflamed; it was hepatised in parts, and was gorged with blood, and hæmorrhagic nodules were found here and there throughout its substance. It weighed $35\frac{1}{2}$ ounces, and rode upon blood-clot. Thirty-four ounces of fluid blood and of clot, mingled with some lymph, from acute pleurisy set up by the extravasation, were removed from the left pleural cavity, the walls of which were also thickened by old pleuritic membranes. The bronchi were deeply congested. The right lung weighed 17 ounces; there were emphysema and some old pleuritic adhesions; two-and-a-half ounces of fluid were contained in the pleural cavity. The heart weighed $10\frac{1}{4}$ ounces; the left ventricle was contracted; the mitral valves and aortic arch slightly atheromatous.

Abdomen.—The cones of the kidneys were deeply injected; the cortices granular and mottled; the capsules adherent. The right kidney weighed $4\frac{1}{4}$ ounces; the left, $5\frac{1}{4}$ ounces. The spleen was firm, pale, and weighed nine ounces. The liver weighed 65 ounces; it was pale and flabby; there were a cicatrix on the upper surface, and starred depressions on the upper and lower surfaces near the anterior border, connected with each other by septa of firm white fibrous bands traversing the gland.

REMARKS.—1. The absence of any noteworthy symptoms of aneurism was due to the partial filling of the sac with laminated firm clot, and to the situation of the tumour at a point of the descending aorta, where it did not implicate the pulmonary plexus to any marked extent. If, however, perception and sensation had not been blunted, the relation of the sac to the bronchus and vessels would probably have induced E. B. to complain of his chest. The patient survived twelve days after the rupture of his thoracic aneurism. The lung immediately adjoining the sac received the first brunt of the hæmorrhage; it was extensively inflamed, and the hepatised and engorged tissue was made ragged by the burrowing blood, which had found its way into the bronchi, on the one hand, and had caused profuse hæmoptysis; and, on the other had escaped into the left pleural cavity, and had set up acute pleurisy, with fibrinous effusion. The cause of the aortic atheroma was not clear. How far the influences of tropical climate, strain of the circulatory organs arising from the exigencies of a soldier's life, or syphilis, were engaged in producing it, cannot now be ascertained. Certain it is that the chronic cirrhosis of the kidneys found after death was only of moderate degree, had given rise to no special symptoms during life, and had not induced cardiac hypertrophy. The weight of the heart was quite within the normal range for a healthy man of his size and time of life, and was about one ounce less than the average found in cases of similar brain-disease in males of a corresponding age. (Burman, *West Riding Reports*, 1873, p. 232.) It is true the hair was prematurely thinned and tinged with grey, the features withered, and of parchmenty hue; and there was arcus senilis; but these indications are not characteristic

of renal degeneration alone. (Fothergill, *BRITISH MEDICAL JOURNAL*, January 9th, 1875.)

2. From the existence of atheroma and of aortic aneurism, one was led to expect that probably the small miliary aneurisms described by Bouchard and Charcot existed in the minute vessels of the brain; and that the attack of hemiplegia was caused by a blood clot, resulting from the rupture of one or several of these little aneurismal dilatations, which are not infrequently found in cases resembling the one described above. But this anticipation was not verified by the necropsy; the large vessels at the base appeared to be healthy; and numerous sections, from various parts of the brain, presented, under the microscope, no change of the character specified by the above writers, notwithstanding that the minute cerebral vessels were extensively diseased, and that certain changes on, or in, their walls were revealed; such as granular and fatty molecules, thickening, bulging, or twisting from intramural deposits, occlusion, etc. The microscopical appearances of the vessels resembled rather those observed by Major in senile atrophy of the brain (*West Riding Reports*, 1873 and 1874) than in chronic brain-wasting (*Ibid.*, 1873), differing from the latter mainly in the absence of any marked proliferation of the nuclei of the vascular walls. The changes in the minute vessels and cells were, in some respects, not unlike those found in certain cases of general paralysis. L. Meyer has described alterations analogous to some of those present in the above case, as being merely "characteristic of retrograde metamorphosis of tissues". (Abstract in *Journal of Mental Science*, October 1872.)

The cerebral degeneration was, in all probability, largely due to the abnormal state of the nutrient vessels, aided by the influence of the lesions of the corpora striata. No doubt the hereditary inclination to nervous disease made the cerebral tissues the more ready prey to the general departure from health, and to the premature senility; and there was the further stress of a long residence in the east. Degeneration had advanced to a greater degree in the left than in the right cerebral hemisphere; the weight of the left was the lesser, and the specific gravity of its cortex was lower than that of the cortex on the right side. Moreover, the under surface of the right occipital lobe was rather wasted, and there was not the normal difference of .002 to .003 between the specific gravity of the posterior and of the antero-median convolutional regions. (Bastian, *Journal of Mental Science*, January 1866, p. 493.)

3. But the principal gross lesions found in the brain of E. B. were those affecting both corpora striata. It has been seen how extensive was that of the left corpus, how the greater portion of this ganglion was implicated, especially in its deeper aspects; and how the tissue in the area of morbid change was completely broken down and almost reduced to mere *débris*; while a portion of the medullary substance immediately above the body of the lateral ventricle was converted into a minute cavity containing turbid fluid detritus. It has been seen, also, how, in the right corpus striatum, the complete *ramollissement* was confined to more narrow limits, especially in front, and, as on the left side, was associated with a minute cavity in the medullary substance—in this instance, situated above the anterior horn of the ventricle. Though one could not positively assert the contrary, there seemed to be no proof that the patches of *ramollissement* marked the sites of former hæmorrhages from ruptured vessels. Judging from the vascular condition, the portions of limited softening were probably due to thrombosis of the minute degenerated vessels supplying these regions; thrombosis which occurred long before he came under care here, and of which no noticeable trace might remain in the vessels after the lapse of so long a period. The portions of softened tissue were those mainly supplied by twigs from the middle cerebral artery to the corpora striata; and, on the right side, by those twigs, also, which pass onwards to the anterior and external portion of the optic thalamus. There was no history of the mode of onset of the attack of hemiplegia, from which he virtually recovered; and, therefore, no data for a clinical diagnosis of the particular lesion which produced it primarily. The average specific gravity of the various portions of the striate body was $1032\frac{1}{2}$, or considerably below the standard, which is about 1038 to 1039.

It was a feature of interest that, while so much of both his corpora striata were destroyed for all practical purposes, this man's hemiplegic symptoms were only slight when he was admitted, and scarcely continued beyond the earlier months of his residence in this asylum. True he was inert, indisposed to move, and walked slowly; but this, though partly from feebleness, was mainly the result of his mental condition. Part of the routine of his life here was to fall into the ranks, and march in the grounds with his fellow-patients. The only history of palsy to be obtained was that of an attack of hemiplegia about three years before his death—of which side not stated, the patient himself said it was of the right—and slight dextral hemiplegia existed when he was admitted. No history of symptoms due to the lesion in the right corpus striatum was known, and no symptoms of this character were observed while he

was here, unless, indeed, it aided in causing his inaptitude for exertion.

Finally, there was no aphasia. Speech was low and mumbling, he was disinclined to converse, his replies were usually nearly monosyllabic; but, when urged, he could, and often would, speak more fully to the point, and used his limited vocabulary without hesitation or mistake. The use of language was partly restricted by his mental condition; the impairment of articulation was merely of a paretic nature, and the essential characters of aphasia proper were absent.

HYDATID DISEASE:

AS ILLUSTRATED BY SPECIMENS CONTAINED IN THE PATHOLOGICAL MUSEUMS OF THE METROPOLIS AND IN OTHERS ELSEWHERE.

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IV.

BEFORE concluding my summary of the human hydatids contained in the metropolitan and certain other museums, there is in this connection an interesting literary contribution that I cannot pass unnoticed. In the November number of the *Indian Medical Gazette* for 1870, an article occurs in which it is stated that the Calcutta Medical College Museum contains eighteen specimens of hydatid cysts of the liver. This fact was, it seems, originally adduced to show not the frequency, but rather the rarity, of the occurrence of hydatids in India. However, from a valuable communication by Dr. James Cleghorn, which was published in the same periodical for the following March, it appears that hydatids of the liver are much more common in India than is generally supposed. This, according to Cleghorn, is owing to the circumstance that many of the so-called cases of tropical abscess are neither more nor less than examples of hydatid cysts that have suppurated.

I now turn to a phase of the subject from which much practical instruction may be gathered. The consideration of the pathological phenomena of hydatid disease as it affects the lower animals is of high interest, and no prejudice should induce any medical man from accepting such useful data as may be gathered from this source. The facts of hydatid parasitism in animals, though often peculiar, are, for the most part, of an order similar to those presented in the human subject. If any practitioner think it beneath his dignity to study the pathology of the lower animals, the conduct of John Hunter in this respect is a standing protest against such narrowness.

The museum of the Royal College of Surgeons of England contains some of the finest specimens of hydatids from the lower animals that are to be seen anywhere; the very choicest of them having been selected by Hunter himself. That distinguished man sought information from every available source; and hydatids were for him of almost equal interest, whether found in the body of a human being or in the carcass of an ox or an ass. Now, at all events, neither pathologists nor sanitarians can well afford to neglect comparative pathology; and, for myself, I am free to say that the yearly exposition to the students of the Royal Veterinary College of the phenomena of parasitic life amongst animals has brought with it an ever increasing knowledge of the most curious and often unlooked for information. Some of the data thus supplied are quite remarkable. Let me also add that my studies of the entozoa of wild animals have put me in possession of particulars of the highest value in regard to the larger question of the origin of epidemics. Beasts, birds, reptiles, and fishes of every description are liable to succumb to internal parasites, and there is practically no end to the variety of useful information to be obtained from this source. I have collected materials for a large treatise on this department of the subject, but I fear I shall never have either the means or opportunity of giving the facts due publicity. Here, for obvious reasons, I restrict myself to the hydatids, more or less properly so-called.

Referring, in the first instance, to those true hydatids of animals that have the same mode of origin, and that exhibit the same general characteristics as those found in man, I notice that four of the museums exhibit nine examples of liver echinococci. The Hunterian collection shows specimens of this kind from the pig, monkey, zebra, and lion. The museum at St. Bartholomew's Hospital contains two examples from the pig and one from a cow; whilst the animal liver-hydatids preserved in the King's College and Guy's Museums, respectively, are from the pig and sheep. That from the latter is partly calcified. Respecting animal hydatids affecting the lung, the Cambridge Museum exhibits a simple acephalocyst from a monkey, and the Guy's Hospital Museum shows a pulmonary hydatid from the kangaroo. In the museum at Oxford, Dr. Acland's (pathological) department shows a preparation of

"one large echinococcus cyst from the abdomen of a baboon", whilst Dr. Rolleston's department (anatomical) displays the echinococcus itself from the "cavity of the abdomen of the same animal". The collection also contains a variety of other bladder worms from different animals. The Hunterian Museum, Lincoln's Inn, exhibits four or five alleged examples of hydatids from the kidney of the sheep, besides another from the spleen. Some of these are very doubtful in character. A cystic kidney from the sheep, preserved in the London Hospital Museum, and originally supposed to have been due to hydatids, is (as hinted in the MS. catalogue) certainly not of parasitic origin. In regard to the occurrence of hydatids in the heart of animals, the Hunterian series shows two good examples from cattle, whilst the collection at University College exhibits one taken from the wall of the left ventricle of a sow. This was presented by Dr. Elliotson.

In the museum of the Royal Veterinary College, Camden Town, there are a number of excellent preparations of true hydatids taken from various animals, especially from cattle, swine, and sheep; and there are also many kinds of bladder-worms which, though often called hydatid by veterinarians, have a totally different origin from that of the true echinococci. The so-called gid-hydatids (*canuri*) and slender necked hydatids (*cysticercus tenuicollis*) are of this description. Specimens of the polyccephalus brain-hydatid, or *cenurus*, also exist in the museums connected with St. Bartholomew's, Guy's, and St. Thomas's Hospital Medical Colleges, as well as in both the anatomical and pathological departments of the Oxford Museum. Specimens of large *cenuri* occurring in the soft parts of rabbits may be seen in the Guy's Museum (presented by Mr. Carpenter). Similar characteristic specimens exist in the Oxford collection, labelled *C. caniculi*, obtained from the "mas-seter and infraspinatus" muscles of a rabbit. My private collection also contains a recent addition of this remarkable hydatid, sent to me by Mr. Alston from Ayrshire. It is the only one I have seen from Scotland. Three examples of the slender necked hydatid (from a monkey and two sheep, respectively) may be seen in the Guy's and University College collections, and several are preserved at the Royal Veterinary College.

I cannot go out of my way to speak of other bladder-worms, except so far as to call attention to the heart of a bear preserved in the museum at Guy's, the walls of which are crowded with cysticerci. That unique preparation ought to be more carefully examined and described. Lastly, in this immediate connection, I have only to call attention to the fact that the Hunterian Museum contains two really magnificent specimens of hydatids affecting the bones of cattle. In the one case, a large solitary vesicle occupies the shaft of the humerus; whilst in the other, several "acephalocysts" have taken up their residence within the cancellous structure of the ilium. These facts are of high interest when taken along with certain others of a like character, already adduced in connection with hydatid parasitism as it affects the osseous system of man.

INJECTION OF PERCHLORIDE OF IRON IN *POST PARTUM* HÆMORRHAGE RESULTING IN RECOVERY.

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IN considering cases in which death has followed the injection of perchloride of iron in *post partum* hæmorrhage, we should be careful not to attribute more of the result to the perchloride, *per se*, than actually belongs to it. In the case reported in the *JOURNAL* by Mr. Boddy, I cannot avoid the conviction that the manner in which the iron was used was the cause of death. I observe that from the commencement there was decided contraction of the os uteri, requiring "dilatation for the passage of the tube", and also that subsequently "the uterus was so firmly contracted around the tube that some little force was required for its withdrawal". It is evident, therefore, that there could not have been sufficient passage for the free exit of the solution—a point of very great importance. The pipe being introduced to the fundus, the nurse worked the syringe, and sixteen ounces were forced in. The question immediately suggests itself, what became of this fluid? Doubtless, it dilated the uterus, and at the same time escaped at the weakest points. Mr. Boddy contends that fluid could not pass through a contracted uterus, but it certainly might through the placental site of a forcibly distended one, especially if introduced in the jerking manner essential to the working of an "ordinary enema-apparatus". Then, again, why should not some of the solution have escaped through the Fallopian tubes?

In my experience, the two most essential points in the use of the perchloride of iron are—first, to see that there is a free passage

for the exit of the injection; and, secondly, not to use too strong a solution. I may mention that I do not consider one and three a safe strength. The liquor ferri perchloridi fortior thus diluted is a very different thing from a solution of perchloride of iron in water; the former is very strong in acid, and more caustic and irritant in its action. There can, however, be no doubt that the injection of styptics in severe cases of *post partum* hæmorrhage will save life after every other means have failed, but there is no reason why we should confine ourselves to the iron solutions; on the other hand, there are remedies equally efficacious and open to less objections; one of these, which I have used successfully, is chloralum. The following is a brief outline of a case in which I used iron.

August 8th. Mrs. C., primipara, was taken suddenly, whilst asleep, and prior to the commencement of labour, with copious hæmorrhage; and, being consumptive and very anæmic, was reduced to a state of the greatest prostration. To add to her danger, severe *post partum* hæmorrhage took place. I first injected vinegar and water; but, this failing, I used one part of liquor ferri perchloridi fortior to ten of water, which immediately stopped all hæmorrhage; and, although my patient suffered much from the extreme loss of blood, she had not a bad symptom in any way attributable to the iron injection; in fact, to it alone she owed her life. I should be happy to send full particulars of this case to anyone interested in the subject.

CLINICAL MEMORANDA.

TINEA CIRCINATA OCCURRING IN VERY NUMEROUS PATCHES, AND WITH UNUSUAL RAPIDITY.

HAVING lately seen a case of the above, similar in detail to that described by Mr. Nettleship in the JOURNAL of November 27th, I will briefly give a few particulars concerning it. Beatrice D., aged 10 years, the subject of strumous ophthalmia and other evidences of the strumous diathesis, was noticed, early in September, to have a red patch upon the neck, immediately above the right clavicle, about the size of a crown-piece. The surface was covered with minute branny scales, and gave rise to occasional itching. One or two small spots, similar in appearance, were noticed a few inches distant, the remainder of the surface being quite free. The parasitic nature of the disease being suspected, tincture of iodine was freely applied to the larger patch, with the effect of altering its character, and producing some irritation. The affected part then put on an eczematous appearance, discharging, for a few days, a thin serous fluid, and rapidly healed. About a fortnight afterwards, the child was again brought by its mother with ringworm, situated in patches, ten to fifteen in number, varying in size from a pin's head to that of a crown-piece, and scattered over both the trunk and extremities. Several of these had assumed a well marked circinate form, the larger being found upon the thighs and pubic region, and in the axillæ. Notwithstanding the thorough and constant application of remedies, including warm baths, etc., fresh patches continued to make their appearance, until as many as from twenty-five to thirty existed on the body at the same time, the former gradually dying away as the latter became more pronounced. The child was closely watched, but six weeks or more elapsed before she was entirely free from the disease. A microscopical examination showed nothing unusual either in the size or shape of the numerous mycelia, and spores, which were present, of the well known vegetable parasite the trichophyton tonsurans. A younger sister, during this period, exhibited a small patch of the same upon the forehead, which was effectually destroyed by one application of the solid nitrate of silver. This case occurred during an unusually prolonged wet season; and it seems very probable, as Mr. Nettleship suggests, that the atmosphere, when charged with an excessive amount of moisture, has the effect of favouring the rapid development of vegetable fungi.

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IDIOPATHIC OR PROGRESSIVE PERNICIOUS ANÆMIA.

HAVING, during the last eighteen months, met with five cases of this disease, I was much interested in an able article on the subject by Dr. William Pepper, Professor of Clinical Medicine in the University of Pennsylvania, which appeared in the October number of the American *Journal of Medical Science*.

Dr. Pepper describes minutely three cases which occurred in his own practice. The chief symptoms were: insidious and apparently causeless development of languor, debility, and pallor of the surface; palpitation; hæmic murmurs; passive œdema; a progressive reduction in the mass of the blood, and especially of the red blood-corpuscles; irregular fever; absence of emaciation in any marked degree; wandering delirium; coma; and death.

All three cases proved fatal. In two, the diagnosis was confirmed by *post mortem* examination. Fatty degeneration of the heart, liver, and kidneys was found. In one case, the only one in which the medulla was examined, "there was a profound hyperplasia of the marrow of the bones, with production of lymphoid cells, constituting a change similar to that described by Neumann, Ponfick, Mosler, and others as found in leukaemia". Dr. Pepper thinks progressive pernicious anæmia is simply the medullary form of pseudo-leukæmia. The truth of this view, he says, will be established, if it be shown that, in progressive pernicious anæmia, the lesion of the medulla be a constant one.

At the commencement of the article, the author quotes Addison's description of idiopathic anæmia, and refers to the contributions of Corrasio, Gusserow, Biermer, and other recent writers on the subject. He comes to the conclusion that the affection, as described by these recent authors, is not a new disease, but is one and the same as the idiopathic anæmia of Addison.

He then goes on to say: "It is not a little melancholy, if this conclusion be correct, to find that, in the native land of that great clinical master, one of the leading journals (*Medical Times and Gazette*, November 21st, 1874) accepts progressive pernicious anæmia as a disease *sui generis*, and observes that no case has as yet been reported in Great Britain."

In making this statement, Dr. Pepper has surely overlooked a communication from Dr. Wilks on the subject, which appeared in the BRITISH MEDICAL JOURNAL of November 28th, 1874. Dr. Wilks, referring to the supposed discovery of progressive pernicious anæmia as a new disease by Drs. Biermer and Immermann, says: "As foreigners are not so well acquainted with English literature as they should be, and as these two physicians may gain the credit of introducing a new disease into our nosology, I beg leave to remind your readers that the disease is well known in England, and that fatal anæmia is alluded to by most authors. I heard a lecture on it by Addison in 1843, and I myself published several fatal cases of the disease in the *Guy's Hospital Reports* for the year 1847-49." Dr. Wilks then quotes Addison's description of the disease; and gives the following extract from his own *Lectures on Pathological Anatomy*, published in 1859. "We occasionally meet with cases of fatal anæmia where no disease is found in the body; patients after being in an almost bloodless condition for some months, die, and all the organs are found pale, and some of them in a commencing state of fatty degeneration. There is, also, generally some exudation of serum into the serous cavities, as well as œdema of the lungs and other parts. I have now seen several of these cases (*Guy's Hospital Reports*, vol. iii); the blood resembles pink water, containing no coagula in the vessels or the heart; and the latter organ exhibits the form of fatty degeneration, where the internal surface, especially the left ventricle, presents the peculiar mottling from change in the muscular fibre."

At a recent meeting of the Northumberland and Durham Medical Society, I showed a patient suffering from the disease. I intend shortly publishing this and my other cases in detail.

BYRAM BRAMWELL, M.B.

Physician and Pathologist to the Newcastle-upon-Tyne Infirmary.

OBSTETRIC MEMORANDA.

CONJUGATE CONTRACTION: VERSION: DEATH FROM EMBOLISM.

ON September 8th, 1871, at 1.40 A.M., I saw Mrs. J., of Reigate, then in labour for the third time. The patient was a fat pale woman, whose circulation was feeble. She had given birth to two living children by a former husband after severe labours, the latter of which occurred in 1861. On examination, I found the head presenting in the first position, above a pelvic brim shortened in its conjugate diameter by a projecting sacral promontory. At 3.30 A.M., the pains, which were regular, failing to advance the head, I sent for Dr. John Walters of Reigate, and, on his arrival at 4.15 A.M., the patient being put under chloroform, I applied the long forceps. Traction was made well backwards, with the view of bringing the head round and under the false sacral promontory into the cavity of the pelvis. The forceps, after a patient trial, proving useless, I passed my left hand into the uterus, and turned. Every effort to deliver the head entire being unsuccessful, and the cord ceasing to pulsate, the skull, which was much ossified, was perforated through the occipital bone, and delivery completed at 6.45 A.M. The woman died on the sixth day after delivery, having suffered acute pain beneath the sternum and very urgent dyspnoea. Dr. Walters and I were of opinion that death was caused by embolism of the pulmonary artery. Most unfortunately, no *post mortem* examination could be obtained.

JOHN CRAIGIE, M.B., Lyme Regis.

BRITISH MEDICAL ASSOCIATION:
SUBSCRIPTIONS FOR 1875.

SUBSCRIPTIONS to the Association for 1875 became due on January 1st, Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, DECEMBER 18TH, 1875.

"SEASONABLE" WEATHER.

UNTIL the stubborn figures of the Registrar-General rendered it no longer tenable, it was a favourite theory that "seasonable" weather was good for mankind. By seasonable weather was meant hot summers and cold winters. It must be acknowledged that it is a somewhat unwelcome discovery, that cold wet summers and warm muggy winters are not only innocuous, but actively favourable to the public health; whereas fine hot summers and bracing cold winters invariably produce excessive rates of mortality. In England and Wales, the excess of deaths during a hot summer, as compared with a cold one, is to be numbered by tens of thousands, consisting for the most part of infants. The excess of deaths due to a long and severe winter, like that of 1874-5, reached a far more formidable total, and is shared, though unequally, by persons of all ages. These facts notwithstanding, it is still difficult to persuade the hale, the hearty, the well-fed, the well-clothed, and the well-housed, of the fatal results which follow a week or two of that frosty weather which gives them so much pleasure. Those who live under the above mentioned fortunate circumstances form so small a section of our communities, that it is next to impossible to judge of the real effect of extreme cold upon them. We know, however, that as we descend in the social scale, this effect becomes rapidly magnified. Hence it is that what may be called the excess death-rate due to cold becomes a sensitive test of sanitary condition in the broadest sense of that term.

Although we have arrived at the inevitable conclusion that, as the thermometer falls below a certain point, so surely will the rate of mortality within a brief period show a corresponding increase, we at present neither know the exact point at which the temperature becomes too low for human health, nor the exact period which elapses between the incidence of the low temperature and the commencement of its effect upon the death-rate. The returns of the Registrar-General only record the dates of registration, which vary principally between one and six days after the dates of death. In order to be able to make accurate observations as to the effect of temperature on the rate of mortality, it would be necessary to have a daily return of deaths, tabulated according to the date of occurrence, instead of registration. Until this information is made available, we have to content ourselves with such observations and conclusions as can be derived from the weekly returns of deaths as registered. Although falling short of that precision which in such matters is so desirable, we have already, however, derived considerable information from the study of these weekly returns.

The Registrar-General, in his weekly return relating to the seven days ending the 4th instant, although reporting an increase in the death-rate, published a more favourable return than might have been expected, considering the fact that in the preceding fifteen days the mean temperature had been so low as 33.7 deg., and 8.0 deg. below the average. The rate of mortality in the six-and-a-half millions of persons estimated to be living in eighteen of the largest English towns was remarkably stationary during the five weeks ending November 27th, and averaged 24.1 per 1,000. The influence of the cold weather during the fifteen days above mentioned caused the death-rate in the

week ending the 4th instant to rise to 25.9 in the eighteen towns, showing an increase of 7.4 per cent., or 239 deaths. In London, the increase due to the cold was equal to 5.2 per cent.; whereas in the seventeen provincial towns it was 9.6. This increase in the death-rate was remarkably small, when compared with the increase which has resulted from previous cold periods. The return for the week which has since elapsed, ending 11th instant, showed a considerable further increase of mortality; and the death-rate rose to 28.1 per 1,000 in London, which corresponded with the average rate in the eighteen large towns. In the same week of last year, following weather less severely cold than what has recently been experienced, the death-rate in these towns rose to 33 per 1,000. Without accurate information as to the daily occurrence of deaths, it is next to impossible to decide whether the recent cold weather has really been less fatal than usual, or whether, in consequence of an increase in the average interval between death and registration, due to recent changes in the law of registration, the real effect of the cold upon the death-rate is longer appearing in the returns. It may, in the meantime, be useful to recall some of the results of previous observations upon the effect of extreme cold upon mortality.

The cold winter of 1874-5 consisted principally of two long periods of low temperature; the one before, and the other after Christmas. With reference to the cold period before Christmas, the Registrar-General published some interesting figures showing its effect upon the mortality. The results were compared with those of a still more strongly defined cold period ending February 24th, 1855. During the five weeks ending December 19th, 1874, 9,871 deaths were registered in London, against 6,967 in the five preceding weeks of moderate temperature. Thus the excess of deaths due to cold in the five weeks was 2,904, or equal to 42 per cent. The percentage of increase at the five vicennial periods of life ranged from 38 per cent. between 20 and 40 to 175 per cent. among persons aged upwards of 80 years. In order to show how the effect of cold upon mortality increases with the ages of those exposed to its influence, or, in other words, how the power of resistance against this effect of cold declines with age, it will be useful again to refer to these calculations of the Registrar-General. Calculating the rate of mortality due to the excess deaths caused by cold, it was found to be 2.2 per 1,000 between 20 and 40 years, 9.4 between 40 and 60, 46.9 between 60 and 80, and 218.3 at 80 years and upwards. Thus what may be called the cold-mortality increased about 8 per cent. for each year of age over twenty years, and doubled every nine years. These figures, interesting in themselves, acquired a greater value from the fact that they corresponded almost identically with similar figures calculated for the six weeks ending February 24th, 1855, when it was also found that the excess death-rate from cold doubled every nine years; and, taking the excess rate at 20-40 years to be one, the excess at each of the three succeeding vicenniads was equal to two, four, and eight respectively. Thus it would appear that the excess of mortality from cold at different ages has a well-defined law, although this law is only applicable to a population living under the at present unsatisfactory sanitary condition of a large proportion of the people of England. It should, above all things, be fully recognised by sanitarians, that the excess death-rate from cold is not beyond control. In November and December, 1874, the excess death-rate due to cold was far more severe in the east than in the west group of registration-districts: a result of more unsatisfactory sanitary condition, including housing, feeding and clothing.

Dr. Griffiths, the Medical Officer of Health for Sheffield, in his excellent report upon the sanitary condition of that borough during 1874, embodied some facts and calculations showing the effect of the same period of cold weather (that in November and December last) upon the rate of mortality in Sheffield. These figures agreed with those published by the Registrar-General for London in a remarkable manner. The excess rate due to cold at all ages averaged 8.2 per 1,000 persons living in Sheffield, against 8.6 in London. At the first period of life—0-20 years—the cold appeared to be more fatal in Sheffield than

in London; whereas in each of the four subsequent vicennials the figures showed an opposite result. The increase of the effect of cold in regular geometrical proportion after twenty years of age was, however, as strongly marked in the Sheffield calculations as they were in those for London, in the two cold periods of 1855 and 1874.

There appears to be no means for satisfactorily distinguishing that portion of the excess of mortality directly due to diseases produced by the cold, and that probably still larger portion indirectly caused by the effect of cold upon invalids suffering from various forms of chronic disease. In the latter case, the undue number of deaths registered after cold weather may be said to have been hastened rather than caused by the cold. In this way, there is probably a considerable tendency to overrate the effect of cold upon the mortality. In London, during the five weeks showing the effect of the cold weather in November and December last year upon the mortality, it has been stated that the deaths from all causes showed an increase of 42 per cent. The increase in the mortality from diseases of the respiratory organs was, however, equal to 138 per cent.; and in that from heart-diseases, 56 per cent. It follows, therefore, that though by far the larger proportion of this excess was returned under the head of lung-diseases, there was a considerable remainder which appeared under other classes of disease. In London, of the annual excess rate of 8.6 per 1,000 from all causes during these five weeks, 5.9 was returned as due to diseases of the respiratory organs. In Sheffield, however, while the total excess rate was 8.2 per 1,000—nearly identical with that in London—only 3.8 was attributed to lung-diseases. Such a difference cannot, to any considerable extent, be due to variation in the manner in which the causes of death are certified; and it would be interesting to know under what classes of disease cold was more fatal in Sheffield than in London, which balanced the far lower fatality from diseases of the respiratory organs.

A more accurate knowledge of all the various aspects of the influence of cold upon mortality would be the first step towards rendering this excess more amenable to control. While we may venture to hope that the Registrar-General will contribute further towards our fund of information on this point, we must look to medical officers of health to furnish materials in greater detail relating to the effect of cold on different classes of the community and in different localities, which are essential to supplement the generalisations which have been furnished to us from the General Register Office.

THE young Rajah of Kolapore intends to devote from £20,000 to £30,000 to build a hospital at his capital, to be called the Albert Edward Hospital.

ACCORDING to the Italian journals, the Duke di Galliera has made the munificent donation of fifteen million *lire* (£600,000) for the erection of a model hospital in Genoa.

THE Berlin medical papers announce the death, at the age of 30, from blood-poisoning contracted in the discharge of his duties, of Dr. Paul Samt, senior assistant in the department for nervous diseases in the Charité Hospital.

PROFESSOR EDWARD MARTIN, director of the Royal Lying-in Institution and of the Obstetric Clinic in Berlin, died on the 5th instant, after suffering for several months from pyelitis.

THE Royal Commission to inquire into the practice of subjecting live animals to experiments for scientific purposes, met on Saturday, Monday, and Wednesday last; all the members being present.

WE deeply regret to announce the death of Dr. Desmond of Liverpool, an able, kindly, and public-spirited member of this Association, whose loss will be widely felt and deeply deplored. We shall publish an obituary next week.—We see also with regret the announcement of the death of Dr. Hassall of Richmond.

THE Committee of the Council of the Royal College of Surgeons have selected the names of the examiners whom they propose to recommend to the Council, who will meet on Monday for the purpose of electing. It is, we understand, desired that we should not meantime make public the names of the recommended candidates.

WE find we had omitted to notice that Dr. Carpenter had been gazetted "C.B." Dr. Carpenter must accept our apologies; this he will do the more readily, that he has many titles which to a man of science are so much the better worth having.

THERE will, we hear, in all probability, be four vacancies declared in the Council of the College of Surgeons next July, caused by the retirement in the prescribed order of Mr. John Simon, F.R.S., of St. Thomas's Hospital; Mr. Luther Holden, of St. Bartholomew's Hospital; Dr. Humphry, F.R.S., of Cambridge; and Mr. Southam, of Manchester. These gentlemen are all eligible for re-election; but a rumour has reached us that three will decline being nominated for re-election.

A "DEATH from tight lacing" is recorded in the papers. As, however, the subject of the story was seventy-seven years of age, and was ascertained to have died from the rupture of an aortic aneurism, the moral is not so impressive as it might be. It appears, however, that in addition to the ruptured aneurism, *post mortem* examination revealed a very sad state of things. The lower ribs were tightly jammed together, the sides nearly touching each other. The liver, intestines, stomach, and other organs were all jumbled up together, and were remarkable for their smallness. The kidneys, etc., were all drawn up in a frightful manner. Deceased was a tall, and had been a very beautiful woman; and this was caused by former tight lacing.

LUNACY APPOINTMENT.

THE Lord Chancellor has appointed Dr. Crichton Browne, Superintendent of the Yorkshire West Riding Asylum, to be a Visitor of Lunatics, in the place of Dr. Bucknill, who has resigned, owing to ill health. The appointment had been foreseen, and will be entirely ratified by the voice of the profession. It is a just recognition of the singular energy, skill, and ability with which Dr. Crichton Browne has conducted the administration of a great curative establishment, and of the scientific zeal and initiative power which he has shown in making his asylum a notable centre of clinical, pathological, and psychological investigation of nervous diseases. To the asylum itself, and to the scientific organisation which he had created, and which is still in its early youth, this appointment indicates a probable and very serious loss. We should rejoice for the sake of both to hear that Dr. Crichton Browne had been induced to decline the appointment, though it be the blue-riband of superintendents of asylums. The West Riding Asylum has, under his management, rapidly assumed a foremost position in the country; and to lose his services, then, at this juncture, would endanger the fruits of his successful labours just when they promised most highly.

MURDERS BY A LUNATIC AT NORWICH.

ROBERT EDWARDS, a labourer, aged 42, was admitted an in-patient of the Norfolk and Norwich Hospital on Saturday. On Sunday, he exhibited symptoms of nervous disorder, and was restless during the night. About five on Monday morning, the nurse in charge of the ward missed him, and communicated with two other nurses, and likewise reported the circumstance to Mr. Baumgartner, the house-surgeon. While searching for Edwards, they heard a noise below, and found one nurse talking with a boy, who said some one was killing the boys in his ward. Mr. Baumgartner went into one portion of the ward, and saw Edwards beating a boy, who was in bed, with a pair of tongs taken from the fireplace. Edwards turned upon him (the doctor) with a poker, but he parried the blow; and, with the assistance of a porter, the madman was secured. It was then found that

Edwards had murderously assailed five boys. William Martin, aged 11, was killed, John Lacy, 10, killed, Joseph Colman, 11, was killed. Lacy's and Colman's brains were dashed out. Martin lived only an hour after receiving his injuries. Alfred Clarke, aged 9, is not likely to recover. These four boys were inmates of one ward; and, while Edwards was attacking Clarke, the nurse, who slept in an adjoining room, was aroused, and, looking out to see what was the matter, Edwards levelled a murderous blow at her with the tongs, which she avoided by closing and barring the door. He then went across a passage to the other portion of the ward, where he was assailing Edward Lubbock, aged 9, when Mr. Baumgartner came in. The police were called, and he was removed to the station.

LUNATICS IN HOSPITALS.

THE shocking occurrence at the Norwich Hospital reveals, in the most appalling form, the weakest point of our hospital administration. It is an event from the recurrence of which no hospital can safely assert itself free of apprehension. That the hapless inmates of a sick-ward should be subjected to the rabid attacks of a maniac, and that he should be permitted to continue his savage onslaught until three or four innocent victims were slaughtered, argues either a deplorable helplessness on the part of the immediate attendants, a want of due surveillance, or a serious error with respect to the laws regulating the admission of patients. It appears that the patient, in this unfortunate instance, showed no premonitory symptom of insanity, and that the medical officer, by his promptitude and courage in encountering and disabling his antagonist, did all that a medical man could do under the circumstances; but there remains the important question, whether it is possible to prevent or to mitigate the liability to such accidents. Granted that, in a very small minority of cases, the homicidal impulse is exhibited without warning, and that the previous history of the case discloses no reason to apprehend untoward results, there still remain the necessary precautionary arrangements in dealing with doubtful cases of mental aberration, which no hospital which values its reputation can afford to overlook. But of all places used for the treatment of incipient mental disease, the wards of hospitals are probably the worst adapted. In many, though not in all, rooms are set apart, usually in the basement of the building, where refractory patients are sent till the attack of delirium tremens passes away, or it may be to remain under observation prior to being transferred to the workhouse, which, as the law at present stands, is the only passport to the lunatic asylum. Probably, no hospital would admit a lunatic with the knowledge that he is such, but every hospital is subject to the inconvenience of admitting patients suffering from cerebral disease, and accidental cases in which delirium tremens may sooner or later supervene. There appears no alternative with regard to cases of delirium tremens but to secure them in a separate room apart from the wards, and, if necessary, to employ physical restraint, as it is out of the question to place a patient with broken limbs in a padded room; but in cases of sudden impulse, emanating from a disordered condition of the intellect, it is important that the patient should be removed at once from the custody of the hospital authorities. Experience teaches us that, both suicidally and homicidally, the dangers to be apprehended from the presence of lunatics are in the earlier stages of the malady, before the symptoms are sufficiently marked to justify their detention; and it is in this condition that they readily gain access to the hospital. As a rule, they are placed in wards appropriated for medical cases, under the custody of women, who, whatever may be their merits in other respects, have a strong instinct of self-preservation, and who naturally rush away for assistance on the first outburst of fury on the part of the lunatic. It will probably be said that much danger might be avoided by the substitution of male for female nurses, and there are, no doubt, times in all hospitals when it is found necessary to secure the services of men to grapple with violent cases, but in no civil hospital in this country are male nurses specially retained for the purpose; and, considering the desultory nature of the employment, it is doubtful whether they should

be placed on the permanent staff of attendants. We have said that the most satisfactory method of dealing with cases of doubtful lunacy is to remove them from the hospital out of the reach of harm, to a place of safety, where they may be placed under medical observation prior to their transfer to a lunatic asylum. Unfortunately, the difficulties in the way are very great; and the daily press teems with reports of suicides and homicides, committed while their perpetrators were suffering from "a fit of temporary insanity". Admission to lunatic asylums, perhaps rightly, is hedged round with so many checks of a technical and medico-legal nature, that it is the next thing to an impossibility for a medical man to obtain admission for a patient at the time when restraint is most urgently required, and removal to the parish workhouse can hardly be looked on as an agreeable alternative. It is now some years since the Local Government Board expressed a wish to legislate on the subject, and made overtures to the Metropolitan Sick Asylums Board respecting it; but the matter, from some cause or other, remains in abeyance. Can nothing be done to rearouse the authorities to a sense of its importance?

DEATHS FROM CHLOROFORM.

A CORRESPONDENT writes to us:—The death from chloroform in the practice of a metropolitan surgeon, to which you last week referred as not having been made the subject of an inquest, or of any public notice is, I presume, the one which occurred on November 26th, in the Kensington district. The particulars of registration are as follows: "Nov. 26th, 1875. A female, aged 48, wife of a major-general, H.M.C. Cause of death. From a surgical operation during the inhalation of chloroform. Certified." We refer to this matter in virtue of the conviction which we have long since and repeatedly expressed, that the circumstances and *post mortem* appearances in every such case of death under the use of anæsthetics should, in the interests of humanity and of the advancement of the medical art, be fully placed upon record, in such a manner as to be brought under the notice of the profession. At the present time, when the relative value and comparative danger of anæsthetics are under active discussion, it is extremely desirable that all the contemporary and home facts should be impartially and accurately stated. We hope, therefore, to see the record of this in some one or other of the medical journals. We hear, also, of a recent death from chloroform at Glasgow, of which we expect next week to be able to publish particulars.

THE GREAT NORTHERN HOSPITAL.

A LETTER was read at the Council Meeting of the Charity Organisation Society, on the 6th inst., from the Hon. R. Capel, Honorary Secretary of the Great Northern Hospital, describing the system adopted at the hospital for checking misuse of out-patient relief.

"Perhaps it is the only hospital", wrote Mr. Capel, "that has upon its staff an officer whose sole duty it is to register the out-patients, to inquire into their circumstances, and to report monthly to the Executive Committee. This inquiry is made as inoffensively as possible, and I am assured by him that he is almost invariably well received, and is often asked to come in and sit down. Personally, I am disposed to think that a Provident Dispensary should be part and parcel of every hospital. I believe that a great number who now come for gratuitous relief would, if they could rely upon having the medical advice of the staff attached to such hospitals, be quite ready to pay the fees which are paid at Provident Dispensaries; but then arises the question, whether any should be attended to without payment? I would not shut the door of gratuitous relief, nor draw too hard-and-fast a line; but I would have a register, to prevent those in really good circumstances from becoming members of such Provident Dispensaries, and, on the other hand, to admit those a shade above the pauper class to relief without payment. I believe such a system would work well, though, like all changes, it might provoke opposition. It is doubtful, perhaps, whether our hospital has benefited by the system in a pecuniary point of view, but it is satisfactory to myself at least to know that a discriminating element has been introduced in the selection of the out-patients."

Mr. Bosanquet said that it was satisfactory to find that the Great Northern Hospital had a registrar. Mr. Fairlie Clarke had pointed

out, in an article in *Lancet* some years ago, that every hospital ought to have such an officer. It was essential that there should be some person at the hospitals competent to judge what inquiries it was necessary to make, and how different applicants should be dealt with.

ANTI-VACCINATORS IN BERLIN.

AN active agitation, says the *Berliner Klinische Wochenschrift*, has commenced in Berlin, having as its object the repeal of the compulsory vaccination law enacted about a year and a half ago; and a petition for this, with many thousand signatures, has been presented to the *Reichstag*. No new grounds nor any facts worth notice have been adduced; on the contrary, the old well known motives, based on gratuitous assumptions and false interpretations, have been brought into the field. It appears that this petition, which is accompanied by numerous pamphlets (mostly a *réchauffé* of old productions), has produced no small impression on some of the members of the *Reichstag*, so that it is possible that it may receive more consideration than it deserves. It can, however, scarcely be believed that the *Reichstag* can be induced to repeal the law, which has been generally hailed as an important step; but it would be to be lamented if even only a minority supported the petition. At a recent meeting, the Berlin Medical Society, at the suggestion of Dr. B. Fränkel, decided to throw the weight of its influence into the scale. Not one of its members supported the petition; on the contrary, the following resolution was passed unanimously: "The Berlin Medical Society, after consideration of all the objections raised in recent times against compulsory vaccination and revaccination, which objections it regards as feeble, considers that it is an essential step in the progress of public sanitation, and would regard it as a lamentable misfortune if the German empire should be again deprived of the benefit of the vaccination law of April 8th, 1874." A resolution to the same effect was passed at a meeting of the Public Health Society in Berlin on November 29th, and has been transmitted to the *Reichstag*.

MARRIED SOLDIERS' QUARTERS.

CONSEQUENT upon the fearfully fatal outbreaks of fever and diphtheria which attracted much public attention many months ago, the Woolwich cottages for married soldiers were cleared, and plans were then prepared by which ample accommodation would be secured for more than sixty families. The number of women and children there is unusually great, and much inconvenience was necessarily felt by those married men who were compelled, by want of room in barracks, to take their scanty lodging-money and pack their families into some unwholesome dwelling in the town far removed from their daily work. Under these circumstances, not only do they lose their allowance of coal and candles, as well as the advantage of a common laundry and bakehouse, but the actual pecuniary recompense received by them in lieu of these solid benefits is very insufficient, and they are deprived also of the wholesome discipline and restraints imposed on those who live more immediately under the eye of their superiors. Some years ago, a benevolent lady sought to alleviate this state of affairs by building a number of cottages in the immediate neighbourhood of the common, to be used as married quarters; but these, having now fallen behind modern sanitary standards, recently gave rise to the well known scandal in connection with an epidemic of diphtheria. There was little doubt, however, that the defects of these structures was very considerably exaggerated at that time, and, although they are at present unoccupied and somewhat decayed from neglect, we are informed that rectification of their drainage, and some slight structural alterations, are all that is necessary to render them fairly eligible habitations. In connection with them, schools and lavatories have lately been built on the most approved principles; and, when Government has made up its mind to sanction the expense attending the building to which we have already referred, we understand that its erection will take place on a piece of ground adjoining the cottages. One of our contemporaries ascribes the delay which has taken place in commencing operations to the necessity for utilising the ground now actually occupied by these

"condemned" structures, and to some difficulty of reference to the freehold, which prevents its being employed for this purpose. We are informed, however, that no such difficulty stands in the way, but that Government not unnaturally prefers to build on adjoining ground with equally good exposure and surroundings, and not involving the necessity for sweeping away the already existing quarters, which may not impossibly be yet turned to good account. We should be glad, however, to hear that there is some reasonable prospect of action being taken in this matter. The disgraceful and degrading accommodation too often provided in former years for the wives and children of the married soldier was a scandal to any civilised country, and an insult to respectable women. Nothing used to be more common at Aldershot than for five or six families to be put up in one hut, the only semblance of partitions being extemporised from rugs suspended here and there by some rudely constructed appliance. Under such conditions, cleanliness and morality must suffer, epidemics make rapid progress, all sense of home comfort be rapidly destroyed, and that gradual hardening process exist which made these unfortunate women soon sink into the worst form of slatternly domestic drudge. If we wish to encourage recruits to enter our ranks, and hope to compete on any equal terms with the present prosperous state of the labour market, we must put our soldier's house in order, and endeavour to secure for him something like order and decency in his domestic life.

EPIDEMIC OF FEVER IN SHEFFIELD.

ENTERIC fever is now fatally prevalent in the borough of Sheffield. The deaths referred to typhus, enteric, and simple fevers in that town averaged five per week during the first six months of this year. In the three months ending September, this weekly average rose to seven; and, in his last weekly return, the Registrar-General calls attention to the fact that the deaths referred to this cause were 10, 11, and 18, respectively, in the three weeks ending on the 11th instant. In order to show the exceptional fatality from fever in Sheffield last week, it is stated that the 18 deaths were equal to an annual death-rate of 3.5 per 1,000; whereas, in the seventeen other large towns, the fever-rate last week did not exceed 0.4 per 1,000. The workhouse at Sheffield is overcrowded with fever-patients, many of whom are not admitted until past hope of recovery. The responsibility for this fever-epidemic would appear to fall in great measure upon the Town Council, as the urban sanitary authority for the borough of Sheffield, if, as we are informed, it is a fact that they have neglected to provide any hospital accommodation for the isolation and treatment of infectious diseases, notwithstanding remonstrances both from the Local Government Board, and from their own medical officer of health, Dr. Griffiths. In spite, too, of the admittedly wretched condition of a large proportion of the houses inhabited by the working classes in Sheffield, there appears to be no alacrity upon the part of the Town Council to take advantage of the powers they possess under the Artisans' Dwellings Act of last session.

UNQUALIFIED MEDICAL ATTENDANCE.

OUR attention has been attracted by the report of an inquest held on a child whose death occurred under the following circumstances. It appears that in Bethnal Green there is established a mission-hall devoted to preaching the Gospel and alleviating the sufferings of the poor. On week-days, a woman attends there, and assumes the duties of a medical man; and relief in that respect is afforded poor people who are unable to pay a doctor, or who are unwilling to apply to the parish. The mother of the deceased child took him to the mission-hall, as he was unwell. She there entered a room fitted up like a doctor's shop, and received from a woman a bottle of medicine and some cod-liver oil. The deceased not getting better, she went to the woman and asked her whether, in the event of his dying, she would give a certificate, to which she replied that she could not. The mother then took the deceased to Mr. Schmidt of Bethnal Green Road, but he died at four o'clock the same day. Mr. Schmidt deposed that, when the child was brought to him, it was in a sinking condition. He had since

made a *post mortem* examination, and found the immediate cause of death to be bronchitis. From the conditions of the lungs and general appearance of the internal organs, he was of opinion that the deceased had needed the most skilful treatment. He was unable to say positively that, had the deceased been attended by a medical man, he would have recovered; but its chance of living would probably have been greater. The jury returned a verdict of "Death from natural causes"; but the verdict might not improbably have been one of manslaughter. At any rate, much blame attaches to those who promote and support an establishment of the kind, where responsibilities are assumed which are not warranted by the possession of the necessary medical skill and qualifications. In view, too, of the extensive provision made for the sick poor by hospitals and dispensaries in all parts of London, such a course of proceeding is as unnecessary as it is manifestly dangerous.

THE DEATH-RATE IN LONDON.

LAST week, 1,856 deaths were registered in London, which number exceeded by 117 the average of the week, and was equal to a death-rate of 28.1 per 1,000, a higher rate than in any previous week since the end of March last. There were 303 deaths from the seven principal zymotic diseases, or 17 above the average. This excess of zymotic deaths was principally due to the fatal prevalence of scarlet fever (which caused 103 deaths) and whooping-cough (to which 75 deaths were referred). During the twenty-two days ending last Saturday, the mean temperature was continuously below the average; the mean for this period was 33.6 deg., and the average deficiency 8.0 deg. The deaths referred to diseases of the respiratory organs, which in the eight preceding weeks had slowly increased from 194 to 391, rose last week to 536, and exceeded the corrected average number of the week by 71; 342 resulted from bronchitis, and 132 from pneumonia.

BRITISH MEDICAL DEFENCE ASSOCIATION.

AT a general meeting of the members of the British Medical Defence Association held on the 10th inst., Dr. B. W. Richardson was elected President for the ensuing year; Dr. Alfred Meadows and Mr. James R. Lane, F.R.C.S., were elected Vice-Presidents; and Mr. George Brown was elected Honorary Secretary. The Council and remaining officers of the Association are to be appointed at an adjourned meeting, to be held at the Guildhall Tavern, Gresham Street, on Tuesday afternoon next.

THE MEDICAL USE OF BRANDY.

DR. DIPLOCK, the coroner for West Middlesex, lately held an inquiry at the Royal Eagle Tavern, Keppel Street, Chelsea, touching the death of Sarah Bull, the infant daughter of a labourer. The father of the deceased stated that she appeared a little poorly on Saturday morning last. He sent to a chemist for a cough mixture, which was given to her. On the Monday, she having become worse, he went to Mr. Woolrych of the King's Road, who advised him to give her brandy and milk. He refused to give the child brandy, as he was a total abstainer, and did not believe it would do any good. Mr. Woolrych then told him to call in another medical man. Witness went for Dr. Scatliff, but the child died before he arrived. Mr. Woolrych deposed that, when called to see the child, he found it suffering from a lung disease. Its life could be saved only by the administration of a stimulant, and he ordered brandy because it was the most easily to be obtained. The father was very rude, and said that he would not give the child brandy. In reply to the coroner, the witness stated that he did not suggest any other stimulant, such as ether or chloroform. He could not positively say that, if the brandy had been given, the child would have lived. Undoubtedly brandy or some other stimulant was necessary. The coroner told the jury the case was a parallel one to that of the Peculiar People. The law in their case had been held to be that if a man acted *bonâ fide* and to the best of his conscience—but his must be conclusively proved—then he was not criminally responsible. The medical man could not say in this case that the brandy would

probably have saved the child's life, but if he had, he should have told them it was their duty to return a criminal verdict against the father. He should ask them to consider whether there was culpable negligence or not. The jury returned a verdict of "Death from natural causes". Our comment upon this case is that, if the medical man thought and declared brandy essential to the child's life, the culpability of the father in declining to obtain it is clear. On the other hand, fair allowance should be made for the conscientious scruples which many persons entertain against the use of alcoholic stimulants in the forms in which they promote drunkenness, and thus become the dread source of immeasurable crime and misery. We do not easily figure to ourselves any such case in which a diffusible stimulant of a strictly medicinal character might not, under pressure of such scruples, be advantageously employed.

NEWCASTLE-UPON-TYNE WORKHOUSE INFIRMARY.

AT the meeting of the Newcastle-on-Tyne Board of Guardians on November 26th, a report upon the workhouse infirmary, from Dr. Mouat, her Majesty's Local Government Board Inspector, dated Nov. 20th, was read by the chairman. The report spoke in very high terms of the infirmary. The building was erected four or five years ago under the superintendence of Mr. Septimus Oswald of Newcastle, architect. The above report is not the first official commendation which the building has received, the Lunacy Commissioners having reported upon it when near completion as "incomparably the best accommodation for the sick poor anywhere known to them, creditable to the humanity as well as public spirit of those who have provided it, and a honour to the town".

HOSPITAL SUNDAY FUND.

A MEETING of the managers of this fund was recently held to appoint a day for considering the date of the Hospital Sunday Collection in 1876; and a notice was prepared convening such a meeting for the 22nd inst. Though this was the main business of the day, some other subjects were incidentally discussed; among these, two are of sufficient importance to call for a passing notice. Mr. Hogg drew attention to the fact, that several hospitals had been assisted out of the fund, of the usefulness of which the profession entertained grave doubts. It is well that this fact—for a fact it is—should be plainly stated, and carefully considered by the manager. No doubt it is delicate ground to tread upon; but the first report of the fund led us to believe that some censorship would be exercised, and the need for it has certainly not diminished during the last few years. It would have a very damaging effect upon the fund, if it were found by experience that it tended to encourage such undesirable institutions as those to which Mr. Hogg alluded. Canon Miller moved for a committee to inquire into the question of the distribution of tickets, and urged that hospitals receiving grants should be required to give tickets in return for the same. This would surely be to aggravate and perpetuate an evil. Among all the moot points connected with hospital reform, there is scarcely one upon which there is so much agreement as upon the evils of the ticket system. As upwards of 800 churches and chapels gave last year less money than in 1874, it is not wonderful that the managers of the fund should cast about for means to increase their popularity. But nothing will be gained in the long run by descending from a higher line of action to a lower. No ultimate benefit will arise from encouraging those hospitals which are of most questionable utility, or from trying to please those persons who cannot give a guinea for charitable purposes without demanding a *quid pro quo*.

IRREGULAR PRACTICE IN BAVARIA.

A MINISTERIAL order, dated July 1873, provides that, before the first of March in each year, a tabular return shall be made of persons practising medicine without due authority in the kingdom of Bavaria. The table for the present year is published in a recent number of the *Ärztliches Intelligenz-Blatt*. It shows that there were, on January 1st, 1,156 illegal practitioners—911 men and 245 women—in the kingdom: and gives

statistics as to the nationality, social condition, and calling of the various persons, and the department which they practise. There are 106 homœopaths—99 males and 7 females; 39 bonesetters—28 males and 11 females; 15 rheumatism and gout doctors; 2 hydropaths; while 4 gave their special attention to skin-diseases, 2 to cancer, 2 to syphilis, 7 to hernia, 4 to whitlow, 1 to toothache, etc., and in the list are 396 *chirurgen*, barber-surgeons and dentists, and 40 apothecaries. Medicine in general is practised by 464; internal medicine by 112; and surgery by 50.

SCOTLAND.

THE Police Commission of Dundee have resolved to appoint a public analyst, and have remitted to the Sanitary Committee to recommend a suitable person for the office, and to report upon the amount of remuneration which should be attached to it.

THE Queen in Council has approved of the alterations made by the Aberdeen University Court on the ordinance which regulates the number of examiners in medicine in that University; and in future six medical examiners will be appointed by the Court, instead of three, as at present.

It was stated to the Dundee Parochial Board last week, that three foreign seamen who had arrived at Dundee on board a vessel from Calcutta, and who had become insane, had been sent to the asylum at the expense of the parish. The clerk said he had written to the members of Parliament for the town, asking them to ascertain from the Government whether the parish could not be relieved in the matter. It was agreed to communicate with the Boards in Aberdeen, Glasgow, Greenock, and Leith, on the subject.

THE MONTROSE ASYLUM.

AT the meeting of the Montrose Asylum and Infirmary Board, a report was read from Sir James Coxe, M.D., in which he drew attention to the desirability of having the proposed extensions to the asylum proceeded with. It was stated that the extensions would cost about £5,000. The matter, as well as the plans of the architect, stand over for further consideration.

EDINBURGH OBSTETRICAL SOCIETY.

ON Wednesday, the 8th instant, the Edinburgh Obstetrical Society held a meeting, to which all the members of the profession in Edinburgh and the neighbourhood were invited, to hear an introductory address from Professor Simpson, the newly elected President. The address was on the subject of Menstruation, and was a masterly sketch of what is known on the subject and its connection with utero-gestation. A vote of thanks to the lecturer was proposed by Dr. Matthews Duncan, and seconded by Dr. Moir. There was a large attendance of Fellows of the Society and others.

THE CHAIR OF PHYSIOLOGY IN GLASGOW UNIVERSITY.

DR. ANDREW BUCHANAN has intimated his intention to resign the Chair of Physiology or Institutes of Medicine in Glasgow University at the end of the session. This step has immediate reference to an article and correspondence in one of the daily papers, in which it is alleged that this class has been for some time in an unsatisfactory state. We understand that the University Court were about to inquire into the condition of the class when they received the intimation of Dr. Buchanan's intention to resign, which caused them to suspend the inquiry. Dr. Buchanan has sent an exceedingly intemperate letter to the newspapers, the publication of which, we are sure, his friends will regret. The appointment to the Chair is in the gift of the Crown. It is understood that Dr. McKendrick of Edinburgh intends to become a candidate. Dr. McKendrick's claims to such a position are of the highest order. As an original investigator, he has few rivals; as a teacher, his

power of lucid exposition and brilliant demonstration are widely recognised; and his tutorial powers and capacity of managing a large class are proved. Dr. McKendrick's services would be valuable to any University, and the University of Glasgow is fortunate in the conjunction of circumstances which has set them free at a period when its physiological chair is vacant.

AN EXTRAORDINARY CASE OF POISONING.

AN extraordinary case of poisoning occurred in Lochmaben last week. On Thursday, the assistant in a druggist's shop in the town had occasion to leave the shop for a short time, and, on his return, he found a woman in the shop drinking from one of the bottles, which contained tincture of cantharides. Remedies were immediately used, but the woman died in a few hours from the effects of the poison. She was a confirmed laudanum-drinker, and had been in the habit of watching when no one was in the shop, and entering and taking laudanum. On this occasion, she had mistaken the bottle. We should be glad to hear the symptoms and course of this case from the medical men who saw her, as the drug has been rarely used as a poisoning agent.

IRELAND.

IT is commonly reported, that Dr. Burke will be the medical member of the Local Government Board in the vacancy caused by Dr. McDonnell's resignation. Mr. Rawdon Macnamara has received a very strongly worded testimony, supporting his claims, from a number of the leading medical men of the city.

DAMAGES FOR INSUFFICIENT RESTRAINT.

A CASE of considerable interest to the managers of public or private hospitals has just been tried at the Court of Queen's Bench, Dublin. The following is a statement of the case: *Denis Morrissey v. James Duncan and others*.—This was an action to recover damages, laid at £4,000, for injuries sustained by the plaintiff through the alleged negligence of the defendant. The plaintiff was a dealer in whiskey, carrying on business in Dublin; in the year 1871, in consequence of a family affliction, he became addicted to intemperate habits, and, in the year 1872, he had an attack of delirium tremens. He was removed to the Maison de Santé Hospital—a private hospital conducted by the defendants—in order that he might receive the care and comforts of a hospital, as well as the medical attendance suitable to his malady. He was at that time three weeks in hospital, and returned home perfectly cured. In August, 1874, he again fell into habits of intemperance, and was again attacked with delirium tremens. He was again taken to the Maison de Santé, and, in addition to the ordinary charges, he paid a sum of £1 8s. per week for an attendant who was expected to keep a constant watch upon his movements. It appeared that there was a room on the ground floor set apart for delirium tremens patients; but for some reason the plaintiff was removed to a room on the third story, and after he had been for some time under treatment, he took advantage of the absence of his attendant and jumped out of the window, the result of which was that he received a compound fracture of the leg, which was successfully amputated on September 22nd. The plaintiff's case was, that proper care had not been taken to prevent him doing a dangerous act when suffering from delirium tremens; that the attendant was improperly absent when the plaintiff jumped from the window, which was not properly secured. The defence was, that the attendant was careful and attentive; that all precautions had been taken to secure the patient against injury; that when he was in a dangerous condition he was placed in a room on the ground floor specially provided for delirium tremens cases, and only placed upstairs when it was considered safe to do so; that he was convalescent when he jumped from the window; that the patient had been insane and confined in a lunatic asylum before admission to the Maison de Santé. This fact had not been communicated by the pa-

tient's friends to the managers of the Maison de Santé, and therefore arrangements had not been made to treat a person liable to maniacal attacks apart from delirium tremens, and that it was in one of such attacks that he jumped from the window. The jury were unable to agree to a verdict, and were accordingly discharged. We understand that a new trial will take place shortly, so for the present we abstain from remark upon the case.

TYPHOID FEVER IN DUBLIN GARRISON.

A PAPER by Dr. Albert A. Gore, Surgeon-Major to the Military Prison (read before the Medical Society of the College of Physicians of Ireland, on the 8th instant) contains the following statement with reference to the recent prevalence of fever in the Dublin garrison, by which it will be apparent that quite sufficient ground existed for recent rumours and for our statements. In former days, the Irish command was unpleasantly notorious for the production of all forms of febrile disease. The military records of the seventeenth and eighteenth centuries, show that continued fevers, called by Boate the "Irish ague", was very prevalent, but the history of the disease is so mixed up with that of epidemic dysentery, an acute specific disease, thought by Dr. Murchison, in our own time, to be very closely allied to typhoid, which stood next in order of frequency of occurrence, that to differentiate the two is not always easy. Between the years 1837-46, continued fevers of all kinds, including typhoid, accounted for an annual ratio per 1,000 *per annum* among the troops in the United Kingdom as below :

	Admitted.	Died.
Dragoon Guards and Dragoons	51.9	1.36
Royal Artillery	50.0	.65
Foot Guards	77.7	2.44
Infantry Regiments	69.9	2.45

Since that period the Foot Guards have always shown the highest ratio of admissions. In 1859, the annual ratios had fallen with improved sanitation.

	Admitted.	Died.
In Dragoon Guards and Dragoons to	27.8	.37
Royal Artillery	26.0	.35
Foot Guards	32.2	.84
Infantry Regiments	24.0	.66

The minimum was reduced in 1867, when there were among

	Admitted.	Died.
Dragoon Guards and Dragoons	9.0	.52
Royal Artillery	14.2	.00
Foot Guards	16.6	.72
Infantry Regiments	15.5	.96

From that year until the present, there has been, on the whole, a gradual rise or increase in the admissions from these various forms of fever, the ratios being, in 1872, among

	Admitted.	Died.
Dragoon Guards and Dragoons	17.0	.19
Royal Artillery	22.5	.38
Foot Guards	25.5	.49
Infantry Regiments	18.0	.38

In the Dublin garrison alone, the ratio per 1,000 *per annum* of admissions and deaths from continued fevers from among all arms was as below:

Year.	Admitted.	Died.
1860	27.47	.37
1861	32.80	.41
1862	29.10	.00
1863	13.10	.65
1864	14.70	.85
1865	15.00	.68
1866	13.60	.60
1867	21.40	2.97
1868	20.60	2.24
1869	24.60	.70
1870	19.40	.22
1871	19.00	.87
1872	29.90	.40

According to Dr. Grimshaw, fever among the civil population of Dublin steadily decreased from 1866 to 1869, since which last year it has been rising again. If the army medical returns are referred to, it will be seen that the admissions from typhoid have followed much the same course; the fall and rise in the military statistics corresponding on the whole with the fall and rise in the admissions into the civil hospitals of the Irish metropolis. In 1871, the excess in typhoid admissions occurred at Aldershot and Mullingar—twenty-eight cases and seven deaths at the first; eighteen cases and two deaths at the last station. In 1874, outbreaks of this fever occurred at the military prisons of Limerick and Dublin, traced also to faecal poisoning, and in the present year at Duncannon Fort, where it had been for some years since epidemic. Fever is never absent from Dublin. It seems to be an endemic and epidemic disease, and appears to depend especially upon the weather, presenting a tendency to prevail in the first quarter of the year. It becomes very fatal in the autumn, when the mean temperature falls below 54 deg., the mortality beginning to rise with the falling temperature. As the summer goes on, typhoid shows, according to the tables published by Dr. Moore, a decided tendency to increase at an earlier period than typhus. There is a striking increase in the percentage of the amount of typhoid towards the close of the year, while the highest percentages of typhus are met with in the contrary seasons of winter, spring, and early summer. According to the Registrar-General's returns, Dublin, with a population of 314,666, yielded during 1837-74, the following number of deaths from fever :

Typhus.		Typhoid.		Simple Continued Fever.	
1873	1874	1873	1874	1873	1874
54	103	144	182	53	61

It will be seen from these figures that not only was the febrile poison more active in 1874, but that this increase was spread over all the forms of fever, and not confined exclusively to typhoid. Among the troops, however, the admissions were almost confined exclusively to typhoid, owing probably to the fact that some of the essentials to the production of typhus—viz., want of food, proper clothing, *plus* undue exposure to wet and cold and overcrowding—were entirely absent, whereas the defects in the mode of getting rid of the excretions were many and apparent, for, wherever it appeared among officers or men, the subsequent investigation brought to light some defects in the mode of getting rid of the excretions. The exact number admitted into the General Hospital of Dublin garrison were : In 1868, 2; in 1869, 4; in 1870, 7; in 1871, 3; in 1872, 11; in 1873, 15; 1874, 29; all cases of typhoid. As has been frequently noticed by those who have had much experience of fever, the type of the disease, and even the symptoms and complications, varied according to the source of the poison, and where the source of the poison was evidently the same the symptoms and duration of the disease varied immensely, one member of a family having rose-coloured spots and diarrhoea, and a prolonged fever of eight or nine weeks' duration, while other members of the family would have neither diarrhoea nor eruption, and the duration of the disorder would be ten to twelve or twenty-one days. Dr. Gore has observed this also among soldiers. In the garrison of Dublin, the disease, in 1874, appeared amongst the men in the form of a series of small local outbreaks, solitary cases being the exception. For instance, we had in January two cases admitted from among the men of the Royal Artillery quartered in Portobello Barracks; in March and April, four cases from among the Guards, stationed at Beggar's Bush; next, three cases from the 17th Lancers, at Island Bridge, in May; and sixteen cases from the military prison—one in August, the remainder in November and December—isolated cases occurring in September, November, and December. In fourteen admissions to hospital, the ultimate results are stated. Of these, seven, or fifty per cent., were sufficiently recovered on leaving hospital to resume their duties in the ranks after intervals varying from thirty-two to seventy-four days, according to the severity of the symptoms; five required sick furlough before joining, and one was invalidated for phthisis, and one case terminated fatally.

ASSOCIATION INTELLIGENCE.

BATH AND BRISTOL BRANCH.

THE next meeting of the above Branch will be held at the York House, Bath, on Thursday, January 20th, 1876, when a discussion on Cerebro-spinal Meningitis (based on Dr. Cole's paper, printed at page 667 of the JOURNAL) will be opened by Dr. Brabazon.

R. S. FOWLER, Bath, *Secretary*.
E. C. BOARD, Clifton, *Secretary*.

Bath, December 15th, 1875.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

DR. HERBERT DAVIES is appointed Assessor to the Regius Professor of Physic in the place of Dr. J. W. Ogle, resigned. Mr. B. Anningson of Caius is appointed a member of the Board of Medical Studies.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen of the College, having undergone the necessary examinations, were admitted Licentiates in Midwifery at a meeting of Board on the 15th instant.

Messrs. Edward John Burgess, Brentwood, Essex, diploma of membership dated July 24th, 1874; Samuel Beaton, Woking Hall, Essex, July 27th, 1874; and Thomas James Pickburn, M.D. & C.M. and L.S.A., Sydney, New South Wales, on a member of the College (Students of St. Bartholomew's Hospital) Andrew Henry Blake, Drury Lane, July 29th, 1875 (of the Middlesex Hospital); Thomas Stroud Hosford, Merton Road, May 5th, 1869 (of the London Hospital); and Eyre Jevers, M.D. & C.M. Dub., Tonbridge, not a Member of the College.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 9th, 1875.

Bickford, William, Ashburton, Devon
Carey, John Thomas, 47, Trinity Square, S.E.
Cross, Philip Henry Eustace, Lanaster Road, Notting Hill
Henbeck, Frederick Emanuel, Westbourne Terrace North

The following gentlemen also on the same day passed their primary professional examination.

Batchelor, Henry Thomas, London Hospital
White, Robert Godfrey, London Hospital
Hamp, John Walter, Queen's Hospital, Birmingham
Marsh, Joseph Henry, St. Thomas's Hospital
Turner, Alfred Moxon, Guy's Hospital
Welchman, Walter H. Lawson, Guy's Hospital

MEDICAL VACANCIES.

THE following vacancies are announced:—

ARDWICK and ANCOATS DISPENSARY, Manchester—Resident House-Surgeon.
BELHELVE, Parish of—Medical Officer.
BERKS COUNTY ASYLUM, Moulford—Assistant Medical Officer. Salary, £80 per annum, with board, lodging, and washing.
BOOLE BOROUGH HOSPITAL—House-Surgeon. Salary, £80 per annum, with board, furnished apartments, and washing. Applications to the Honorary Secretary.
CARMARTHEN UNION—Medical Officer.
CHORLTON UNION—Medical Officer. Salary, £50 per annum, with fire, light, attendance, and furnished apartments. Applications on or before the 30th instant.
CHORLTON-ON-MEDLOCK, RUSHOLME, and MOSS SIDE DISPENSARY, Manchester—House-Surgeon.
DARLINGTON HOSPITAL and DISPENSARY—House-Surgeon. Salary, £50 per annum, with board, rooms, and attendance in the Hospital. Applications on or before the 22nd instant.
DENBIGHSHIRE INFIRMARY—House-Surgeon. Salary, £85 per annum, with board, washing, and residence.
DUMFRIES and GALLOWAY ROYAL INFIRMARY—Assistant House-Surgeon. Board and washing. No salary. Applications to the Treasurer.
EVELINA HOSPITAL FOR SICK CHILDREN—Registrar and Chloroformist. Salary, £30 per annum. Applications on or before the 22nd instant.
GENERAL HOSPITAL and DISPENSARY FOR SICK CHILDREN, Pendlebury, near Manchester—Superintendent. Salary, £100 per annum, with everything found.
GLOUCESTER INFIRMARY—Surgeon and Assistant-Surgeon. Applications before January 27th, 1876.
HUDDERSFIELD INFIRMARY—Physician.
KENT and CANTERBURY HOSPITAL—Assistant House-Surgeon and Dispenser. Salary, £50 per annum, with board, lodging, and washing. Applications on or before the 31st instant.

LEEDS UNION—Medical Officer. Salary, £300 per annum, with unfurnished residence, coal, gas, water, and rates. Applications on or before Dec. 25th.
LIVERPOOL DISPENSARIES—Assistant Resident House-Surgeon (unmarried). Salary, £150 per annum, with £5 a board and each year till the salary reaches £125, furnished apartments, coal, gas, and attendance. Applications on or before the 20th instant.
MALL LOCK HOSPITAL—House-Surgeon.
MOFFAT HYDROPATHIC ESTABLISHMENT—Medical Man to take charge. Applications to Messrs. Bruce and Kerr, W.S., Edinburgh.
PARISH OF LISMORE AND APPIN, Lettermore Medical Officer. Salary, £150 per annum. Applications to the Rev. D. Dewar, Manse, Appin, Argyll.
RIPON DISPENSARY—Resident House-Surgeon. Salary, £120 per annum, with furnished apartments, attendance, coal, and candles. Applications on or before January 1st, 1876.
ROTHERHAM HOSPITAL—Resident House-Surgeon. Salary, £120 per annum, with board and furnished apartments. Applications on or before December 23rd.
ST. PANCRAS and NORTHERN DISPENSARY—Resident Medical Officer. Salary, £100 per annum, with residence, and £10 for servant's wages.
SHEFFIELD GENERAL INFIRMARY—Physician. Applications on or before January 5th, 1876.
STROUD GENERAL HOSPITAL—House-Surgeon. Salary, £60 per annum, with board, furnished rooms, attendance, and washing.
THARSH MINES, Province of Huelva, Spain—Medical Practitioner. Salary, £200 per annum. Applications to the Secretary, 156, West George Street, Glasgow.
TONGUE and FARR, District of, County of Sutherland—Medical Officer. Salary, £150 per annum, and house.
TRINITY COLLEGE, Dublin—Professor of Botany. Applications on or before January 5th, 1876.
WANDSWORTH and CLAPHAM UNION—Resident Medical Officer. Salary, £200 per annum, with furnished apartments, rattans, washing, gas, and coal.
WESTMINSTER GENERAL DISPENSARY—Honorary Surgeon. Applications on or before the 30th instant.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BARRETT, George, M.R.C.S.Eng., appointed Medical Officer to the Morison Infirmary, Glasgow, Aberdeenshire.
DALE, William, M.D., appointed Physician to the West Norfolk and Lynn Hospital, *vice T. Cossar, M.D., resigned.*
MAPLES, Reg., M.R.C.S., appointed House-Surgeon to St. Thomas's Hospital.
NEWBY, Chas. Henry, M.R.C.S.Eng., appointed House-Surgeon to St. Thomas's Hospital.
POTTER, H. Percy, M.R.C.S., appointed House-Physician to St. Thomas's Hospital.
ROSSITER, George F., M.R.C.S., appointed Resident Accoucheur to St. Thomas's Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

Forms for inserting announcements of Births, Marriages, and Deaths, which should be forwarded in stamps with the communication.

MARRIAGE.

GEORGE W. WESLEY, On the 14th inst., at St. John's, Hackney, by the Rev. R. Allen, M.A., Vicar of Christ Church, Gipsy Hill, William Gossely, Esq., M.R.C.S., Parkstone House, Gipsy Hill (late of the Peninsular and Oriental Company's Service), to Julia Matilda, youngest daughter of the late Charles Wesley, Esq., of Upper Capton. No cards.

MR. VALENTINE STONE, F.R.C.S. Ed., has been appointed a Justice of the Peace for Kincardineshire.

TESTIMONIAL.—On December 9th, Dr. F. D. Jones of Washington, county of Durham, was presented with a testimonial by the inhabitants of that place, where he has been located in his professional capacity for upwards of a quarter of a century. The testimonial consisted of an illuminated address, a silver salver, gold pencil, and cameo ring. The presentation was made by S. B. Coxon, Esq., of Ilsworth, Hull.

LONDON HOSPITAL MEDICAL SOCIETY'S SOIREE.—The microscopical *soiree* of the London Hospital Medical Society was held on Friday, the 10th inst., in the Medical College. By the kind permission of the Council, the greater part of the ground floor was in use. The anatomical, pathological, and materia medica museums, which were used as a general promenade, had numerous curiosities and objects of interests displayed in them. The reading-room was devoted to microscopes, stereoscopes, and photographic views. In the anatomical theatre, a good collection of gleans and solos were admirably performed, and some recitations given with great success. A number of lime-light views were shown in the chemical theatre, thanks to the kindness of Dr. Tidy, who placed his instruments unreservedly at the disposal of the Committee. Refreshments were provided in the lecturer's room, and done due justice to. The rooms were crowded; many strangers and neighbouring medical men being present, together with a large number of the members of the Society, and all seemed much pleased and interested by the entertainment, which lasted from seven to half-past ten; the only cloud upon which was the serious indisposition and consequent absence of the President, Mr. Mercier.

OPERATION DAYS AT THE HOSPITALS.

- MONDAY** Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
- TUESDAY** Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
- WEDNESDAY** .. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
- THURSDAY** ... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.
- FRIDAY** Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
- SATURDAY** ... St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY**.—Medical Society of London, 8.30 P.M. Mr. Maunder, "Excision of the Elbow-joint" (discussion on case of); Dr. T. Lauder Brunton, "On the Physiological Action of Alcohol".
- TUESDAY**.—Pathological Society of London, 8.30 P.M. Mr. Thomas Smith: Hemorrhagic Periostritis. Dr. Cowers: Fatty Tumour of Spinal Cord. Mr. Nunn: Injury to Radius from Fracture. Mr. Nunn: Deformity from Rheumatic Gout. Mr. Goodlee: Recurrent Epithelioma. Dr. Greenfield: Cancer of Heart and of Suprarenal Capsules. Dr. Greenfield: Cancer of both Breasts and of Right Ovary. Mr. Walsham: Tumour of Cavicle. Dr. Frederick Taylor: Aneurism of Aorta. Mr. Alban Doran: Arrest of Development of both Forearms. Mr. Spencer Watson: Report of Sequel to Dr. Walker's Case of Recurrent Sarcoma of Leg. Dr. Goodhart: Embolic Infarct in Heart-Muscle. Dr. W. Legg: Aneurism of Heart. Dr. W. Legg: Aneurism of Mitral Valve. Dr. W. Legg: Displaced Kidney. Mr. C. Heath: Epithelioma of Chin (living specimen). Mr. C. Heath: Epithelioma of Tongue. Mr. D. Balding: Sarcoma of Sciatic Nerve. Dr. Coupland: Cancer of both Breasts and of Ovaries.

NOTICES TO CORRESPONDENTS.

- CORRESPONDENTS** not answered, are requested to look to the Notices to Correspondents of the following week.
- PUBLIC HEALTH DEPARTMENT**.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with Duplicate Copies.
- AUTHORS** desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.
- CORRESPONDENTS**, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.
- WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.**
- COMMUNICATIONS** respecting editorial matters, should be addressed to the Editor; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

ERRATA.—In the notice of Crief, p. 741, BRITISH MEDICAL JOURNAL, read, at end of paragraph, "the parishes of Crief, Comrie, Monzievard, and Muthill".

MIDWIFERY ENGAGEMENTS.

SIR.—The practice of which H. complains is not uncommon. Although I have attended a large amount of cheap midwifery, I rarely get cheated. I advise H. when a woman engages him, to tell her it is a contract, and that he shall expect his fee, whether called in or not, and to ask her if she wish to engage him on those terms. If she consent, and do not send for him, he is at liberty to sue her husband for his fee, and I believe would recover. With a little tact and firmness, I think he would soon get over his difficulty. He would find a good deal of worry in going to law—more than it is worth.—I am, etc.,

December 1875.

AN OLD PRACTITIONER.

ARE YEW-LEAVES POISONOUS TO PHEASANTS?

MR. M. A. KENNY (Holme-on-Spalding Moor) asks whether the leaves of the yew-tree are poisonous to pheasants, and, if so, in what way do they act? He has lately examined a pheasant, and found yew-leaves in the gullet and a few in the stomach. There were no signs of irritation. He tested for metallic poisoning, but found no trace.

ERRATA.—In Mr. Christopher Heath's clinical lecture in last week's JOURNAL, p. 725, first column, last line but one, for "continued", read "confirmed"; p. 726, first col., line 20, for "was", "were"; line 19 from bottom, for "vertical", read "vertebral"; line 3 from bottom, insert "of" between line and force; 11 lines from end of lecture, for "no", read "a".

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

MISPLACED ANNOUNCEMENT.

SIR.—In the last issue of your JOURNAL, under the heading "Misplaced Announcement", a correspondent has furnished you with a notice that appeared in one of our local papers, in which my name appears in a most erroneous light. That paragraph, I need not say, appeared without my knowledge or sanction. A member of the Hospital Committee, in his zeal for the interests of the institution, had it inserted. I refrained, on the advice of several of my professional brethren, from noticing it in the paper, inasmuch as we considered it would be only giving the matter undue publicity, and would not be understood by the reading public, I brought the matter before the next meeting of the Ulster Medical Society, as I felt it was due to the members and myself to explain the facts of the case.

I am happy to state that no member of the profession to whom I am known would for a moment attribute any connection on my part with so unworthy and unprofessional a proceeding; and I am sorry to find your JOURNAL made the medium of placing members of our profession in a false light before their brethren. I would respectfully suggest your observing greater caution for the future before inserting, without inquiry, communications from your Belfast correspondent, who, if he belong to our profession, must have been actuated by other than honourable motives.—I am, sir, your obedient servant,

December 14th, 1875.

JOHN FAGAN, F.R.C.S.I.

* * * The paragraph was transferred to our columns without any comment except the obviously just one implied in the head. Mr. Fagan's highly satisfactory explanation would have been better without the tag. In noticing such "misplaced announcement", the JOURNAL fulfils an important function. Not every such announcement—and there are only too many of them—can be as satisfactorily explained and as promptly disavowed.

L. M. D. Mr. Pillscher, New Bond Street, London.

THE HOSPITAL SATURDAY FUND.

SIR.—I am requested by the members of the Hospital Saturday Board, who met last evening, to beg you to state, in contradiction to an announcement which, we are informed, appeared in your columns, that there is no intention whatever to transfer the functions of the Hospital Saturday Fund to the Sunday Fund; on the contrary, every arrangement calculated to ensure a successful collection for next year is in active preparation. It being the intention of those earnest members of the industrial classes who have devoted their energies to the good work to still persevere, it will be satisfactory to the public to know this, and that the distribution of the amount (£4,000) available of this year's collection has been completed, the principal hospitals participating being King's College (£153 1 s. 9 1/2 d.), London (£426 8 s. 3 d.), Metropolitan Convalescent (£228 12 s. 3 1/2 d.), Middlesex (£206 17 s. 3 d.), Seamen's (£143 17 s. 6 1/2 d.), and University College (£159 16 s. 8 1/2 d.). I am, sir, your obedient servant,

CHAS. MERCIER, Chairman.

28, Leicester Square, W.C., December 9th, 1875.

DR. R. BARR. We will draw attention to the subject next week.

WHOOPIING COUGH.

In the course of a case lately tried before the Vice-Chancellor's Court, "The Attorney-General v. the Hyde Chemical Company", an affidavit was put in deposing that the medical men in the neighbourhood of Hyde, a town in Cheshire, had within the last month sent about forty children suffering from whooping-cough to the manufactory to inhale the fumes of pitch.

MESSRS. WEISS and Co. forward us a letter from Mr. Barr of Northampton, stating that more than a year ago they made for him a spring hypodermic syringe similar in principle to that of Leiter's of Vienna, but, in his opinion, superior in construction. Leiter's syringe is, however, by no means of recent invention, and was described by us chiefly because we have found it useful.

SO-CALLED INQUESTS.

We have before us, cut from the *Eccles Advertiser* of November 13th, 1875, the following report of what appears on the face of it to have been a monstrous farce, though called an inquest.

"*Inquest on the Body of a Child found in the Drwell*.—Inspector John Henderson deposed that on Sunday, the 7th November, about twelve o'clock at noon, he was in a field near the boat-house, at Irlam, when his attention was drawn to an object on the opposite side of the river. The object was about fifty yards past the boat-house on the Flixton side of the river, floating in the stream, but entangled in some willows. He got a man to take a boat and fetch it across for him, and he did not lose sight of it while the man was fetching it across. When he got possession of the object, he washed it; found it to be the body of a full grown male child. It had apparently been in the water some weeks. The skull was open in the middle, and there were no brains in it. The navel-string appeared to have been rudely broken asunder without being tied. No medical man had seen it; he thought it would be difficult for a medical man to say whether it had been born alive or not. There was a wrapping round its loins—a coarse old apron. The water was half way up the towing-path, and had been five feet higher than it then was during the night. No information had been obtained respecting the mother of the child. A verdict was returned to the effect that the child was "Found dead, and that there was no evidence to show that the child was born alive."

Thus one of the most important and nicest questions in jurisprudence is described as having been settled on the off-hand dictum of a police-inspector, that he thought it would be difficult for a medical man to decide it. We need not point out the crass ignorance involved, or the certainty that such a mode of proceeding must, in the end, facilitate crime, and defeat the ends of justice. It is desirable at this time to collect such flowers of justice from the inquiries of legal coroners, and we shall be obliged if those of our readers under whose notice they may come in the columns of local papers will have the goodness to mark them and forward the papers to us.

ERRATA.—In the list of candidates who passed their examination on November 16th (JOURNAL, November 20th, page 696), the name "Whitley, E. E.," should be "Whitby, E. V."

NOTICES OF Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

MEDICAL EDUCATION.

SIR.—I own the letter of your correspondent K. N. M. on the subject of medical education generally, and the course of education in Edinburgh specially, has occasioned me much surprise. To make a few remarks on his letter is perhaps allowable to an old graduate who has been unable, from many years' absence in the East, and pressing engagements since his return, to revisit, for more than twenty years, the scene where some of the pleasantest, and he would hope, the most profitable, years of his life were passed. His only regret then was, and still is, that he could not, after graduation, spend another session there to allow more perfect assimilation of the "food" he had received.

First, it may be well to say but a few words as to some of the teachers who then filled the professorial chairs. Their names together are surely sufficient to refute K. N. M.'s idea, that "the success of Edinburgh as a seat of learning is to be as much attributed to political considerations as to the wisdom and greatness of its professors"—Godsiv, Alison, Syme, Miller, Simpson, Christison, Bennett, Balfour, and Jamieson. Is there one of these names that is not well known over Europe or America? The writer went to modern Athens when over twenty-one years of age, and knowing nothing whatever of medicine or medical practice, and so his impressions may be taken as illustrating the effect of the system. The only prior assistance he had was, that for some years he had studied chemistry under an old pupil of Liebig.

Naturally, the study of the bones, as the framework of anatomy, was the first. Does not the study of the bones at first suggest the parallel of the generals of medical subjects being studied before the particulars? My course of study was entirely that recommended, except that I attended Syme's clinical surgery from my first session, and nearly every session afterwards. Yet I differ from K. N. M., as I can now recall many of Alison's remarks, and turn up my note-books for confirmation. Syme's lectures I can scarce imagine any one forgetting, his remarks were so terse, frequently so scathing in verbiage, and yet so filled with instruction. Some of Christison's clinical lectures are now vividly present to my mind, and many of Simpson's and Bennett's. Yet why should I go on with such reminiscences, when I wish to defend the system in vogue, which I believe is right, and more likely to produce a class of medical men with a breadth of view, as contradistinguished from the routine practice likely to be engendered by such a process of educational cramming, combined with two hours' practical instruction, as is recommended by K. N. M.? What more likely to induce a true practical knowledge of the body than lectures giving a general knowledge of anatomy, combined with practice at dissection, followed by the institutes of medicine, showing the intimate structure and function of each part, and then their diseased conditions? then medicine proper giving a general view, clinical medicine a particular, and general pathology and practical pathology completing (as far as we can) our natural history of the body in health and disease? Side by side with these we naturally have chemistry, botany, natural history, and materia medica; and, except of the last, no very deep knowledge is required at examinations. Hospital practice is combined, and illustrates what the student has heard in lectures, and what he must supplement by reading, as various classes of disease come before him. Medical education is only the framework of knowledge; on practice and thought of one's own labours, and comparing these with the works of others, must hang the wisdom of the experienced physician.

Many medical students fail from not devoting a certain portion of time day by day to completing the work of the day. Lectures are attended but not listened to, not being considered to have a distinct place in the medical curriculum. The subject is not read after lecture, and so it goes on till the crammer has in a few weeks to try to get his pupil to remember what requires months and years to master and digest, and even then imperfectly.

That lectures are most useful is, to my mind, abundantly proved by the lectures in the extra-academic school in Edinburgh, which are numerous, and much resorted to; and the lecturers themselves act as no mean stimuli to exertion in their academic brethren.

There was one most important matter which distinguished, or did in my day distinguish, the Edinburgh Infirmary medical officers, which was the daily visit, and its absolute punctuality. The arrival of Syme, Miller, Spence, Alison, Christison, and Bennett, was absolutely to the time, and it was only the most pressing emergency which prevented the daily round from being made. When in Paris, I found the same punctuality; and it is a most important matter to teach the student, that the medical men in charge of important cases should see them daily.

I have not specially alluded to surgery and midwifery; the lectures on both had a high degree of interest as well as instruction.

So much for the University and its mingled lectures. Then, what pleasant evenings were Fridays at the Royal Medical Society, venerable in a green old age, dating from 1737; proving, by the roll of attendance, that the students were not so overburdened with academic work but that they could devote some of their spare time to write each in his turn a paper on some medical or scientific subject, to be circulated in duplicate for a fortnight, and then discussed. Surely, earnestness in work may be claimed for such a society, and the work was all that of volunteers. Meeting in their own hall, the Society had in my day a library of 14,000 volumes; and, if I remember rightly, about £2,000 of accumulated funds. The story of that Society has, I think, much to do with the eminence of the University, and shows that the University teaching of medicine bore such fruit in generations long gone by as could be shown by no other British school of medicine.

I have most pleasant memories of the years I passed and the agreeable society I enjoyed, procured by a few letters of introduction. It is, I think, no mean item in the advantages to a student that he should have good society occasionally.

As a place for study, I need scarce say aught of the physical features or the surroundings of Edinburgh; but as to the basis and plan of medical education pursued, I would say with the old Roman, "Hanc retinetæ quæso, Quiritis, quam vobis tanquam hæreditatem majores vestri reliquerunt.—Your obedient servant,
November 8th, 1875. M. D. EDIN.

MR. MALCOLM.—The following are the correct lines.

"How "D.D." swaggers, "M.D." rolls;
I dubb them both a brace of noddies;
Old "D.D." takes the cure of souls,
And "M.D." takes the cure of bodies.
Between them both, what treatment rare
Our souls and bodies must endure;
One takes the cure without the care,
T'other the care without the cure."

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than *Thursday*, twelve o'clock.

ROYAL COLLEGE OF SURGEONS.—The half-yearly examination of candidates for the diploma of Fellowship of the College was brought to a close on Saturday, November 27th.

THE EXAMINATION OF M.R.C.P.L.

SIR.—Can any one who has recently passed the final examination for the M.R.C.P. kindly give me some information as regards the best works, in which to study the prescribed subjects? These are: Medical Anatomy, Principles of Medicine, Practice of Medicine, Principles of Public Health, and Psychological Medicine. Moreover, one has previously to translate a passage from a Latin author, and have the opportunity of showing a knowledge of Greek, or of one or more of the European languages (Rule 13). These books very simple; but I should like the opinion of a recent candidate as to the security or otherwise of the examination. In the bustle of general practice, it is not many who keep up their classical studies, and what might have been easy fifteen years ago, may perhaps be formidable now. Any information will be very acceptable to yours, etc.,
December 1875.

IGNORAMUS.

ONLY A DOCTOR.—As showing how members of our profession were appreciated by the upper classes a few years ago, Mr. Greville, in his *Memoirs of George and William IV.*, states that on dining one evening at Lord Holland's, he loaned himself between Sir George Robinson and a common looking man in black; and, as "he did not open his lips, except to eat, I settled that he was some obscure man of letters, or of medicine—perhaps a cholera doctor". To his great astonishment, he found him able to carry on a conversation on every subject started; and it was not until Lord Auckland respectfully addressed the supposed "cholera doctor" as "Mr. Macaulay", that he became aware of the genius seated by his side, when he snobbishly observes, "I thought I should have dropped off my chair; the perspiration burst from every pore of my face".

We would suggest to Mr. T. P. Lucas to submit his "doubts" direct to Dr. T. I. Brunton.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Hastings and St. Leonard's News; The Belfast News-Letter; The Sheffield Daily Telegraph; The Chester Guardian and Record; The Hereford Times; The Bristol Daily Post; The Statesman; The Birmingham Morning News; The Cork Constitution; The Newcastle Weekly Chronicle; The Worcester Journal; The Hobart Town Mercury; The Weekly Times; The Mid-Weekly Hampshire Independent; The Lincolnshire Herald; The Sunderland Daily Echo; The Co-operative and Financial Review; The South Wales Daily News; The Macclesfield Courier; The Glasgow Herald; The Croydon Advertiser; The Glasgow News; The Hastings and St. Leonard's Chronicle; The Metropolitan; The Londonderry Sentinel; Saunders's News-Letter; The Tenby Advertiser; etc.

* * * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Sir Thomas Watson, London; Dr. J. C. Hall, Sheffield; Mr. E. Lund, Manchester; Mr. George Cowell, London; Quondam; Mr. Jonathan Hutchinson, London; Mr. Isaac Sparks, London; Mr. Cheshire, Birmingham; Dr. Edis, London; Dr. Southey, Slough; Dr. R. J. Lee, London; Dr. J. Braithwaite, Leeds; Dr. Roberts, Manchester; Dr. Young, Florence; Dr. Sidney Ringer, London; Dr. W. Murrell, London; Mr. W. Fairlie Clarke, London; Dr. J. M. Fothergill, London; Impecunius; Captain Mercier, London; Dr. Mackey, Birmingham; The Secretary of the Pathological Society; Mr. Joseph Bell, Edinburgh; The Registrar-General of England; Dr. Finlayson, Glasgow; The Secretary of Apothecaries' Hall; Mr. Eastes, London; Dr. Durrant, Ipswich; The Registrar-General of Ireland; Mr. Warrington Haward, London; Mr. J. Croft, London; Dr. Donkin, London; The Secretary of the Royal Medical and Chirurgical Society; Dr. G. de G. Griffith, London; Dr. Langmore, London; Dr. Theodore Williams, London; Dr. W. J. Mickle, Bow; Dr. Beigel, Vienna; Dr. H. Moon, Brighton; Mr. Cricbett, London; Dr. E. T. Wilson, Keltenham; Mr. S. Hamilton Cartwright, London; Mr. T. P. Lucas, London; Our Glasgow Correspondent; Mr. Johnson, Birmingham; Dr. Macleod, Edinburgh; Mr. Blanchard, Ditchling; Mr. Samuel Lee, London; Dr. John Smith, Edinburgh; Dr. Mark Long, Hackney; Dr. Bond, Gloucester; Mr. W. W. Carr, Blackheath; Mr. Nettleship, London; Dr. Sheen, Cardiff; Dr. A. P. Stewart, London; Mr. Jacobson, London; Mr. R. S. Fowler, Bath; Dr. Farquharson, London; Our Dublin Correspondent; Mr. J. T. Williams, Barrow-in-Furness; Mr. George Brown, London; Mr. Nathaniel Baker, London; Mr. Joseph Pratt, Markeshill; Dr. Dunglison, Philadelphia; Mr. Jeffery A. Marston, Lee; Mr. Barr, Northampton; Messrs. Weiss and Son, London; Mr. Jones, Llanrwst; Dr. Marey, Paris; Mr. W. H. Kimpton, London; Mr. J. Nally, Ardahan, Co. Galway; Dr. Sidney Stone, Flaqa, Mauritius; Dr. Skinner, Liverpool; Mr. Mackenzie, Edinburgh; Dr. W. D. Fairless, Bothwell; Dr. Robert Bell, Glasgow; Dr. F. J. Brown, Rochester; Staff-Surgeon Nelson, Gosport; Dr. David Young, Florence; Dr. Septimus Gibbon, London; Dr. Munro, Cupar Fife; Dr. Philpison, Newcastle-on-Tyne; Dr. G. H. B. Macleod, Glasgow; etc.

BOOKS, ETC., RECEIVED.

The Relations of the Nervous System to Diseases of the Skin. By L. Duncan Bulkley, A.M., M.D. Sampson Low and Co. 1875.
The Superannuation of Officers in British Hospitals for the Insane. By W. Lande Lindsay, M.D., F.R.S.E. J. and A. Churchill. 1875.

AN ADDRESS

ON

THE EFFECT OF THE ANTISEPTIC TREATMENT
UPON THE GENERAL SALUBRITY OF
SURGICAL HOSPITALS.*Being the Address delivered in opening the Surgical Section of the British Medical Association in Edinburgh, August 4th, 1875.*

By JOSEPH LISTER, F.R.S.,

Professor of Clinical Surgery in the University of Edinburgh; President of the Section, etc.

GENTLEMEN,—I believe I can hardly more profitably occupy the time allotted to me for an address in opening this section, than by bringing before you some facts illustrative of the effect of antiseptic treatment, when strictly carried out, upon the general salubrity of surgical hospitals.

Six years ago, when writing on the very remarkable improvement which had been brought about by "enforcing strict attention to the antiseptic principle" in the wards of which I had charge in the Glasgow Royal Infirmary, "converting them from some of the most unhealthy in the kingdom into models of healthiness", I ventured to express myself thus. "Considering the circumstances of those wards, it seems hardly too much to expect that the same beneficent change which passed over them will take place in all surgical hospitals, when the principle shall be similarly recognised and acted on by the profession generally."* That prediction, I think I may say, is now in course of fulfilment.

I shall speak first of what has come to my knowledge with regard to some foreign hospitals, and I will begin with Copenhagen, where Professor Saxtorph long ago introduced antiseptic treatment; indeed, I believe he was the first to bring it into operation on the continent. The large hospital of which he had the charge used to be a very unhealthy one. Pyæmia was extremely frequent, even after very small operations, such as amputation of a finger. Pyæmia has vanished ever since the antiseptic treatment was introduced, hospital gangrene has almost entirely disappeared, and erysipelas is nearly unknown except as imported from the town. Professor Saxtorph writes to me as follows: "If you ask me what I have observed respecting the effects of antiseptic treatment, I may say that it has not modified, but completely changed my principles of pathology and my surgical practice." "The word *hospitalism*, which some years ago found its way from Edinburgh to the continent, no longer terrifies us; it no longer keeps us from performing operations in the infirmary, and you seldom meet with a case that could be called a case of hospital disease." After going into details regarding the various forms of hospital disease, he proceeds to describe the greatly increased success that now attends the treatment of some injuries. "As to accidental deep wounds, large lacerated wounds of the scalp, contused wounds with smashing of hand or foot, compound fractures or wounds of joints, I almost invariably have them heal without any bad symptoms, by means of antiseptic dressing and drainage-tubes. Any case of this sort will almost certainly recover if there is no complication of shock, or gangrene of the limb, or contusion of internal organs." He next speaks of the change which has taken place in the results of operations, such as amputations and excisions, and adds, "In short, I think I am right in saying that patients very seldom die from an operation. If they do die, it is not the operation that kills them, but the disease that existed previously to the performance of the operation." Lastly, he alludes as follows to abscesses connected with diseased bone. "What until the last few years proved the most difficult to deal with, are the abscesses which are connected with bone-disease. But now I think we may safely cut into them, if we only persevere in the antiseptic treatment for a sufficiently long time. By means of careful dressing, drainage-tubes, and the antiseptic spray whenever the dressing has to be changed, we get over those accidents of septicæmic poisoning which formerly almost invariably followed incision into these collections. But I am equally sure that, if I do not carry out the antiseptic treatment to its full extent, it is of no use whatever to apply carbolic acid to a wound, at least as regards the dangers that always accompany putrefaction."

I come now to what I witnessed in the course of my recent travel in Germany, and I shall speak only of those hospitals into which antiseptic treatment has been introduced. Of these, the first I saw was Munich. The large Allgemeines Krankenhaus there has been until

lately increasingly unhealthy; pyæmia was very frequent; and hospital gangrene, which made its appearance in the year 1872, had become annually a more and more frightful scourge, until last year it had reached the astounding proportion of 80 per cent. of all wounds that occurred in the hospital, whether accidental or inflicted by the surgeon. And not only was it thus extremely frequent, but was in a very severe form, produced frightful ravages, often caused death, and led to patients who recovered being retained an inordinately long time in the hospital. But, from the time when, at the beginning of the present year, efficient antiseptic treatment was brought into operation by Professor Nussbaum, they have not had one single case of hospital gangrene. At the time when I was at Munich, they were doubtful whether they had had one case of pyæmia; erysipelas, formerly very prevalent and severe, was rare, and, when it did occur, was in a very mild form; and I saw the convalescent wards—which previously had always been filled and overflowing—standing one after another empty, because the patients, no longer affected with hospital gangrene, recovered much more rapidly.*

I next proceeded to Leipzig, where Professor Thiersch is clinical teacher. He has three hundred beds under his own charge, of course seconded by able assistants. Professor Thiersch was the first to introduce antiseptic treatment on scientific principles into Germany. His results, as regards the general salubrity of the hospital, have been, on the whole, progressively more and more satisfactory, and in the present year he was able to state that he had only had one case of pyæmia in twelve months; and that, you will observe, in a service of three hundred beds. Hospital gangrene, also, had almost disappeared. There had been in 1871 a curious attack of that disease in two barrack wards, which seemed to be due to old hospital furniture piled up in an empty space under those apartments; but of late this also has vanished. Professor Thiersch has of late used, instead of carbolic acid, salicylic acid as an external dressing; but he still employs carbolic acid for the spray and lotion. Salicylic acid, as he uses it, certainly works very well; but that his increasingly satisfactory results are due to any special virtues of that agent, cannot be maintained.†

From Leipzig I passed to Halle, where I found Professor Volkmann carrying out antiseptic treatment just in the same way as we do here. He gave an antiseptic demonstration, to which he invited professors from various parts of Germany; and he certainly showed us a magnificent set of cases. It was, I confess, somewhat gratifying to me, that Professor Volkmann had obtained his results without any of his assistants having visited Edinburgh. Seeing the importance of the subject, he had worked in good earnest at the system, in accordance with what he had read of my writings. He told me he had only gradually got into the way of carrying out the system properly; but I had the satisfaction of seeing everything done exactly as we do here, and with results of the most brilliant kind. That hospital was previously an extremely unhealthy one. The wards are small and overcrowded; each one has a water-closet opening into it, and a large drain of the city runs under the wards. Indeed, the building is so confessedly bad, that it has been condemned to demolition. Pyæmia used to be exceedingly common there; but, since the introduction of

* Since the delivery of this address, I have received from Professor Nussbaum a pamphlet entitled *Die Chirurgische Klinik zu München im Jahr 1875*. Ein Andenken für seine Schüler. Published by Ferdinand Enke, Stuttgart. The subject of this work is the complete revolution brought about in the salubrity of the hospital by antiseptic treatment, and the means by which this result has been attained. One passage from the first chapter seems to me to demand reproduction here. After describing the previous frightful state of unhealthiness, he says: "Every thing that we had tried against the above-mentioned horrors had proved unsuccessful. The open treatment, the occlusion dressing, the continuous water-bath, irrigation with chlorine water or with carbolic acid solutions, salicylic acid in powder and in solution, the putting on of Lister's antiseptic materials—carbolic paste, etc.—all, were unable to combat hospital gangrene and pyæmia. But when in the course of a single week, with great energy and industry, we applied to all our patients the newest antiseptic method, now in many respects improved by Lister, and did all operations according to his directions, we experienced one surprise after another. Everything went well; not a single other case of hospital gangrene occurred. Pyæmia and erysipelas were observed a few times at the very beginning; but only, as the result proved, because we did not yet possess the necessary practice in the carrying out of Lister's directions. We took pains, as you know, and learned from day to day more exactly how to comply with his instructions. Our results became better and better, the time of healing shorter, and pyæmia and erysipelas completely disappeared." (*Op. cit.*, page 6.)

† The true explanation of the improved results is given by Professor Thiersch himself in the following passage in a work which he has recently published on this subject—a statement characterised by the usual perfect candour of the distinguished writer: "Our results have constantly improved in proportion to the perfecting of the method and our own practice in carrying out its details. They are, indeed, not so good as those of Lister himself, or of Volkmann, etc." (see *Klinische Ergebnisse der Lister'schen Wundbehandlung*, etc., one of the *Klinische Vortrüge* edited by Volkmann; Leipzig, 1875, page 645). To the same cause, I have little doubt, is to be attributed the fact that erysipelas was considerably less ("bedeutend geringer", *op. cit.*, p. 676) in the year 1874 than in the previous year. Professor Thiersch himself believes that erysipelas is not influenced by antiseptic treatment; but this view is entirely opposed to the experience of Saxtorph and Nussbaum already mentioned in the text, and to that of others to be alluded to in the sequel.

* See the *Lancet*, January 8th, 1870.

antiseptic treatment, a change has taken place which I can best describe by a quotation from a paper by Professor Volkmann himself.

"I had hoped to have been able to publish before now the communication which I made on the antiseptic treatment and Lister's mode of dressing, on the occasion of the third Congress der deutschen Gesellschaft für Chirurgie; but as this has, unfortunately, not been the case, I may, perhaps, be allowed to mention here a few facts for the purpose of showing how greatly the danger of some forms of injury, which were formerly followed by a very high rate of mortality, is diminished by this procedure.

"Since the introduction of the antiseptic method into my *clinique*, now exactly two years ago (at the end of November 1872), no single patient suffering from a compound fracture, in which conservative treatment was attempted, has died. Amongst this number are included even those cases in which conservative treatment was only resorted to because the patients would not give their consent to amputation, and also those in which we at first underestimated the severity of the injury, and afterwards intermediate or secondary amputation had to be undertaken on account of hæmorrhage or gangrene. The number of compound fractures successfully treated without a single fatal result in our hospital, which is old and always overcrowded, and offers the most unhealthy hygienic conditions, amounts at present to thirty-one. Amongst these were as many as nineteen compound fractures of the leg, in several instances much comminuted, and often complicated with most severe bruising and laceration of soft parts. There were also two compound comminuted fractures of the patella, both of which recovered with movable joints. No case of pyæmia has occurred for a year and a half—*i. e.*, since July 1873—although during this period alone about sixty major amputations have taken place." (See Professor Volkmann on Antiseptic Osteotomy, translation in the *Edinburgh Medical Journal*, March 1875.)

I also learn that hospital gangrene is now entirely unknown in that hospital. Erysipelas likewise is extremely rare; and, where it does appear, it is of a superficial and mild type: and Professor Volkmann told me that his experience of the effects of antiseptic treatment in diminishing the amount and severity of that disease was so striking, that he entirely differed from the opinion of Professor Thiersch on this matter.*

Amongst the cases brought before us in Professor Volkmann's demonstration was one of excision of the hip-joint, where putrid sinuses had existed before the operation. About a week had passed since the operative procedure, but there was no purulent discharge whatever; and no fluid even of a serous character could be pressed out from the small spot that alone remained unhealed, and the use of a drainage-tube had been already given up. In short, the case had followed the typical course we expect under antiseptic treatment when we operate with an unbroken skin. This is a kind of result I myself had never yet obtained, and it filled me with astonishment. I inquired how it had been arrived at, and I found it was as follows. Professor Volkmann several years ago strongly advocated the application to diseased soft parts of "the sharp spoon" which had been introduced into German surgery by Bruns of Tübingen for scraping carious bone. Thus, supposing a strumous abscess to be opened, instead of leaving the degenerated textures around to come away by a tedious process of suppuration, or to be removed by slow absorption, he scraped it all out at once with the sharp spoon, and thus greatly accelerated the recovery. Being thus accustomed to the use of this instrument, he applied it to clear out the pyogenic membrane of putrid abscesses and sinuses, and all granulations around the diseased bones after excision. For my part, I have always, after operating upon such a case, treated the cut surfaces with solution of chloride of zinc, and injected the sinuses with the same, in the faint hope of exterminating existing putrefaction; but I have practically never succeeded. The failure was always readily intelligible to me, on the ground that I could never get the antiseptic to penetrate all the recesses of the sinuses and the lymph or sloughs lying among the granulations. But here Professor Volkmann had cleared out the offending substances altogether, and then introduced an antiseptic lotion; and he told me, to my amazement, that it was the rule with him to attain results of the character I then witnessed. If my journey on the Continent had been one of unmixing labour, I should have thought that labour well rewarded by this circumstance in my visit to Halle. I have already put this plan in operation in my own practice since my return, and I hope to show you some of the results to-morrow, at a demonstration in the operating-theatre of the Royal Infirmary. Whether I can obtain such frequent success as Professor Volkmann, I do not know; but I have already succeeded in some cases.

In Berlin, Professor Bardeleben, with one hundred beds under his care at the Charité Hospital, has long introduced the antiseptic system. The hospital used to be a very unhealthy one. Pyæmia was so fre-

quent, that amputation in the lower limb was almost certain death to the patient; but, through antiseptic treatment, this has for a long time past been entirely changed. Professor Bardeleben informed me, at the time of the meeting of this Association in London, that pyæmia was practically abolished from the wards, without any other change than the introduction of antiseptic treatment; and I found that this same satisfactory condition of things continued at the time of my visit this year. Erysipelas was also rare, and of a mild type; and hospital gangrene very uncommon. At the same time, I feel bound to express my conviction that Professor Bardeleben would get still better results had he not been led, on the score of economy, to substitute for our antiseptic gauze unprepared gauze soaked with a watery solution of carbolic acid; for here, the carbolic acid being dissolved in a liquid, instead of being stored up in an insoluble medium, the antiseptic and its vehicle are both displaced together by the discharge which soaks into the dressing, and this involves great additional risk. In fact, Professor Bardeleben told me that for very special cases he still used our antiseptic gauze.

In the other great clinical hospital of Berlin, the renowned and veteran surgeon Von Langenbeck had not until the present year seen his way to adopting antiseptic treatment. He had professed admiration of various results he had heard of; but, as Professor Bardeleben said, it had been barren admiration. But it was a singular coincidence, and one very gratifying to me, that, when I called upon him, I found him preparing to perform his first operation according to strict antiseptic principles. The case was one of tumour of the upper end of the fibula; and, considering the possibility of the wound communicating with the knee-joint, he felt himself bound to use antiseptic treatment. This he did with perfect faithfulness, in spite of the serious inconvenience of a most unnecessarily wetting spray; and, when the operation was concluded, he did me the honour to ask me to put on the dressing.

At Magdeburg, I found a great hospital, containing, on the average, one hundred surgical patients. This hospital used to be noted for its unhealthiness; but I learned that, since the introduction of antiseptic treatment, an entire change had come over it in this respect. Pyæmia has almost entirely disappeared, hospital gangrene has gone, and erysipelas, when it occurs, is of a very mild type.*

At Bonn, also, I heard similar testimony. I learned from Professor von Busch, who introduced antiseptic treatment into the clinical hospital last year, that some previously unhealthy wards had since quite changed their character; and that in some fine airy wards, which were always very free from hospital disease, the mode of healing of the wounds was something altogether different from what it used to be.

So much, then, gentlemen, for my continental experience. And now I wish to say a few words as regards the Infirmary here, where I have now been at work for about six years. And, first, as to the conditions under which I am working. The wards, as some of you have seen, are small and overcrowded. These wards were never so severely tested as they have been since I came here. There used to be, in the old High School building, two reserved wards kept ready for the reception of erysipelas or other peculiar case; but, at the time when I was appointed, twenty beds were taken off from the clinical surgical department for the purpose of creating a new surgeency; and, at the same time, the two reserved wards previously kept empty were filled with patients. That particular block of building has, therefore, been more severely tried than ever it was before. The number of beds is so limited that there is always great pressure upon them. When I came to Edinburgh from Glasgow, seeing the beds so close, I had several of them cleared out; but the result was, I found, that the same number of patients were admitted; and there always being a considerable proportion who could walk about during the day, they were put down on mattresses on the floor at night, so that the number of patients remained as before; and, as the wards continued perfectly healthy, I had the beds reintroduced. But, more than this, I have still the mattresses on the floor. If you were to go into these wards sometimes at night, you would be surprised to see how many "shake-downs" there are. We have, also, often two or three children in one bed; and altogether by these means, while I have fifty-five beds, I have lately had seventy-one patients. During the time I have been here, there has hardly been a day on which there have been as few patients as beds,

* Dr. Hagedorn, the chief surgeon, was absent at the time of my visit; but in a letter, which, through accidental circumstances, I did not receive till after this address was delivered, he describes in full detail the change that antiseptic treatment has effected. From this letter I must content myself with quoting two short passages. "I have now been for twelve years chief surgeon to the hospital, and I had to do battle on a large scale with pyæmia and septicæmia, till in May 1872 I introduced your antiseptic method." "Since that time we have constantly practised it with excellent results, which, in truth, have been constantly improving; for at first the procedure does not always succeed, and every man must pay for his schooling (*musz Lehrgeld geben*). Now I have arrived at the conviction that your procedure is unconditionally secure, and that in every failure the surgeon himself is to blame, and not the method."

* See note at the foot of last page.

although any of you can see those beds are not as distant from each other as they ought to be, according to modern notions of what is requisite for the salubrity of an hospital.

Then there is another important respect in which my wards have been more severely tried than before. There had previously always been an annual cleaning of the wards of our infirmary. Now, this involves considerable inconvenience. The patients had to be transported to another part of the hospital, and some cases were liable to be injured by this transport. Therefore, when the annual cleaning came about, I used to consider whether the patients would get more harm from the want of the cleaning of the wards, or from the transportation. I thought they were more likely to get harm from the transport; and this being year after year my conviction, it is now three years since any cleaning took place in these wards of mine. The year 1872 was the last in which it was practised, except in the case of one individual ward where a sore throat prevailed last summer, which seemed to be of the nature of scarlatina, and on that account the ward was emptied and purified. I have sometimes observed remarks made with regard to the results of treatment in my wards, to the effect that I work under superior hygienic conditions. It is, in truth, exactly the opposite. My wards, in these respects, are more severely tried, I believe, than those of any other surgeon in the kingdom.

Then it is said that greater cleanliness is involved in the antiseptic treatment. This, again, is an entire mistake. If we take cleanliness in any other sense than antiseptic cleanliness, my patients have the dirtiest wounds and sores in the world. I often keep on the dressings for a week at a time, during which the discharges accumulate and undergo chemical alteration, probably from oxidation and the action of the resin of the gauze upon them; and, when the wounds are exposed after such an interval, the altered blood with its various shades of colour conveys often both to the eye and to the nose an idea of anything rather than cleanliness. *Æsthetically* they are dirty, though surgically clean.

There is yet another way in which my wards have been unusually tried—namely that I now perform operations which, without antiseptic means, I should not have considered justifiable, some of them being of a character which used to involve especially the risk of pyæmia, such as cutting down on ununited fractures of the femur, and removal of the ends of the fragments.

Yet, in these circumstances, if I have had one case of pyæmia where I have operated myself, it is the only one I know of; and that was a spurious form of the disease. It occurred in a patient from whom I had removed the mamma, and, at the same time, cleared out all the axillary glands; and putrefaction took place in the axilla, in consequence, as we had reason to believe, of mismanagement of the spray. Of hospital gangrene we have not had one single case during these six years. As regards erysipelas, our experience has been various. As a rule, it is very rare in many wards. I have been two entire years without a single case of it; but, on the other hand, there was a time when it was frequent. This was during a concurrent epidemic of small-pox and erysipelas in Edinburgh two years ago. The erysipelas was of a very virulent type, and some patients in private practice in the city died of erysipelas affecting the puncture of revaccination. At this time, we had several cases of erysipelas admitted into my wards from the town, and several, also, took origin within the hospital. But the constitutional rather than the local cause of these cases was shown in several instances by the disease occurring not in or near the wound, but at some remote part, as in the head after an operation upon the penis. And it was somewhat remarkable that in no case did the disease as it originated in the hospital assume the malignant form which it sometimes exhibited in private practice.

Tætaus also appears to be rendered much less frequent by antiseptic treatment. Far be it from me to say that putrefaction is the only cause of it; we all know it is otherwise; but when I say that, in six years, with an average of sixty severe surgical cases, I have only had two cases of the disease, and those both of them in connection with septic wounds, I show strong grounds for believing that, if we exclude putrefaction, we exclude one—and the most common—exciting cause of tetanus.

One objection that has been urged against my treatment is the inordinate length of time patients remain in hospital. No doubt it is so in some cases; but, as a rule, these are instances in which we expect to cure otherwise incurable cases, such as spinal abscess. But, on the other hand, on comparing Mr. Syme's case-books with my own, during two periods of three years, the unexpected result has lately been arrived at that, in proportion to my number of beds, I have had a larger number of operations than Mr. Syme; showing that, while some patients, kept alive by antiseptic treatment, have remained long in the hospital, this was more than counterbalanced by the rapid cure of others.

I trust, gentlemen, that the facts which I have now had the honour

to bring before you will be considered pretty strong proof of the value of strict antiseptic treatment in promoting the general salubrity of surgical hospitals.

FURTHER OBSERVATIONS ON HARE-LIP AND CLEFT PALATE.

By SIR WILLIAM FERGUSSON, Bart., F.R.S.,
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In the *BRITISH MEDICAL JOURNAL* of March 28th and April 4th, 1874, I ventured to write on these topics, under the impression that, in regard to both, I had something new, and therefore original to state. On hare-lip I trod on ground which to many might seem so trifling and so exhausted that I could scarcely expect attention to what I stated, excepting from those who might have special interest in such cases; or who might, like myself, have devoted more than forty years of careful study to matters in surgery and abnormal development, which, in the estimation of many, have been considered of minor importance.

Within these two years, my experience on such malformations and their treatment has been considerably increased; and, at the risk of being considered prolix, I venture to give the results of that experience in the hope of making additions to our knowledge in this department of professional study.

At this date in surgery, it is not easy to imagine how any novelty in regard to hare-lip could be announced. In the paper above alluded to, I described a practice in the operation which I thought likely to be advantageous in certain examples. In some cases of single fissure, I had learnt from experience that failure of the usual operation was induced by the projection of the intermaxillary bone on that side, and I had long been in the habit of removing such projection previously to bringing the edges of the gap into approximation. This removal was readily accomplished, in the majority of cases, by the scalpel or scissors. Preferring, as I do, to perform the operation in the early months of infancy, the tissues are then so soft that they can be readily cut by these instruments. At an older date, the cutting forceps was sometimes applied to divide the narrow part of the intermaxillary bone where connected with the vomer. For many years in early life, a scalpel can readily be passed between the intermaxillary bones in the mesial line; and it was my custom in many instances to so use the blade as to effect the separation. But even here, in the course of time, I learnt to apply conservative surgery; and, instead of taking away bone, tooth, and mucous membrane, I so managed by cutting and raising the mucous membrane that I could cut away tooth and bone, and leave the membrane as a soft cushion and a more complete covering to the side not interfered with. The object here was to keep a natural surface of mucous membrane, instead of exposing a considerable portion of raw surface. Within these two years, I have frequently acted on these views, and have every reason to be well satisfied with the results. In some instances, I have been content with gouging out the tooth only; but in others, where the prominence has been of considerable bulk, I have clipped away the whole bone, leaving, however, the whole mucous membrane, and probably most of the periosteum. By such a plan, I feel confident that union of the gap in the lip has been rendered more certain. An objection, and seemingly important one, to this plan is, that it costs the milk incisor, and possibly the permanent one. I have long been convinced, however, from experience, that these teeth are rarely of much value. Occasionally, some good teeth are met with in the intermaxillary bone, but so rarely, that their preservation is of small consequence as compared to the result of a well designed and perfect operation. Whilst advocating the sacrifice of teeth, or even of an intermaxillary bone in single hare-lip, where the bone happens to project, I feel equal confidence in recommending free work with the two intermaxillaries when they happen to be very prominent in double hare-lip. In many instances of double hare-lip, as in single, the alveoli are not involved in the fissure; but usually there is the complication of cleft-palate, and the intermaxillary bones are left so isolated, being attached by a slender neck to the vomer, that in subsequent years their value is questionable, even when preserved in a satisfactory operation for the double gap. It does in some instances, even after years have passed, fill up a gap that might otherwise be in front of the mouth; but it has often appeared to me that it would have been better away, so as in due time to permit the closer approximation of the lateral portions of the jaws. Where, however, the intermaxillary bones do not project, so as to endanger the success of an operation on

the lip, I am not disposed to urge their removal; but, where they project so as to interfere with the satisfactory treatment of the lip, I earnestly recommend the removal of the projecting and nearly isolated mass. From time to time, I have met with cases where I have been reluctant to meddle with this projection; and, with a conservative motive, have even been content to do one gap first, and the other in a few weeks afterwards. I cannot say, however, that this plan has given me so much satisfaction as taking away the whole, and effecting junction in the two gaps at once, whether the intermediate portion of skin has been worked into the lip or made to represent the columna only.

It is often a puzzle what to do with the central portion of the lip in front of the intermaxillary bones. It is rare to find it so long and the nostrils so perfect that it can be associated with the lip—particularly to bring its free margin down to the level of the lateral portions of the lip by however small a strip. It more frequently is so short that the surgeon may be well pleased if he can, by paring its extremity into a wedge, incorporate it into the upper portion of the lip. In the majority of cases, he may be well content if he can shape it into a respectable columna; and in some instances it will puzzle his ingenuity even to accomplish this. Some of the most troublesome cases I have met with have been those where the difficulty has been how to dispose of this bit of lip—it might have been called skin—so very short has it been. Some writers on this subject have gone so far as to question the presence of this intermediate portion of lip or skin, as if to show that the gap in the human subject may take place in the mesial line, as in the hare. This, I contend, never happens; but, in some instances, the intermediate portion may be so short as to appear wanting altogether. There are specimens of this kind in the museum of the Royal College of Surgeons of England; but a fissure in the mesial line in the human subject, with the nostrils perfect, has never to my knowledge been seen. It would be to me as unprecedented as to see a fissure in the upper lip under each nostril in a hare. So far as I am aware, no such specimen has ever been seen.

In general, if I have the opportunity of treating a case *de novo*, I try to join the apex of this intermediate portion with the sides of the lip at the first operation, but occasionally union fails. I have tried again months or years afterwards, and usually succeeded. Sometimes I have met with instances where the junction in the mesial line has been effected by others, and I have been in doubt whether a bit of the mesial soft substance has or has not been cut away. I fancy that in some cases a portion has actually been cut away. If anyone who reads these lines should ever think of cutting a portion of the intermediate soft slip away, I earnestly urge him not to do so at first at any rate. Sometimes, in my own practice, I have left this portion so long and broad as to make it appear far too big for a columna; but that is a fault which can easily be remedied, whilst the surgeon with all his skill may be foiled in closing the opening into the nostrils, left either by the natural shortness of this intermediate portion, or in consequence of its abbreviation by his own hands.

Since I last wrote on the intermaxillary bone in the human subject, illustrative of hare-lip, the most notable case I have met with in practice is to me unique, and, in my opinion, specially worthy of record. In April 1875, I was consulted regarding the case of a young lady, six years old, who had been born with double hare-lip and cleft palate, each of the worst kind. The operation for hare-lip had been performed in early infancy, and union had ultimately been accomplished after several failures, chiefly attributable to the prominence of the intermaxillary bones. To facilitate matters, these had been bent backwards towards the gap in the palate. The whole condition of the upper lip and mouth was most unsatisfactory, both regarding appearance and comfort. There was still a projection in the middle line, caused by the intermaxillary prominence, which was but scantily covered by the sides of the lip and a portion of soft material extending partially from the columna. Being requested to improve if possible, I decided to remove the intermaxillary mass entirely, bring the lateral portions more extensively into apposition, and to raise the columnar portion more into the normal position. These views were most satisfactorily realised. The friends and I were gratified; but, for myself, further matter of interest remained regarding the condition of the intermaxillary bones and the teeth. Prior to the present generation of surgeons, the idea of bending back the projecting central portion had been entertained. Mr. Samuel Cooper described an interesting case of the kind, wherein, by means of a kind of truss, this was accomplished by a slow process of pressure. Some thirty years ago, it was not uncommon to push the projection back by means of rapid force. The slender neck was bent, or rather broken, the mass was carried backwards and held there by the completion of the operation for the clefts in the lip. I performed the operation repeatedly, but was never specially well satisfied with it, nor had I ever an opportunity of examining the parts anatomically

afterwards. Before doing so, the death of the patient was to be implied. Here, however, in the young lady's case above referred to, was an opportunity never presented to me before. So I had the intermaxillary projection macerated with care, and found the slender neck bent upon itself. The bone or bones were thickened somewhat, as if there had been a fracture. The symphysis between the bones had closed by bone, an early period for this, and probably caused by the exalted action subsequent to the bending or breaking action. But the state and position of the teeth chiefly interested me, as I had for the first time ocular proof of what I had long conjectured, and considered a serious objection to this mode of preserving the intermaxillary bones. I doubted the wisdom of thrusting this wedge between the side portions of the jaws, and placing the part so much in the horizontal plane as to make the front surface the under one. Moreover, I fancied that probably the most desired object of this plan, viz., that of preserving the teeth, would so place them that, in the event of their acquiring to even tolerable development, they would grow horizontally backwards instead of downwards, as in the usual direction. Before I removed this intermaxillary process, I could feel the margin of the left front incisor, as if it were coming in this fashion; and, on macerating the specimen, I found such to be the case. Here is a sketch of the specimen, of normal size. It is placed in the line of the alveoli as it was in



Sketch showing Intermaxillary Portion, with Teeth Horizontal

life. The right, which had not yet come through the gum, besides having its horizontal direction, has its margin where the flat surface should be; and the left, whose edge had protruded, is nearly parallel with the horizontal palate plates of the upper jaw, instead of being at right angles with the roof of the mouth. This specimen I believe to be as unique as were those, now preserved in the museum of the Royal College of Surgeons, when they were first depicted in some of the early editions of my work on *Surgery*, about thirty years ago, and displayed at the College of Surgeons, where I gave lectures on the Progress of Surgery in the Nineteenth Century, in 1864.*

But I fear those matters may appear too minute, and possibly trifling, to those who read them; yet they are of palpable value to the practical surgeon, and this comparatively substantial aspect may possibly prove refreshing to some who feel themselves bound to read up to the day about organisms, anatomies, and atomies which seems so transcendental and subtle as to reach beyond ordinary comprehension and demonstration.

The object of this paper is more with reference to cleft palate than hare-lip. To some it may appear that the latter is a worn out subject, but I believe there are many to whom cleft palate is still an abstruse subject, and for further elucidation I venture to continue the theme which formed the principal feature of the communication in 1874, above referred to. At that date, my experience of the operation for the defect extending to between two and three hundred cases, had led me to the conclusion that operative interference with cleft in the hard palate was rarely followed by satisfactory results. I had resorted to most of the plans familiarly known, likely to prove successful, and was occasionally much pleased, but failures were so frequent that in many instances I made no attempt to close such gaps at all, and was content if I got fair union in the greater extent of the soft velum. The subject had long engaged my attention in every aspect I could think of, and at last I resolved to adopt a plan which in my estimation held out the greatest chance of success. This plan consisted mainly in dividing the hard palate about midway between the margin of the fissure and the alveoli, with a sharp chisel, so as to set a portion of the hard palate on each side free, thereafter paring the edges and uniting them in the middle line by means of stitches. Particulars of the operation were given in the paper in the BRITISH MEDICAL JOURNAL, already referred to, and in the concluding remarks I ventured to say that I had touched new ground in surgery. In this, however, I soon found that I was mistaken, for my friend Mr. Hulke, of the Middlesex Hospital, within a few days pointed out to me that Dieffenbach, more than forty years ago, had made a proposition of the kind. The subject was further made public by my friend Mr. Mac Cormac of St. Thomas's Hospital, in a

* See *Lancet*, 1864; also *Lectures on the Progress of Surgery during the Nineteenth Century*. Churchill.

communication to this JOURNAL, of date June 20th, 1874, and I found that I had been in a manner anticipated in what I had considered an original idea. In several of my first trials of this process on the living body, I carried the threads through the holes or slits made by the chisel, but I found that on drawing the noose there was great tendency to bring the palatal mucous surfaces of the flaps into apposition instead of the pared edges; in other words, to throw the two flaps into a vertical position in the roof of the mouth. Here I fancied that I had hit on a remedy for this also, which was to bore one or two holes, according to the size of the flaps, through which I could pass the needles and threads, and so approximate the pared margins without upsetting the horizontal position of the flaps. This plan answered my expectations, but here again I found that the original record of the great German surgeon had anticipated what I had found in practice. Dieffenbach had also suggested these punctures. It seems doubtful whether or not this operation had been done by Dieffenbach; and it is curious that no trace on the subject is to be found in any English surgical writings on cleft palate during the last forty-five years. I myself had not met with any suggestion in regard to division of bone until my attention was called to it by my two friends above referred to. Within the last thirty years much has been said and written by Mason Warren, myself, and others regarding cutting and tearing the soft parts from the hard, and bringing them down in hope of getting union in the middle line, but the proposal with the chisel seems to have been overlooked or ignored by all who have worked at the subject. I shall, however, be well content to have followed in the wake of Dieffenbach, whose proposal to divide the internal rectus of the eyeball for ordinary strabismus gave me the key to my own practice of dividing the levatores palati in ordinary cases of cleft palate.

I shall now proceed to give the results of my experience in regard to the supposed addition to the operation in certain cases of cleft palate, which I described in this JOURNAL of date April 4th, 1874.

(To be continued.)

CLINICAL LECTURE ON WINTER PRURIGO.

By JONATHAN HUTCHINSON, F.R.C.S.,

Senior Surgeon to the London Hospital, and to the Skin-Hospital for Skin-Diseases; Surgeon to Moorfields Ophthalmic Hospital.

GENTLEMEN,—I wish to describe to you this evening a certain group of well marked cases in which the skin is made irritable by cold. A man who has gone about through the summer with his skin quite comfortable finds himself, as soon as the first threatenings of winter weather occur, troubled by irritation in various parts, often of a very severe character. Year after year, the same thing happens, until he begins to expect his tormentor, or possibly has learnt how to anticipate and prevent it. This form of prurigo usually affects first and most severely certain special parts: the calves of the legs, the out-sides of the thigh, the forearms, and the outer parts of the upper arms. It usually attacks the trunk last, and but slightly. It is not, in the first instance, attended by any eruption, but only by a general tendency to *cutis asperina*. If, however, the sufferer give way to the temptation to scratch, he will be able to find certain isolated points which itch intolerably; and on these, after use of the nails, little pimples appear. Sometimes I have been told that these points felt like little seeds in the skin, which it was absolutely necessary to dig up with the nail. These are the true prurigo-papules, and possibly are developed in connection with nerve-papillæ. In addition to them, there is often more or less tendency to roughening of the surface by lichen-spots (thickened orifices of hair-sacs). Ultimately, in bad cases, the skin becomes rough and harsh, and there are seen a number of little blood-stained crusts; but in a majority of cases, in comparison with the patient's loudness of complaint, there is surprisingly little to be found. Now and then, patches of eczema are produced, or a porrigo or ecthyma rash may result. Perhaps I shall, however, best convey a good idea of the malady, or rather of the liability, by relating to you some cases; and I will select first a mild one.

W. T. aged 45, is a London collector in good health, but thin and rather bilious. He has all his life suffered from that kind of feeble circ-

lation which allows the extremities to become very cold. He never has chilblains or chaps; but his hands and feet are usually dry, somewhat shrivelled, and very cold. His feet, he says, are often icy. He scarcely ever perspires, and can take vigorous exercise with much pleasure and advantage. In boyhood, he did not ail anything from his skin; and it was, indeed, not until about fifteen years ago that he first began to suffer. He then, in winter weather, found the calves of his legs very irritable, and affected by spots which were aggravated by scratching. Afterwards, his thighs, in their outer and posterior parts, became affected; and then it spread in greater or less degree to the entire surface. From that time to the present, he has suffered with varying degrees of severity every winter. He assures me that in summer he is perfectly well, but he dreads the first advent of cold weather. It is not always the coldest weather which makes him worst; for, if it be cold, dry, and clear, without wind, he does not suffer so much. Wind and draught are his chief enemies, and they make his skin creep and itch all over. He has been obliged to adopt all sorts of precautions to diminish the influence of cold; wears washleather next his skin and woollen over it, and high Wellington boots for the protection of his calves. He sleeps between blankets, fearing lest the cold sheets might induce the prurigo and keep him awake. By these expedients, he keeps himself in a state of tolerable comfort, and has usually very little to show on his skin. When seen in March 1873, we noted that there were a few scattered black blood-crusts, but no papules, and no long excoriations from scratching. The same was the state of things in December 1875. During the intervening summers, he had been perfectly well. I must ask you to keep in mind, as to this patient, who is a good example of the class which affords the subjects of winter-prurigo, that he is thin, chilly, bilious, and has a feeble circulation. With the exception of advising the use of a tar-wash to all affected parts, I was unable to do more than counsel, in the way of precaution, sedulous attention to the class of expedients which he was already in the habit of using. He had previously consulted several specialists, but with no definite result. It was clearly a case for management, rather than for drugs.

The severe and lifelong form of prurigo described by Hebra, and for which he has claimed the name to the exclusion of all others, has the peculiarity of being made worse by cold. It is not impossible but that the severe Vienna winters, and the biting character of the winds to which the Austrian capital is liable, may account for the apparent fact that prurigo assumes there features much more formidable than those which attach to it in London. In another lecture, I shall show that we do not in English practice meet with many cases which fit well with Hebra's descriptions. Our chronic cases either are made better by winter, or, if the reverse, have not begun in childhood; two points which are amongst the more distinctive features of Hebra's disease. In this instance, you will see that the man, now forty-five, began to suffer for the first time in his life at the age of thirty. Nor have his sufferings from the disease ever in the least approached Hebra's description; nor, although his tendency to suffer from prurigo has been a long reason to apprehend its increase.

The case which I will now relate is one which fits very closely the Vienna type, except in its minor degree of severity.

Transcribed from an old form of the "Gleanings of the Earth," ascertained by Child.—James C. Child, in age 16, was under care at the Hospital for Skin-Diseases for a year and a half in 1872-73, on account of prurigo of varying severity. The parts affected were the sides of the neck and insides of the thighs, with a few spots at times on the fore-arms. The eruption was not copious at any time while under observation. At one time, there was an eczematous patch above the ear. On inquiring as to the duration of his malady, he told us that from early life he had had an irritable skin. In boyhood, he often used to scratch the insides of his thighs till they bled, and also frequently suffered from what he thought was nettle-rash; the latter form of eruption he used to attribute to bites of fleas, gnats, etc. He never could bear flannel next his skin. His prurigo had always been worse in winter than summer, and was worst of all during one winter that he spent in Quebec, where the cold was intense. With regard to time of day, he stated that his itching was generally worst just after getting up in the morning. In respect to treatment, he said he had once derived some benefit while under medical care in Belgium. He had often suspected that he had lice, and had looked for them repeatedly without success; and there seemed no reason for suspecting their presence while he was under care. He said that bugs did not annoy him particularly. It seemed probable that he had transmitted an irritable condition of skin to some of his children, for two of them were said to have had bad "scald-heads" at the age of two or three years. The treatment used for this old man did not have much effect on his very troublesome

skin-disease. Temporary improvement was followed by fresh crops of papules; and at his last visit in October 1873, it is noted that a fresh outbreak had occurred. I have not been able to learn anything about him since then. It is probable that the prurigo on the thighs was aggravated, and to some extent kept up, by the presence of large varicose veins in that part; but this condition had not been present until long after his disease had become established. The treatment was much varied, the most constant element being the lotio sulphuris, which was continued throughout the greater part of the time. The tar-lotion was tried for a short time, but apparently did not suit, as it was soon changed again for the sulphur.

Winter-prurigo in its milder forms is, I suspect, a very common affection; and not a few who read this lecture will probably, from personal experience, be able to confirm my description of it. It is not, however, very often that it rises to such a degree of severity as to induce its subject to seek medical advice. In certain cases, it acquires a very troublesome complication in a tendency to eczema, as well as in liability to irritation, not only from cold, but from the very measures likely to prevent its influence. When a prurigo-patient is unable to wear flannel on account of the aggravation caused, and unable to come near a fire for fear of exciting eczema, his case becomes very difficult to manage. Such a case is at present under my observation. The gentleman who is its subject tells me that in boyhood he suffered from somewhat irritable skin, and that he well recollects having the popliteal spaces cracked and sore every winter. He believes, however, that this was caused rather by standing with his back to the fire, than by cold. His mother had psoriasis, and at least one brother suffered severely from eczema; whilst several of his children have had slight forms of the latter. He is himself, like the subject of my first narrative, thin, bilious, of feeble circulation, and liable to suffer much from cold extremities. In boyhood, the change from summer to winter clothing always annoyed his skin, but it was not till middle life that the cold itself began to cause prurigo. For the last five winters, he has been liable, with the first onset of cold, to prurigo on the legs and some other parts, and with gradually increasing severity; and during the last two he has been obliged to keep at a distance from fires, on account of the smarting and tendency to eczema which fire-heat always causes. Formerly, he used to roast himself with impunity. Being engaged in avocations which compel him to mix much with the poor and dirty, he has once at least had scabies, and on several occasions been temporarily troubled by lice. Although these have always been quickly got rid of, yet they have occasioned extreme irritation; and he believes that these accidents have had their effect in augmenting the permanent irritability of his skin. He is always quite well in summer, with the exception that now and then, in consequence, apparently, of excessive perspiration, he has had eczema between the nates and on the inner sides of the thighs. There appears reason to fear that, in his case, both the eczematous and the pruriginous liabilities are likely to increase, and that the utmost care will be requisite to prevent his becoming severely affected. Washing with the tar-lotion, applications of boracic acid ointment, and the use of abundant warm clothing (from the irritation of which the skin is protected by silk or some soft material), seem to be the most helpful measures.

I have been careful to mention to you all the little details of the symptoms and supposed causes at work in these cases, because it is only by the correct appreciation of these that we can in any degree understand them. Winter-prurigo is not so much a disease as a liability. It is by a susceptibility to annoyance from slight and common sources of cutaneous irritation, which do not hurt the majority, that its sufferers are characterised; and it is by obviating these that we must hope to cure them. As to the efficiency of any internal remedies, I really have nothing that I can say with any confidence. Several of my patients have thought themselves better whilst taking arsenic; but, as one of those who spoke most definitely on this point afterwards told me that the homœopathic "*arsenicum*" suited him yet better than my prescription, I felt obliged to distrust his evidence. Let me insist that the utmost care is necessary in accepting conclusions on this point; for the disease varies with every change of wind, and may sometimes disappear spontaneously when mild weather suddenly succeeds to cold. As regards tonics and dietetic measures, I have but to say that the more you can invigorate your patient, and especially the more you can fatten him, the less will he suffer from cold and the prurigo which it induces.*

* Since this lecture was in the printer's hands, I have been informed by my friend Dr. Hilton Fagge that Dr. Duhring of New York has carefully described the same malady. I have not had time yet to seek Dr. Duhring's paper; and prefer, with this acknowledgment of his priority, to leave my statements just as they had been written. He has proposed for it, I believe, the term winter-pruritus, or pruritus hyemalis.

ABSTRACT OF NOTES OF A CASE OF REMOVAL OF THE ENTIRE OF THE RIGHT PARIETAL AND HALF THE FRONTAL BONE.*

By JOHN R. HAYES, M.D., Tralee, co. Kerry.

On the night of May 24th, 1874, Mrs. S., aged 32, was found insensible, lying on her right side, with her face and head on the hearth, in which there had been a turf fire, then nearly extinguished. How long she had lain there no one could tell. She had been seen under the influence of drink about seven o'clock P.M. She is supposed to have sat on a low seat near the fire, and to have fallen off insensible. She was found in the above-mentioned position about eleven o'clock, when I was called to see her.

I found her unconscious, with a quick weak pulse, about 120. The upper and centre parts of the right cheek were of a yellowish grey colour, and quite callous; both eyelids of the same side were reddened and vesicated. The eschar extended upwards between the ear and eye, involving the parietal and frontal bones. The integument was charred, the bone appearing without any covering to an extent of an inch square; half the forehead was also covered with an eschar; and the entire scalp from before backwards was extensively burned. Part over the parietal bone remained adherent; posteriorly there was a charred surface extending to the lambdoid suture. I cleaned off the ashes which covered the injured parts, removing the hair; administered a stimulant, and had the burned parts dressed with Carron oil. During this time she remained unconscious.

The following morning, consciousness had returned. I found her greatly depressed, the pulse quick, but small and weak; she was free from pain. I renewed the stimulants cautiously. About the third day, reaction set in, and the pain increasing rendered her sleepless. I gave occasional doses of opium, allaying the pain. Gradually she became calmer, and the stimulants were omitted.

In about ten days the inflammatory symptoms subsided, her appetite improved, and the pain entirely left her. Her pulse was 80. A slough appeared all round the edges of the eschar. I had this dressed with carbolic oil. The discharge decreased, and the vesicated parts began to cicatrise.

In about sixteen days, she suddenly became delirious, with nausea and occasional vomiting. Paralysis set in on the left side, the arm and leg only being affected; the face was not engaged. The pulse became weak and quick. She could take no food, but was able to



Fig. 1.—Appearance after removal of bone

retain her drinks. These symptoms slowly passed off, in about ten days her strength returned, and her appetite improved.

On July 1st, about five weeks after the receipt of the injury, the upper part of the ear had sloughed away; the vesicated portions were

* Read before the South of Ireland Branch.

nearly cicatrised. A line extended round the entire lateral portion of the scalp, from the mastoid portion of the temporal bone to the posterior angle of the parietal, and upwards along the lambdoid suture, from the inner angle of the superciliary ridge of the frontal, outwards to the external angle; the centre within this line continued quite hard and immovable. Not knowing how long she might continue in that state, and having no one to nurse her, I recommended her to go into hospital. She became dissatisfied in the County Infirmary, and left it in about a fortnight. I saw her some time afterwards, on August 1st, when a part of the frontal bone, about two inches square, was exposed. The bones were slightly movable, as if they had separated at the sagittal suture. The eschar on the cheek had separated. The eyelids were contracted, the conjunctiva everted, dragging the eye outwards. Her general health appeared good; she was able to take plenty of nourishment. To counteract the foetid odour, I applied a lotion of carbolic acid. She continued going about doing her household duties; and I did not again see her until she sent for me on October 1st. She complained "that the bones of her head were falling off". I found the right parietal and half the frontal separated from those of the opposite side, to the extent of about an inch, and slightly movable. I did not like to interfere with them then, fearing some serious result; but on October 3rd, the bones having separated a little more, I removed the whole parietal and half the frontal. The inner surface was covered with



Fig. 2.—Portion of bone removed: outer surface.

a thick curdy matter, and the depressions for arteries, etc., obliterated; the surface of the dura mater was covered with florid granulations, and a quantity of foetid pus came away. I could neither see nor feel any pulsation in the meningeal arteries. On making slight pressure on each side of the head, a quantity of pus welled up from between the



Fig. 3.—Portion of bone removed: inner surface.

hemispheres. She felt no inconvenience, neither headache, nor any other cerebral symptoms. Her appetite continued good; she said "she could eat a pound of chop for dinner, and take two pints of porter in a day". I washed the surface with a weak carbolic acid lotion, after which I applied water dressing, and kept it covered with gutta-percha paper, in lieu of oiled silk, which gave the surface a clean healthy granular appearance. In ten days, I changed it for zinc dressing, which I still continue to use. It was slowly healing from the margins; no pus escaped now from the situation of the superior longitudinal sinus; it was healed over to the extent of three quarters of an inch in width. The surface occasionally bled from the slightest touch. She complained of pain and soreness through the eye, but none in the head.

On December 2nd, I grafted skin on the surface of the granulation on four different places; three became attached, the other fell off.

Only once since writing the above notes (December 7th, 1874) did she have any symptoms of an urgent nature, when she became feverish, vomited, and was slightly delirious (December 9th, 1874). These symptoms, however, quickly subsided; and, from that date to the present, she has continued in good health. I exhibited the patient at the South of Ireland Branch of the British Medical Association on January 9th, 1875, when she accurately described her state from the time she recovered consciousness after the injury, and did not appear in the least to have suffered from any mental impairment. She then remained in Cork, at the Ophthalmic Hospital, under Dr. H. M. Jones's care, for about three weeks, during which time she enjoyed excellent health. It was while in the hospital that the photograph (Fig. 1) was taken. On the day I write this postscript to the case (April 13th, 1875), she is quite well. The new skin has grown nearly over the entire of the exposed surface. It was astonishing how successfully the grafting acted in this instance. She goes about at her ordinary duties, complaining of no pain or any ill effects from the terrible accident. I am not aware that any case has ever been put on record in which recovery took place, when, from any cause, such complete destruction of the cranial bones and extensive exposure of the brain has ensued.

A CASE OF DIABETES INSIPIDUS TREATED BY (1) JABORANDI AND (2) ERGOT.

By SYDNEY RINGER, M.D., F.R.C.P.,

Professor of Materia Medica in University College, and Physician to University College Hospital.

THIS was a well marked case of this disease. The patient was for some time under the care of my friend Mr. William Murrell, who has kindly supplied me with the following notes.

William S., aged 38, has been under occasional observation since May 1874. The intermittent nature of his treatment was owing to the fact that he resided some miles from town. Notes of his condition were taken at every visit. It would be tedious to give the notes in full, and a classification of the chief points has, therefore, been attempted. The patient's own expressions have in most instances been used in the description of his symptoms. Respecting his paternal grandparents, the patient knew nothing. His maternal grandfather died at the age of 82 of consumption. He used to spit up a "good quantity" of blood every morning. The patient remembered him well, and had often seen the blood in his chamber utensil when he washed it out. His maternal grandmother was always very healthy, and lived to the age of 92. The patient did not think that either of his mother's parents passed an unusual quantity of urine. The patient's mother was subject to cough, with expectoration. When from 40 to 41 years of age, she commenced passing large quantities of urine. The patient was sure that she habitually passed more than he had ever done. He did not think that she passed urine quite so frequently as he did; but she used to make more at a time. This lasted about four years, when she died. She never received any treatment, and the patient could not say whether her urine contained any sugar or not. The patient's father died, aged 60, from a "bad leg". He never suffered in any way from his urine.

The patient was the eldest of a family of seven, four girls and three boys. He was apparently not very clear as to their relative position as regards age, but remembers each individual perfectly. His eldest brother was now about 30, and, for the last three years, he had spat blood in considerable quantities. He was formerly in the army, but was discharged on account of bad health. He was described as being a "drunken beggar"; but was not known to suffer in any way with his urine. His youngest brother was "taken bad" when he was about 21. He had a cough, and spat a good deal of blood, and was said by the doctor to be in a decline. He only lasted six months or so, and was quite a skeleton when he died. The patient had three sisters living who were said to be well and strong. They had no cough, did not spit blood, and did not pass an unusually large quantity of urine. The youngest sister died when she was about 20. About two years before her death, she began passing large quantities of urine, often a pint or more at a time. The ordinary chamber-utensil "was not a bit of good to her", and she was always obliged to have a big pail kept in her room. She had a nasty cough, but the patient thought she never spat any blood. Respecting his cousins, the patient could not say much; two or three of them on his mother's side died of "decline", but were not known to have suffered from diabetes.

Place of Birth.—The patient was born at Aberdeen. His

was a soldier, and they were constantly changing their quarters, so that the patient never remained long at any one place.

He was a private gentleman, and had always lived in good families. He could not say that he had ever been particularly overworked.

Health.—He had been well; rather better than good, than most people. He had been a strong healthy man, accustomed to boxing, wrestling, and active out-door exercise. He had never been a drinker; had, in fact, always been rather careful in what he took in the way of stimulants, seldom exceeding a pint of half-and-half in the day.

The present illness.—He was of a strikingly fine complexion. It was not until six months before he died, even when he had not been steadily progressing downwards, he exhibited no disease.

Family Connections.—He had been married once, and was the father of seven children; they were all living with the exception of one which died from whooping-cough. The youngest, a girl, had been born since the patient had suffered from diabetes, and was now four months old. When six or seven weeks old, she began passing large quantities of urine—"twice as much as she ought to"—but this condition, after lasting seven weeks, passed off, much to the relief of the parents. The other children suffered from wheezing on the chest, but not in any way from their urine.

Previous Illnesses.—The patient had had measles and scarlet fever when a child, and small-pox when about 13. He had no recollection of any blow or fall upon the head or abdomen.

Motion of Onset.—About Christmas 1873, the patient was told to go after a carriage, and take the occupants some money which had been accidentally forgotten. He ran as hard as he could for four miles before he came up with them. He was, he says, dripping wet, and the perspiration was "regularly running off him". Before he had time to get cool, he was asked to drive a pony-chaise home, a distance of six miles. It was a bitterly cold day, with a nasty east wind blowing, and, before he had gone far, he felt all of a shiver. He was so bad that he had to pull up and get some ginger brandy; but that had no effect, and he kept on "in a regular tremble" all the way home. For a fortnight after this, he "felt very queer"; had no appetite; could hardly keep about, and was always very drowsy and sleepy. At the expiration of that fortnight, his excessive thirst commenced. He drank then more than he has ever done since. He used to drink "a good gallon in from two to three drinks". For the first three days, he passed hardly any urine; but, on the morning of the fourth day, he awoke with a strong desire to urinate, and got up and passed "the best part of a pot full". From that time to this, he had passed large quantities of urine. Four or five months later, he suffered from cough, and for the first time spat blood, on one occasion nearly half a pint. In about ten months from the commencement of his illness, he noticed that he was losing flesh. His weight had always been about 9 st. 2 lb.; but, in a few months, he had lost nearly two stones. About a year later, his appetite fell off considerably. The excessive dryness of the skin had troubled him from the time he commenced passing the large quantities of urine.

A detailed description of the patient's symptoms will now be given.

Urine.—The quantity of urine passed in the twenty-four hours when not under active treatment varied from nine to twenty-two pints. The average quantity passed during five days in May 1874, when he was under constant supervision, was twelve pints five ounces; the largest quantity being fifteen pints, and the smallest nine pints five ounces. About a year later, the patient was habitually passing twenty-two pints in the twenty-four hours. He usually passed urine two or three times during the hour, and was on this account unable to go to church or to any place of amusement. It may be mentioned that the diagnosis of the case was first made by observing that the patient had a slop-pail under his bed, in addition to two ordinary chamber-utensils.

Characters.—The urine was examined at frequent intervals, but varied little in its characters. It was usually of a light straw colour, clear, with no deposit; odourless, very faintly acid, and of a specific gravity ranging from 1,002 to 1,005. It contained no albumen and no sugar. It decomposed very rapidly, and became extremely offensive after standing for even a short time. An estimation of the urea showed that it contained, on an average, about $\frac{1}{3}$ per cent.

Thirst.—This was one of the patient's most distressing symptoms. During the first year of his illness, he used generally to drink about six quarts of water in the day, in addition to tea and coffee. He had drunk as much as twenty-two quarts in the twenty-four hours. He had measured it on several occasions when this had been the quantity. He seldom drank less than a quart at a time. He went out as much as possible, to "keep away from the water". He generally kept a little pebble in his mouth to check the sensation of thirst. His sufferings when he was unable to get water were very great. He said he should never forget one day, when he was left alone in the house without any

thing to drink. He was laid up at the time, and too weak to get about. For about an hour, he was pretty comfortable, but then became very thirsty. He bore his thirst as well as he could, hoping that some one would come to him; but it finally became so intolerable, that he suddenly caught up his chamber-utensil and took a long deep draught of his urine. During the day, he drank the urine he passed seven times. It was at last so salt, that it hardly quenched his thirst at all.

Appetite.—The appetite was extremely poor. The patient often went for days together without touching meat. Whilst under treatment in a hospital, he had so little appetite that he obtained permission to stay in his ward during the dinner hour, instead of going to table with the other patients. On one occasion on which he was seen, he stated that he had had nothing to eat but half a halfpenny biscuit for four days. He had money in his pocket, and could get anything he wanted in the way of food; but "he had no appetite, and could not eat anything".

Bowels.—The patient was usually a week or more without having a motion, and had sometimes gone from a month to six weeks. The feces were extremely hard, and were passed with the greatest difficulty. There was occasionally a little blood in the motions.

Skin.—The skin was very dry, with the exception of the feet. The patient said he could walk as fast as he liked, even in the hottest day in summer, without perspiring about the body. The feet, however, were constantly damp, and the secretion from them was so exceedingly offensive, that he had to change his socks two or three times a day. The feet itched very much, and were often "almost raw". He was never troubled with the dryness of skin or offensive secretion from the feet before this illness. For the last two years, he had suffered greatly from boils at the back of the neck "each spring and fall". With this exception, he had had no cutaneous eruption. The patient's hair was always "very dry and crisp".

Pain.—The patient had not suffered much pain during his illness. He had at times complained of pains in the legs and loins; but these had usually been of short duration.

Cold.—He was always cold. As soon as he got away from the fire, he came over all of a shake.

Loss of Flesh.—As already stated, the patient very rapidly lost flesh, and in a few months was reduced from 9 st. to 7 st.

Cough.—The cough had never been a prominent symptom. It had troubled him chiefly in winter, and was seldom accompanied by much expectoration.

Hæmoptysis occurred on some half a dozen occasions, but never whilst he was actually under observation. It was stated to have been once about half a pint, but was ordinarily, judging from the patient's description, from three to four ounces.

Physical Examination.—There was nothing very striking in the patient's appearance; nothing, at all events, which would excite a suspicion of the disease from which he was suffering. A physical examination of his chest showed nothing abnormal. The temperature was taken in the mouth and rectum and under the tongue; but there was no fever.

Previous Treatment.—The patient had had a great deal of general treatment—quinine, cod-liver oil, etc.—without deriving any benefit.

Treatment by Ergot.—The ergot was first tried in June 1874. The dose was twenty minims of the liquid extract taken in water three times a day. In a fortnight, the urine was reduced from fifteen to eight and a half pints, and in six weeks to between six and seven pints. The medicine was then discontinued, but the urine passed did not exceed seven pints daily for four months. It then increased in quantity; in January, it had returned to the old amount. The ergot was given for the second time in July 1875, the dose being on that occasion fifteen minims of the liquid extract every three hours. In a fortnight, the urine fell from twenty-two to twelve pints. The thirst was less troublesome, and the patient said "the medicine had made a good two quarts difference in his drink". The appetite was improved, and the patient was able to get about better. The bowels were opened more frequently, and the motions were softer. The medicine was discontinued in consequence of his admission into the hospital.

On the publication by Dr. Laycock of two cases of diabetes insipidus successfully treated by jaborandi, Mr. Murrell sent this patient into University College Hospital, that he might test this drug.

The man was very thin. His thirst was most distressing. He would drink three to four pints of water at a time. His skin was very dry, except his feet, which, strange to say, perspired profusely, enough to annoy and trouble him. He was easily tired. His mouth was generally distressingly dry. In other respects, he was fairly well, and no disease could be detected in any of his organs. His temperature varied between 98 and 99 Fahr. His appetite was bad; his bowels obstinately confined; his sexual powers were not diminished. We kept him some days without any treatment. He

was then put on infusion of jaborandi (one drachm to six ounces), and this treatment was continued for forty-four days. The dose was from time to time increased till he took several times daily a dose enough to produce in healthy people very profuse perspiration and salivation. As will be seen, the jaborandi had no effect on the quantity of urine; but his mouth was moister and more comfortable, and, though the jaborandi never produced copious perspiration, it kept the skin comfortable, and, after exercise or eating, or hot drinks, he perspired rather freely. The sweating of the feet soon ceased after taking jaborandi. The medicine did not make him spit. After it had been clearly proved that the jaborandi was useless, he was put on ergot for the third time with considerable success. The results of the treatment will be seen in the following table.

Quantity of urine		Treatment.	Quantity of urine	
Date.	in litres.		Date.	in litres.
Aug. 12	9.0600		Aug. 12	10.0700
" 13	10.0700		" 13	10.0700
" 14	8.0500		" 14	10.0700
" 15	10.1000		" 15	10.0700
" 16	10.0250		" 16	10.0700
" 17	10.0100		" 17	10.0700
" 18	10.0100		" 18	10.0700
" 19	11.0600		" 19	10.0700
" 20	11.0000		" 20	10.0700
" 21	10.0100	Two drachms of infusion of jaborandi every 4 hrs.	" 21	10.0700
" 22	11.0000		" 22	10.0700
" 23	10.0600	To be given every 3 hours.	" 23	10.0700
" 24	10.0250		" 24	10.0700
" 25	11.0000		" 25	10.0700
" 26	10.0600	Three drachms every 3 hours.	" 26	10.0700
" 27	10.0600		" 27	10.0700
" 28	11.0250		" 28	10.0700
" 29	11.0600		" 29	10.0700

From the 14th to the 30th inclusive, the amount varied between 10.0500 and 9.0250

Oct. 1	10.0000	One ounce and a half every 2 hrs.	Oct. 1	6.0300
" 2	11.0000		" 2	6.0600
" 3	11.0000		" 3	6.0500
" 4	11.0000		" 4	5.0800
" 5	11.0000	Ergot begun 30 minims of liquid extract of ergot every 3 hours.	" 5	5.0800
" 6	12.0800		" 6	5.0800
" 7	12.0000		" 7	5.0800
" 8	11.0800		" 8	5.0800
" 9	11.0500		" 9	5.0800
" 10	11.0500		" 10	5.0800
" 11	11.0000		" 11	5.0800
" 12	7.0200		" 12	5.0800
" 13	7.0700		" 13	5.0800
" 14	6.0500		" 14	5.0800
" 15	6.0400		" 15	5.0800

When he was in the hospital, the urine was free from albumen or sugar. The specific gravity varied between 1000 and 1006; but as the quantity became less, it rose to 1017.

It will be seen from the foregoing notes that this well marked case of diabetes insipidus was uninfluenced by jaborandi, whilst on three occasions the quantity of urine was very greatly reduced by ergot.

CHLOROFORM AND ANÆSTHESIA.

By JOHN SMITH, M.D., F.R.C.S.E.,
Surgeon-Dentist to the Queen for Scotland.

SINCE the publication of Dr. Lauder Brunton's communication, in which he alludes to the administration of chloroform in insufficient quantity as a cause of danger, some attention seems to have been drawn to the subject in respect to this and other points.

I wish to make a few additional remarks on the matter; and that I am so far qualified to do so, will perhaps be admitted from the fact of an experience in the use of chloroform ever since its introduction in 1847, and a practical acquaintance with it, more or less, in every variety of case in which it ever has been given—over and above that of between three and four thousand times administering it in my own department of surgery. I trust my making such a statement may not be set down to any other motive than to show that I do not speak without sufficient data to entitle me in a certain measure to do so.

First of all, I entirely agree with Dr. Lauder Brunton's views regarding the degree of anæsthesia required for operating safely. In a

communication read by me before the Medico-Chirurgical Society here ten years ago, and published in the *Edinburgh Medical Journal* for 1866, I make the following remarks, which will be seen closely to coincide with those of Dr. Brunton.

"In all cases, anæsthesia, to be either satisfactory or safe, should be complete. I have repeatedly noticed patients, who have had chloroform on different occasions for such operations as came under my own department, express themselves as much less uneasy after a full dose—much less exhausted; and I may mention my own personal experience of this agent to bear out such a statement. So far it is more satisfactory; but it is also more safe. We know that one of the benefits of anæsthesia is the prevention of shock during an operation. We know also that shock tends to interfere with the heart's contractions, by the influence of the cerebro-spinal system on the cardiac ganglia through the par vagum. And this tendency does not always depend on the magnitude or importance of the operation. The operation may be a minor one, and the suffering inflicted very slight. The patient may be unconscious of pain, and yet the heart may, through the ganglionic system, be affected by the operation, and syncope result. . . . There can be no reasonable doubt that, of two patients equally under chloroform, if one be operated on in any way worthy of the term, and the other not, although neither has actually experienced pain, yet the one awakens up in a very different condition from the other: the one has suffered more or less from shock, the other has not."

In the same paper, allusion is made to the fact of the sudden diminution of the heart's action, on the operation being commenced, even during the state of anæsthesia. This I have myself frequently remarked even in tooth-extraction, and the fact has been over and over again observed in the greater operations. It is this tendency to sudden syncope which indicates the necessity for all operations being, if possible, performed with the patient in the recumbent position. In my lectures at Surgeons' Hall here in 1854 and subsequent years, and in the *Handbook of Dental Surgery* published as my class-book, this was, so far as I am aware, inculcated for the first time as applied to dental surgery; while, again, in the paper I am now quoting, I find it stated that "syncope during anæsthesia, as at all other times, is most apt to occur when the patient is in the upright or semi-upright position; and it need scarcely be here said that, in order to diminish the chances of a complication so serious, the horizontal posture should in all cases be the one adopted during the exhibition of chloroform. Such, however, is far from being the position generally chosen for minor operations. The preponderance in these operations of death associated with chloroform is, no doubt, attributable in a great measure to a contrary practice, it being very generally considered not worth while in such cases to make a patient lie down."

With regard to the subject of death from the administration of chloroform, much has been stated calculated to create a very unfair prejudice against it. No agent possessing such power of abrogating sensation can possibly be free from a certain amount of risk in its employment. Thus much, therefore, is to be understood as admitted in speaking of chloroform. But a great deal beyond this has been attempted to be made out. Every death now occurring during an operation in which chloroform has been given is set down to its effect, and sensational paragraphs too often appear in our daily press spreading such ill-authenticated reports. In fact, no deaths under such circumstances are now-a-days attributed to "shock" and other causes which used, before the days of anæsthesia, to be set forth in explanation of such cases, which, by the way, were far more numerous than they now are. But these cases, although fewer, still do occur; and that chloroform is unwarrantably blamed in them is, I fear, equally true.

Dr. Brunton mentions a case where chloroform was to have been given, and in which the patient suddenly died during the operation without its use. As I happen to have been present on that occasion, I may mention that the non-administration of the anæsthetic was not due to the bottle being broken, but to Professor Simpson, who was to have administered the chloroform, not arriving in time. Here the patient died on the first incision being made through the skin over the hernial sac. Shortly before this, again, Dr. John Argyll Robertson here had met with a similar case—strangulated hernia—where the patient died while the groin was being shaved, and where no anæsthetic had been given. And, since the introduction and general use of chloroform, did time and space permit, many such cases could be cited where circumstances rendered the administration of any anæsthetic impossible. Even in tooth-extraction, this has occurred; and Mr. Holmes mentions the case of a patient whom the dentist found dead in the chair on returning from a side table, where he had been selecting the instrument to be used. There is very little doubt that, had chloroform been employed

* A litre is = 35½ fluid ounces.

in these cases, it would have been subject to strong suspicion, if not to actual blame, as the cause of death.

Lastly, there is an important point connected with the numerous alleged deaths from chloroform which seems to be overlooked or set aside, as undeserving of notice; and that is the extreme discrepancy prevailing in the account of *post mortem* appearances. In the case of any other poison producing death, we find certain specific and uniform indications of its peculiar toxic action; whereas in those ascribed to chloroform the *post mortem* appearances range from those presented by death from syncope, on the one hand, to those produced by asphyxia, or those of the very opposite characters to syncope, on the other; arguing it to be extremely probable that one or other of them was during, and not owing to, anaesthesia from this agent. I will add a single other quotation on this topic from the paper to which I have so largely ventured to refer. It is as follows.

"In the fifty cases collected by the late Dr. Snow, the condition of the heart was very various. In nearly twenty, it was either gorged or tolerably filled with blood. In others, it was empty, but stained with blood, showing that probably it had been emptied only at the *post mortem* examination. Dr. Berend of Hanover details, among others, ten cases, in all of which the heart was empty, flaccid, collapsed, and doubled upon itself. In other cases from time to time recorded, the heart was firmly contracted. In many it was diseased, and in not a few the cause of death was found in some other organ altogether, such as the spinal cord. Again, the opinions as to the mode of death are not less various. Dr. Sibson, in 1848, attributed the fatal result to death of the heart; Dr. Snow, to what he termed cardiac syncope; Dr. Black, to asphyxia; Caspar, to neuro-paralysis; Sanson, to both syncope and asphyxia, etc. A conflicting mass of evidence, from which it appears impossible to derive any other conclusion than that the deaths described were due to no one cause, but had been produced in a manner widely different, according to the circumstances of the case."

A word here may be said regarding nitrous oxide as an anæsthetic. Although in the daily use of this agent, I fear that we can scarcely yet place it in comparison with chloroform, allowing that its mode of action were similar, which is very doubtful. The limited sphere of its application in medicine and surgery, the condition of patients under its influence, and some of its possible bad effects not being immediate, but more likely to show themselves at an after date, preclude its being used as anything like a fair standard by which to judge of chloroform. It is an excellent, an invaluable agent in its own place; but neither in medicine nor surgery is it ever likely to supersede such anæsthetics as ether or chloroform. In fact, if such were attempted, it seems very doubtful whether its present small rate of mortality would not increase in rather a startling manner; while its efficiency as a substitute would be found at fault in many ways.

CASE OF ACUTE POISONING WITH CHLORAL-HYDRATE.

By DAVID YOUNG, M.D., Florence.

A FEW days ago, I was called to see a gentleman who had just recovered from an attack of delirium tremens. He was feeble looking and nervous, and wished me to prescribe for persistent sleeplessness. For many months previously, he had taken chloral-hydrate in doses of twenty-five grains, with excellent results; but, since his last attack, the medicine had failed to act as before. I suggested a slight increase of the dose, and ordered the following mixture.

℞ Chloral hydrat. ℥ij; glycerini ℥ij; syrupi ℥ss; aque q. s., ad ℥iv. Misce.

A sixth part to be taken at bedtime, and half a dose more in two hours, if necessary. I was hastily summoned in the night; and, when I reached the hotel, found the patient in a deep stupor, the breathing slow and difficult, and the surface of the body, especially the extremities, very cold. In reply to my question if he had taken the medicine as ordered, his wife told me that he had come home about three hours before, and had apparently been drinking. He said, just before he went to bed, "I will now take the doctor's draught", and poured out, as she thought, one dose. Shortly after taking it, he became very restless, complained of being breathless, and of severe cramps in the legs. On attempting to get up for a drink of seltzer water, he staggered and fell on the floor. His wife became alarmed; and, after lifting him up, discovered that the bottle which had contained the chloral was empty; he had taken the whole—180 grains.

I was immediately sent for; and, on arriving, found him as above

stated. Acting on the suggestions given by my friend Dr. Lauder Brunton for the treatment of this accident, I ordered blankets and hot bottles to be procured at once. In the brief interval which elapsed before they were got ready, I noticed the following points in the condition of the patient. His breathing was slow and difficult; respirations 11 in the minute. Pulse 76, feeble and irregular. The temperature in the axilla was 35.6 deg. C. (96.08 Fahr.). The first sound of the heart was indistinct, and its action feeble. The eyelids were opened with difficulty. The conjunctiva was deeply injected, and the pupil firmly contracted. The surface of the body was very cold.

The lower limbs were wrapped in warm flannel, and hot bottles applied to different parts of the body; and a gutta-percha water-bag was filled with hot water, and laid over the cardiac region, and the patient carefully covered with blankets. The effects of the warmth were decided, and soon apparent. The temperature slowly rose, the breathing improved, and the heart regained its power. Half a teaspoonful of Darby's extract of meat, with a teaspoonful of brandy in a small cupful of hot water, was now ordered to be given every two hours.

Six hours after the application of the warmth, and nine after the taking of the chloral, the patient's condition was noted as under. Breathing was tranquil; respirations 16 per minute. The heart-sounds were distinct; its action was somewhat tumultuous. Pulse 92, full and soft. The pupil was contracted. The conjunctiva was injected, and he complained of muscular pains in the arms and legs. The patient continued in a state of great drowsiness for fifteen hours. He was easily roused, but immediately went off again to sleep.

In two days, he was quite well. I have no doubt that the effect of the application of the warmth, in this case, was to prevent another being added to the list of those whose death has been caused by chloral injudiciously taken.

A NOTE ON ANGINA LUDOVICI.

By F. MURCHISON, M.A., M.B. Edin.,

Assistant-Physician to the Crichton Royal Institution, Dumfries, N.B.

Two years ago, during my residence as medical officer in Harris, in the Hebrides, some cases of what I now believe to have been the *Angina Ludovici*, occurred among the natives of the island. The disease was different in its symptoms and peculiarities from any throat-affection that either my experience or reading had brought under my notice. I vainly tried to diagnose the malady, and as vainly read whatever medical literature of the past and present I had access to; but I could find nothing, having a name, similar to it. It attacked children and young persons of various ages. The youngest patient under my care might have been three years of age; the oldest was not certainly over thirty. The symptoms were uniformly of the same type, save that they were modified according to the diathesis and idiosyncrasy of the individual invaded. As a rule, the older the patients, the more intense were the sufferings, and the better developed were the throat-tumours that occasioned them. It is worthy of mention that the anæmic, pale, and pasty fair-haired, suffered in the proportion of six to one of the plethoric and healthy-looking; and that the disease among the latter did not occasion the prostration which it did among the former. Indeed, the cases among the absolutely robust were so few and far between, that I was induced—in the absence of a more plausible one—to adopt the theory that the sickness was one of the numerous manifestations of a scrofulous habit of body, incited into activity by the prevalence of very cold weather, insufficient clothing, want of cleanliness, and inappropriate food. All the cases were purely idiopathic, and independent of any local lesion. They all occurred in winter, and in close succession; but they were not confined to one isolated locality. One island seemed to favour the growth and development of the affection more than any other situation; but the six cases that occurred in it seemed to have arisen independently of infection for their origin, and rather to have commenced in an unhealthy locality, destitute of proper sanitary arrangements. No two cases occurred in the same family, although isolation of the sick from the healthy was not enforced; so that I am induced to believe that the disease was occasioned by climatic and insanitary influences rather than by contagion.

The disease began with a chill, a stiffness of the muscles that move the tongue and throat, a feeling of general *malaise*, discomfort and prostration, loss of appetite, and, in a word, with the feelings that are frequently the precursors of the specific fevers—symptoms which preceded the development of the disease in every instance. This incipient stage was followed by another of much distress and discomfort to the patient. The vicinity of the submaxillary gland, the gland itself, and

the entire floor of the mouth, became the seat of a hard swelling that seriously interfered with the functions of mastication, deglutition, and respiration. From this centre, the disease gradually extended, till, in its course, it involved the parotid and thyroid glands in the morbid action. The mouth was left half open; the voice became much modified, either existing only as a whisper, or being altogether inaudible. The patient was a spectacle of real suffering, and, in some instances, feverish and delirious. His countenance bore the expression of intense anxiety. The saliva dribbled from the mouth, which performed its functions imperfectly or not at all, according to the severity of the case. It was impossible for the sufferer to move his lower jaw without great pain. The entire constitution became involved. The bowels were constipated, the urine scanty and high-coloured, the tongue furred and enlarged from sharing in the contiguous inflammatory action. The local tumour became gradually harder, and imparted the sensation of a board. It pressed the tongue upwards, so that there was scarcely any passage left open to feed the patient, who now lived entirely on slops and stimulants. This state of matters continued for a varying period, which never exceeded twelve days, and terribly exhausted the patient, who passed day and night sleepless, and in despair of relief from pain so insupportable. The tumour was now much larger, but its colour was not characteristic, and differed little from that of the parts in their healthy state. In a short time, redness and, in the worst cases, lividity marked the seat of the inflammation, and the whole throat bulged out as if an immense goitre had attacked the neck. Some of the cases ended in resolution; others in the formation and discharge of pus; but none in gangrene nor in death. Such as were subjected to early treatment got on best, and ended most frequently in resolution; but, in each case, a marked hardness, which proved intractable to every remedy, save time and iodine, remained.

The treatment I adopted was very simple. The bowels were relieved by a saline draught; while the strength of the patient, who was not allowed to leave his bed, was kept up by stimulants administered at stated intervals in a diluted form, as well as by slops and chicken-broth. The local treatment consisted of fomentations and poultices made with a drachm or two of tincture of opium superadded. When fluctuation pointed out the necessity of making an incision, I resorted to the knife to get rid of the pus. This treatment was adopted with few variations, in every case with the best results; and, when convalescence fairly set in, the patient went on uninterruptedly from good to better, till every trace of the disease disappeared.

OBSTETRIC MEMORANDA.

ON THE VALUE OF NITRIC ACID IN THE TREATMENT OF DISEASES OF THE NECK OF THE WOMB.

I FULLY endorse Dr. Braithwaite's recommendation of the use of nitric acid in affections of the cervix uteri. He seems, however, to have overlooked the fact that this agent had been previously recommended by others in such cases. Had he referred to my *Lectures on Diseases peculiar to Women*, he would have found (page 84, 3rd edition) that I say "brushing the part lightly over with nitric acid may (if the unhealthy condition of the mucous membrane does not extend very high) be sufficient"; and again, pp. 154-5: "My usual treatment has been to apply the strong nitric acid freely to the whole interior of the cervical canal." Dr. Braithwaite is, therefore, mistaken in supposing that the value of nitric acid in affections of the cervix uteri has been overlooked.

LOMBE ATTHILL, M.D., Master of the Rotunda Hospital, Dublin.

I AM happy in being able to add my testimony to that of Drs. Braithwaite and Churchill, the result of considerable experience, as to the value of nitric acid as an uterine caustic, which I have found especially useful in cases of chronic endocervicitis, induration and intractable abrasions about the neck of the uterus; and its value appears to have been greatly enhanced, in many cases, by previous depletion of the part affected. Latterly, I have been in the habit of applying the anhydrous nitric acid, which, from its rapid effects upon the tissues, occasions little or no pain; and I find a piece of porous ordinary fire-wood, cut to the requisite size and shape, a convenient method of application.

R. GREENHALGH, M.D., Physician-Accoucheur to and Lecturer on the Diseases of Women, etc., at St. Bartholomew's Hospital, etc.

My desire for brevity in the paper kindly read for me at Edinburgh by Mr. Cullingworth, as I infer from Dr. Tilt's criticisms, has unfortunately led to some ambiguity. It was not my intention to recommend the use of nitric acid as a caustic in all cases of disease of the neck of the womb requiring such an application; the expression used was "generally, but not invariably, the most suitable". Nor did I aim at embracing the whole subject of treatment of the disease in question; but only at pointing out the superiority of nitric acid in cases of "ulceration or erosion of the os and cervix uteri" and "endocervicitis". But I expressly stated that, "if the canal be not open, the case is not one suitable for this treatment". This disposes of Dr. Tilt's objection to the use of nitric acid in comparatively recent cases of endocervicitis. I did not intend to recommend it; for in these cases, the canal is not open. Dr. Tilt again demurs to my "recommendation to leave the patient without examination for a month, unless the os uteri be patulous, and the calibre of the cervical canal such as to render its contraction rather an advantage than otherwise". But this sentence (the words are Dr. Tilt's) does not correctly state my views. For "unless", read "provided that", and it would be correct; but the meaning of the sentence is reversed.

I quite see the value of the classification of cervical diseases requiring a caustic given by Dr. Tilt; and our want of accord as to the treatment is more apparent than real. In his first class—recent cases of endocervicitis—I did not recommend its use. His third class is more strictly inflammatory hypertrophy of the cervix, with hard and fissured lips. These cases, Dr. Tilt regards as originally inflammation of the mucous membrane spreading to the surrounding tissues; and this view naturally leads him to classify them with endocervicitis. On the other hand, I do not so regard them; but believe them to arise from direct injury to the structure of the parts, generally from crushing or laceration during delivery, either by the head of the child or the finger of the accoucheur. Nothing conduces more to this than the practice of rupturing the membranes before the os has attained its full size, especially if it be thick and fleshy. Whatever the origin of these cases, I quite agree with Dr. Tilt as to the value of potassa cum calce in their treatment; but I have certainly, in some cases, been able to avoid the use of that remedy by a free application of nitric acid to the eroded surfaces of the everted lips. But, in a bad case, I should precede this by the use of potassa cum calce, and then after a time use the nitric acid, with the view of producing a healing surface. A sore resulting from the application of potass has little healing power; it is pale and watery in appearance. To sum up, I should use nitric acid in all cases of erosion or ulceration of the os uteri, and in all cases of inflammation or ulceration of the cervix in which the canal is open. I should not use nitric acid in any case in which the canal is closed; and in cases of great induration and hypertrophy of the lips, its use should be preceded by that of potassa cum calce. I cannot admit that it produces more pain than nitrate of silver, nor that it has "an ugly tendency to run"; for there should never be enough on the cotton-wool to do so. Nor can I admit that there is much analogy between the action of nitrate of silver in morbid conditions of the fauces and in the cases in question. A tannin gargle is often very efficacious in the former, but it would be quite useless as a lotion in the latter. The reason is that, from the capillary vessels of the womb running perpendicularly to the surface, there is a strong tendency for the whole thickness of the structures to become implicated; whereas, in the case of the fauces, the vessels run in the mucous membrane, and are amenable to the action of astringents, such as nitrate of silver and tannin. No doubt much of the inefficacy of nitrate of silver as a caustic is from the film of chloride preventing its deeper action. Next to nitric acid in value, I should place nitrate of mercury. Nitric acid, in the words of Dr. Churchill, "does just what we want, and no more". It is a clean and handy remedy in the possession of every medical man in country places, and all are familiar with its action in other diseases; but its great recommendation is that the frequent use of the speculum can, by its aid, be avoided; and nothing, to my mind, is so repulsive in the treatment of these diseases.

JAMES BRAITHWAITE, M.D. Lond., Lecturer on Diseases of Women and Children at the Leeds School of Medicine.

PUERPERAL STATISTICS.

As a small contribution to puerperal statistics from private practice, I beg to send the following for publication. Out of 216 consecutive cases which I have attended and noted down, I find the following; forceps used once in 14, breech once in 36, footling, hand with head, hands and feet, arm, each once; *post partum* hæmorrhage I in 54; retained placenta once. I have lost no mother, although several have suffered from considerable fever with tenderness in the abdomen, etc.,

beginning about the third day after confinement, and continuing in some cases for three weeks.

J. HADDON, M.A., M.D., Monk's Hall, Eccles.

THE DIMENSIONS OF A MULTIPAROUS UTERUS.

THE Whitechapel murder will, for some time to come, cause much thought to the medical jurist. Any evidence which can be brought to bear upon the several medico-legal questions involved in it must be of value.

Dr. Meadows questions the opinions of Messrs. Bond and Larkin as to whether the uterus in this case had ever been gravid. I find, in Beck's *Medical Jurisprudence* (5th edition, 1836), at page 161, article "Delivery", a foot-note taken from Velpeau's *Midwifery*, p. 61, in which that distinguished physician gives the dimensions of the womb after several pregnancies. I place side by side with it those given by Mr. Larkin as found in the womb of the supposed Harriet Louisa Lane.

VELPEAU.		LARKIN.	
Total length.....	2½ to 3 ins.	Extreme length.....	3 inches.
" " of neck.....	1½ to 1½ ins.	Width of neck (upper part).....	1½ "
" " of body.....	2 ins.	" " (lower part).....	1½ "
Breadth of neck.....	1½ ins.	" " at fundus.....	2½ "
Thickness of neck.....	8 to 10 lines.	Thickness of walls.....	½ of an in.
" of uterine walls.....	6 lines.	Cavity—length.....	2½ inches.
Weight.....	1½ to 2 ozs.	" breadth between Fallopian tubes.....	1½ inches.
		" breadth of centre.....	1 inch.
		" breadth of lower orifice.....	1½ of an in.
		Thickness of cervix.....	½ of an in.
		Width of os cervicis.....	¾ of an in.
		Weight of uterus.....	12 drachms.

A line is 1-12th part of an inch.

After a careful comparison of these two tables, we find how closely they correspond in all the principal measurements, and bear out the opinion expressed by Messrs. Bond and Larkin. Let us take, for instance, the following :

	VELPEAU.	LARKIN.
Length.....	2½ to 3 inches.	3 inches.
Breadth of neck.....	1½ inches.	1½ inches.
Thickness of walls.....	6 lines (½ an inch).	½ of an inch.
Thickness of neck.....	8 to 10 lines.	¾ of an inch.
Weight.....	1½ to 2 ounces.	12 drachms.

With regard to the womb retaining its preservation, and being of a bright red colour, long after the other organs have decomposed, many months after death, Casper gives several cases in vol. 1, pp. 52, 53, 54.

H. C. STEWART, F.R.C.S., etc.

THERAPEUTIC MEMORANDA.

ASCITES SPEEDILY CURED BY THE RESIN OF COPAIBA.

GEORGE B., aged 38, recently came under my care in Guy's Hospital. He was admitted with ascites and slight anasarca of the leg on October 13th, and was discharged on October 21st. On October 14th, he was ordered the *mistura resinæ copaibæ*, but did not commence it on that day. On October 15th, the amount of urine passed was found to be 3 pints. On October 16th, it was a little more than 6 pints. On October 17th, it was a little over 8 pints, and the dropsy was fast disappearing. On October 18th, it was 6½ pints, and the swelling of the abdomen much less. On October 19th, the urine passed was 7½ pints; the ascites was considerably diminished. On October 20th, the urine was 7 pints. On October 21st, he left the hospital, as the dropsy was nearly all gone. The rapid disappearance of the dropsy, combined with the increased flow of urine, was very striking.

It is now more than two years since I first suggested the use of the *simple resin of copaiba* as a diuretic, and my further experience of it has more than confirmed my early opinion of its great value. I believe that, with the exception of digitalis, it is a far better diuretic than any which is at present found in the *Pharmacopœia*. The old objection to the use of the ordinary *copaiba* is entirely got rid of by making use of the simple resin after the removal of the nauseous oil. The formula of the Guy's dispensary is as follows: *Copaibæ resinæ* ʒj; *sp. rectificat* ʒiiss; *spir. chloroformi* ʒj; *syrup. zingiber.* ʒss; *mucilaginis acaciæ* ʒj. *aq. ad* ʒvj. A sixth part three times a day. It is, however, a troublesome mixture to compound; and Mr. Probyn (Hooper, Grosvenor Street) informs me that it is necessary to triturate the dry resin thoroughly in a mortar; and then, by adding the gum, an emulsion can easily be made. The mixture is not nauseous, and should have scarcely an odour of *copaiba*. The remedy has now been so long in use, that its efficacy is undoubted both in hepatic and cardiac dropsy. It is more especially in the former case that its great value has been

seen; although, in some of the worst examples of dropsy arising from heart-disease, where the ordinary remedies have failed, its diuretic effect has been equally striking. In the case of a private patient, when the well-known pill of digitalis, squill, and mercury had ceased to be beneficial, the *copaiba*, taken in doses of fifteen grains (made into pills) three times a day, removed all the dropsical fluid in a few days.

There is this excellent property of the drug, that, if it act on the kidney at all, it acts at once. The first or second dose displays its diuretic effect; and, should this not be the case, there is no use in persisting in it, as it is not a medicinal remedy in the strict sense of the term.

Copaiba has long been known as a remedy in bronchitis, and in inflammations of the bladder and urinary passages. It is most probable that the oil is the ingredient which acts beneficially on the mucous membrane of the bronchial tubes and other organs. In the case of gonorrhœa, the mixture made of the ordinary balsam appears to be most efficacious, for therein we have the diuretic properties of the resin combined with the more specific ones of the oil.

It remains to be seen whether other resins might be substituted for that of *copaiba*. I have tried common resin or rosin without success.

SAMUEL WILKS, M.D., F.R.S., Physician to Guy's Hospital.

CLINICAL MEMORANDA.

DETECTION OF ALCOHOL IN URINE.

I WOULD call attention to the fallacy of the bichromate of potassium and sulphuric acid-test for the detection of alcohol in the urine, as recommended in several works on the science and practice of medicine, and originally proposed by the late Dr. Anstie. The test may certainly be used for the detection of alcohol in urine, but not by simply heating a little of the test-fluid with the urine. The fallacy consists in the reduction of the bichromate into a green oxide of chromium, not by alcohol singly, but by reducing agents present in the urine of persons who are even total abstainers from alcoholic liquids. But the test is still of use to detect the recent introduction of any considerable amount of spirit into the system by distilling the urine, and applying the test in the usual manner to the distillate, if any considerable, but doubtful, amount have been recently taken. The characteristic green colour of the reduced oxide of chromium will be produced by the alcohol acting as a reducing agent; but this reaction will not be obtained in similarly treating the urine of an abstainer.

F. CRESSWELL HELWETT, Southampton.

CHLOROFORM IN DENTAL EXTRACTION.

THE value of Dr. Lauder Brunton's paper on the Cause of Death during the Administration of Chloroform cannot, I think, be over-estimated. It goes far to explain the fact for which it has hitherto been difficult to account, that the proportion of deaths during the administration of this anæsthetic is greater in England, where small doses are given, and apparently greater precautions used, than in Scotland, where, following the original practice of the late Sir James Simpson, it is given fearlessly and in large unmeasured doses.

There is undoubtedly some truth in Dr. Brunton's belief that comparatively few of the deaths occurring during the administration of chloroform are directly the result of its use. It would be interesting to know, in statistics of operations in the Edinburgh Infirmary, whether the proportion of deaths during operation—*i. e.*, on the table—has been greater or less since the introduction of chloroform. For practical purposes, it may be said, death from chloroform-poisoning is caused by either syncope or asphyxia, the latter probably being more common. Excluding the reflex causes, of which Dr. Brunton endeavours to prove the existence, death always appears to begin either at the heart or lungs. Chloroform, after having abolished consciousness and motor power, then paralyses the medulla oblongata. The respiratory, as well as the cardiac and vaso-motor centres, are very near one another, and closely connected in the medulla. Any agent applied through the medium of the blood to the medulla must act on all these centres simultaneously; yet how does it happen that in so many cases the respiration stops before the heart's action? Doubtless, because the heart, by virtue of its own inherent nervous arrangements, is so far independent of the nervous centre. If Dr. Brunton's reflex theory turn out correct, it comes to be a question whether, in the absence of some reflex cause, the heart's action is ever likely to stop before the respiration. Many practical questions hinge on this, and I sincerely trust a point so important may be definitely settled by the labours of such painstaking observers as Dr. Lauder Brunton and others.

JAMES CARMICHAEL, M.D., Edinburgh.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN
THE HOSPITALS AND ASYLUMS
OF GREAT BRITAIN.

CHLOROFORM AND ETHER AS ANÆSTHETICS.

We have once more thought it our duty to test the prevailing opinion, and to ask for the experience of the leading practitioners engaged in the administration of anæsthetics, as to the relative value and uses of chloroform and ether.

We have now for many years drawn attention to the duty of publishing records of all facts bearing upon the relative mortality from the administration of surgical anæsthetics; and the number of fatal accidents put on record from chloroform in our pages has surprised the most experienced observers; although there is reason to believe that some surgeons and administrators of anæsthetics are still so ill-advised as to conceal their fatal or serious mischances. Our records for a long time have showed an average of one fatal case per month. We have felt bound now, since 1870, to press upon the profession the propriety of giving a full trial to ether, as being, according to a great bulk of evidence, the safer and more reliable anæsthetic. It may be convenient to preface the following reports by a summary of our former conclusions and those of our correspondents in 1870-73. For this purpose, we reprint here an article from the pen of the late Dr. John Murray, containing such a summary, for which we are indebted to the *London Medical Record* of May 7th, 1873.*

"The persistent efforts of the editor of the BRITISH MEDICAL JOURNAL, in advocating increased attention to anæsthesia and the claims of ether, have at length aroused the attention of the profession to the statements made in America and France of this anæsthetic; and, at the present moment, its claims to general recognition are being practically investigated in London and the provinces. The editor of the BRITISH MEDICAL JOURNAL (November 10th, 1872) says that, 'in the face of the great mortality from chloroform, and of the almost deathless record of ether, it has become our duty to interpose, to call the urgent attention of professional men throughout the country to the claims which ether has upon their confidence; and to urge that the anæsthetic which was thrust out of repute by the ready and convenient fluid introduced by Simpson, shall have an extended and a fair trial'.

"It will be well to record some of the recently published opinions on which the present advocacy of ether in this country is mainly based.

"In America, ether has been for twenty-five years generally but not exclusively employed in preference to chloroform. Mr. Ashhurst, one of the leading authorities in America, says (*Principles and Practice of Surgery*, 1871): 'I prefer ether in a very large majority of cases; it is sufficiently convenient for almost every case that the surgeon is called upon to treat.' At the Massachusetts Hospital, a resolution was passed (*Neligan's Medicines*, by Macnamara) to the effect that the exclusive use of ether should be an absolute law of the institution. The Société de Médecine de Lyons have pronounced three times in favour of ether in preference to chloroform. M. Diday (*Gazette Hebdomadaire*, November 29th, 1872), says that chloroform has for a long time been abandoned in Lyons for ether; and that the latter has been found to answer very well, while the patients prefer it. He invites the surgeons of Great Britain to listen to the appeal made to them, and to furnish to the already convincing Lyonese statistics counterproofs which would give them their full value. Dr. J. H. Packard of Boston says (*Boston Medical Journal*, April 12th, 1873) that, until 1864, his custom was to

* Since May 1873, the following communications on this subject are to be found in the pages of the BRITISH MEDICAL JOURNAL. In the second volume for 1873, by Mr. Clover, Mr. McGill, Mr. W. Brown, Dr. Bigelow, and Mr. J. Morgan. That number also contains a report of the discussion on the comparative advantages of ether and chloroform, which took place at the meeting of the British Medical Association in London. In the first volume for 1874, are notices by Mr. Clover, Mr. R. Davy, Dr. J. Carmichael, and Dr. W. Munro; in the second volume for 1874, by Sir J. R. Cormack, Dr. Marion Sims, and Mr. Clover; and in the first volume for this year, by Mr. Clover, Dr. Hoggan, Dr. Fifield, Dr. Skinner, Dr. Schiff, Dr. Blackwood, Mr. S. M. Bradley, Dr. W. Munro, Mr. F. Jordan, and Dr. T. Keith. There are also reports of deaths by anæsthetics in all the above volumes, which are to be found duly tabulated in the index of each under the heads "Anæsthetics," "Chloroform," and "Ether".

employ ether or chloroform indifferently. Now he believes ether to be not only perfectly safe, but wholly satisfactory as an anæsthetic. 'My firm conviction is that, if the profession in England give ether a fair trial as an anæsthetic, they will agree with the majority of the physicians in this country that it is as economical and efficient as its more dangerous rival. We have no right to imperil our patients' lives by the use of an agent which has slain over a thousand persons, if other and safer means are available.' The editor of the *American Quarterly Journal of Medical Sciences*, says that it is surprising that so many surgeons in England should have obstinately persisted in preferring the use of chloroform, notwithstanding the numerous deaths which have followed its use, and the strong array of evidence which has been adduced of the superior safety of ether. Dr. Joy Jeffries of Boston, in a paper which he contributed to the *Boston Medical and Surgical Journal* of October 3rd, 1872, relates his experience of ether inhalation as demonstrated by him in London during the meeting of the Ophthalmological Congress, and says that he 'foresaw the day when our English brethren would awaken to the danger of chloroform and safety of ether'. The editor of the *Boston Medical Journal*, October 3rd, 1872, commenting on Dr. Jeffries' paper, maintains that, in the legitimate use of ether by inhalation, no *bond fide* case of death is on record, or ever has taken place, and that it is absolutely safe. He asserts that the complaints against ether made by English operators, that it produces insufficient relaxation of the muscular system and but partial insensibility, can only be explained by want of knowledge.

"Dr. Thomas Jones (BRITISH MEDICAL JOURNAL, November 23rd, 1872), after very long experience in ether and chloroform inhalation, thoroughly believes in the superior claims of ether as an anæsthetic; and is quite sure that, if fairly tried, ether will soon replace chloroform in this country as the anæsthetic in general use. Mr. Thomas Green of Bristol (*Ibid.*, December 7th, 1872) feels so convinced as to the superiority of ether that nothing shall ever again induce him to give chloroform. Dr. William Alexander (*Ibid.*, December 14th) thinks that, by the late ventilation of the subject, ether has been restored to its pristine position. Mr. Frank Underhill (*Ibid.*, November 9th, 1872) is persuaded that the advantages which our American brethren assert ether to possess are fully proved by facts; and he believes the time to be close at hand when chloroform, except on special occasions, will be considered a thing of the past, and that the advantages of ether will be every day more conclusively demonstrated. Dr. J. Morgan of Dublin (*Ibid.*, October 12th, 1872) has used it all ages, from three to seventy-one years, from amputation to the most delicate operations on the eye; and ether has proved itself both most convenient and efficient, while it has been proved to be the safest of all anæsthetic agents. The arguments which have been urged against its use have been those only of its being inconvenient, and these have arisen from want of a perfect means of application."

The information contained in the following reports is principally given under four heads, and has been elicited in order to ascertain the following points. 1. What anæsthetics are now in use; and for what cases is either anæsthetic preferred? 2. What methods of administration are employed? 3. Has any change been made within the last four or five years in the anæsthetic used, or its mode of administration? and, if so, what were the reasons for the change? 4. Can any suggestions be made by the adoption of which the safety of the anæsthetised patient might be more completely secured, or any improvement in the production of anæsthesia for surgical operations be effected?

ST. BARTHOLOMEW'S HOSPITAL.—Mr. Joseph Mills (Chloroformist to the Hospital) reports as follows. The anæsthetics now in use at St. Bartholomew's Hospital are ether, chloroform, and nitrous oxide gas; ether preceded by nitrous oxide gas is used in by far the greater number of cases. Chloroform is used for very young children, and in operations about the mouth and nose which are likely to last some time. Nitrous oxide gas is employed for short operations, such as extraction of a tooth or opening an abscess. Nitrous oxide gas and ether are administered by means of Mr. Clover's apparatus, which is admirably adapted for the purpose. Chloroform is given on lint, from a drop-bottle. Until January 1875, chloroform was used for nearly all cases; but I found that, while chloroform frequently depresses the heart's action in long operations, ether stimulates it. It rarely happens that there is any persistent sickness after the inhalation of ether; I have met with but one instance in nearly nine hundred administrations, and in that case it lasted about twelve hours, at the expiration of which time the patient was able to take food well. Ether does not appear to be much less likely to cause vomiting at the time of the operation than

chloroform, but it certainly causes much less after-sickness. Chloroform is used in long operations about the mouth and nose, because: 1. The narcosis of chloroform lasts longer than that of ether; 2. In many operations, as for cleft palate or removal of the tongue, it is necessary to keep a gag in the mouth, which comes very much in the way of a face-piece, such as is necessary for the administration of ether; while chloroform can very conveniently be given on a piece of lint; 3. In operations for cleft palate, too, there is another objection to the use of ether, in the fact that it excites a flow of viscid saliva, and is apt to induce coughing. In delicate operations about the eye, I prefer chloroform, as it causes less congestion. In cases of fracture which require an anæsthetic whilst the parts are being placed in apposition during the time the muscles are relaxed, chloroform is preferable, because patients recover from its effects quietly, the inhalation of ether being generally followed by a state of noisy delirium and struggling, which would be likely to displace the fractured ends and necessitate their readjustment.

GUY'S HOSPITAL.—Mr. Frederic Durham (Surgical Registrar to the Hospital) replies to the queries as follows.—1. In the surgical wards and surgery of Guy's Hospital, chloroform is the anæsthetic which is almost invariably administered; occasionally only, the mixture of alcohol, ether, and chloroform, as recommended by the Committee of the Royal Medical Chirurgical Society, and, more rarely still, ether alone. In some cases, anæsthesia first produced by chloroform, is continued by "the mixture" or by ether alone; this especially in cases in which chloroform does not appear to be well borne.—2. Chloroform is given from a piece of lint, fitted into a metal nose-piece for convenience sake alone, a few drops being poured from a stoppered bottle as often as required. The mixture is generally given on flannel, adapted as the loose lining of a cylindrical paste-board or leather inhaler; and ether on a sponge at the bottom of a deep cylindrical leather inhaler fitting closely round the mouth.—3. During the last four or five years, all the anæsthetics, old and new, ether, chloroform, nitrous oxide, bichloride of methylene, the mixture of alcohol, chloroform, and ether, etc., have been used to a very considerable extent at Guy's; but, chloroform being found much the most convenient in administration, and, as a rule, well borne in surgical operations, and much less frequently followed by the disagreeable after-effects—headache, vomiting, etc.—which were observed to be especially severe and prolonged in the case of ether, it has again become the anæsthetic in common use. In the eye wards, however, "the mixture" is still generally administered.

Mr. Bader (Ophthalmic Surgeon to the Hospital) sends the following replies. 1. For the last two years, I have been using as an anæsthetic a mixture of alcohol one part, chloroform two parts, ether three parts. This mixture I have been using in all cases, both private and in the hospital.—2. It is given in a card-board cylinder, covered with flannel.—3. I have changed the anæsthetic, because I wished to make an experiment.—4. In many cases where the least sign of danger appears, we put from six to ten drops of the nitrite of amyl on a piece of lint, place it on the patient's nose and mouth, with the instantaneous effect of restoring the action of the heart and lungs.

LONDON HOSPITAL.—Mr. Lewis Mackenzie (late resident medical officer) sends the following replies. 1. The anæsthetic chiefly employed at the London Hospital is ether; it was introduced into this hospital in the early part of the year 1872, and has since been used in by very far the majority of cases requiring the production of complete anæsthesia. Some surgeons make exception to ether in certain cases. Mr. Jonathan Hutchinson prefers the use of chloroform in old people with rigid or brittle arteries, as he considers the arterial tension produced by ether a condition very likely to give rise to cerebral hæmorrhage. It will be remembered that Mr. Hutchinson reported a case of this nature when ether was recently reintroduced. Chloroform is more used in the maternity department than any other of this hospital; but, in obstetric operations, ether has been chiefly given. Whilst resident accoucheur, I repeatedly used chloroform, and to the full surgical extent in cases of obstructive and operative midwifery. There never seemed any danger; and one has such a powerful reflex stimulus always ready to be acted upon in this class of cases, that it is very rare to hear of any death from chloroform-administration during labour. In a severe case of *post partum* hæmorrhage, ether seemed to improve circulation, and did not increase the bleeding. In cases requiring the application of the actual cautery about the face, the patient is generally placed under the influence of ether, and anæsthesia is kept up by the use of chloroform. In the eye department, in a few cases, ether has seemed to produce so much venous congestion of the eyeball and orbit that, in some of them (notably cataracts in plethoric old people), chloroform is here preferred. In the dental department of this hospital, nitrous oxide

gas has been very freely given, and with great success; but the writer is acquainted with one case in which the inhalation of this gas for tooth-extraction was followed by a very painful, intermittent, and irritable action of the heart, extending over a period of one year and more; and, again, of another in which auditory vertigo and tinnitus followed the use of this gas, and remained for some months without any cause being discovered by aurists to explain the symptom. Bichloride of methylene was used for a short time in our ophthalmic department, but was abandoned in consequence of its acquiring a bad reputation in other hospitals.—2. It has been the invariable rule at the London Hospital to have as little apparatus in the administration of anæsthetics as possible: this rule has been maintained because so many gentlemen have to give these agents that it was thought more desirable they should not have each to overcome the difficulties of the various forms of inhalers, etc.; but should rely on their own judgment and knowledge, and watch for symptoms of danger unfettered. Ether is administered in cones, made with new stiff towels, with sponges in them. Chloroform is always given with a simple Skinner's inhaler; nitrous oxide gas is given with the usual apparatus; and when bichloride of methylene was given, it was measured from a drop-bottle on lint. I may mention that it has never been the custom at this hospital to measure the amount of chloroform used. I need hardly add that ether is not measured in quantity before administration; several leathern inhalers have been tried with the ether, but the towel, in form of a cone, seems still most popular.—3. A great revolution in the administration of anæsthetics took place in this hospital in 1872; at that time, ether became almost universally substituted for chloroform. Since the introduction of ether, the hospital has not contained any case in which death has resulted from its use nor during its administration. Cases of death have occurred whilst patients have been under the influence of chloroform; but none of these could in any sense be classed under the head of "death from chloroform"; they were such cases as hernia, in which the patients were moribund when put on the table, and died during the operation: one was a case of an aneurism bursting whilst the patient was under the influence of chloroform for compression-treatment. It would be quite useless to deny that ether was adopted in this hospital, and readily so, in consequence of several deaths having taken place during the preceding few years from chloroform-administration. I myself, as a student, had the good or bad fortune to see three deaths from chloroform; two of them, however, were from the introduction of vomited matters into the trachea and bronchi. This raises the important question as to whether it is justifiable to give any anæsthetic when a person is in the last stage of an abdominal obstruction or hernia with fecal vomiting, etc. Having witnessed several deaths from suffocation by such vomited matters, I should myself be very loath to administer any anæsthetic to patients in this last stage of abdominal collapse. On *à priori* grounds, ether is a more suitable agent in such cases; and I personally have never seen death from this cause with ether-administration. It has always appeared to me that, in hospitals, sufficient importance is not paid to the danger of anæsthetics; fully recognising and believing that there is never any carelessness in the administration of them, I still hold that often the operation is performed without the precautions which experience should guide us to use. An unseemly haste is a common fault; everyone seems to want the patient to be under the influence in a minute or two; the operator looks at the chloroformist as much as to say, "When are you going to get the patient under?" I think, too often, no examination of viscera by any competent physician is made. Chloroform has been given, and a patient operated on who had acute pericarditis (as was proved *post mortem*); and it teaches its own lesson. Again, how often has chloroform been given without good light in the patient's face, and with an inefficient assistant, when the delay of only a few minutes could have procured good help and sufficient light, etc. Moreover, when possible, galvanic batteries should be at hand, injections of brandy ready, etc. In the case of chloroform, I should attach great importance to the fasting of the patient for four or five hours previously, and the administration of a small quantity of brandy about half an hour before the operation; for want of the former precaution, several people have suffocated under chloroform. Thus it appears to me that, if we thoroughly examine our patient's "clinical pathology" (as Dr. Hughlings Jackson calls it), if we employ the anæsthetic we consider safest (which in ninety-nine times out of a hundred is ether); if we commence to place our patient under its influence quietly, cautiously, and surrounded by skilled assistants, and such instruments as galvanism at hand, we shall do all that at present lies in our power; and I very firmly believe that it is only by insisting strongly on the maintenance of these rules, rather than by adding fresh ones to them, that we shall bring the mortality from anæsthetics to its minimum.

[To be continued.]

REVIEWS AND NOTICES.

A TREATISE ON SURGERY: ITS PRINCIPLES AND PRACTICE. By T. HOLMES, M.A. Cantab., Surgeon to St. George's Hospital. London: Smith, Elder, and Co. 1875.

THIS book has been long looked forward to, and, for two reasons, with considerable interest. On the one hand, there has been a natural curiosity to see a work which comes from a writer of such acknowledged repute as Mr. HOLMES; who, by his writings, has proved himself to be familiar with the surgical literature of the past, as well as of the present day. On the other hand, as those who see much of students can abundantly testify, there has been a need of a thoroughly good text-book on surgery. The student now-a-days makes his selection from the following books, viz., Druitt, Fairlie Clarke, Pirrie, Erichsen, or Bryant. Putting aside the first two as insufficient in quantity, whatever their quality may be, the student (we mean one who is not content with a bare minimum) is left with three books; of these, it is scarcely to be expected that he will trust himself for his London examinations to a book written in Aberdeen, though it may present him, as Pirrie undoubtedly does, with some particularly good chapters. We fear due justice will never be done to Mr. Erichsen's book, in spite of its great worth and the special merit of such chapters as those on aneurism, for to many it is undoubtedly heavy reading. Mr. Bryant's book failed signally to supply the want above indicated; partly because it dealt only with the practical side of surgery; partly because, throughout the book, there was evidently a lack of culture and an inability to write correctly, even on subjects on which the writer was authorised to speak. Taking, then, for granted, the want of a thoroughly reliable text-book on surgery, we propose to see how far this is supplied by Mr. Holmes's book.

First, while we believe it to be by far the best surgical text-book that we have, inasmuch as it is the completest, and the one most thoroughly brought up to the knowledge of the present day, we cannot but regret one or two serious shortcomings and blemishes, not only because they detract from the great value of the book, but because they might have been easily prevented. We allude to the shortness with which some important subjects are treated, and to the inferior value of many of the original illustrations, notwithstanding there has evidently been a great expenditure of time and money on them. We are here especially disappointed, for two reasons. Anyone who has read carefully through the *System of Surgery* must have been struck by the articles which are written by surgeons connected with St. George's and Guy's Hospitals, not only because they are amongst the fullest, but also because of the illustrations which they contain. We allude more particularly to the articles by Mr. Pollock and Mr. Holmes, Mr. Birkett, Mr. Durham, and the late Mr. Poland. When Mr. Bryant's *Surgery* appeared, one of its few indisputable merits was the fact of its being well and largely illustrated from drawings and preparations in Guy's Hospital Museum. Mr. Holmes's book is liberally illustrated with several hundred new drawings; but we have no hesitation in saying that a great many of the drawings of specimens are nearly useless; and in this we meet with our second disappointment. Most students will pay some attention to surgery in the wards and in the out-patients' rooms, but the museum shelves are practically never touched. If, in the book before us, the quality of these illustrations had only been equal to their quantity, so many well-selected drawings must have been a great help to the reader; whereas, at present, not a few of them only serve to puzzle him.

The book opens with a short but clear sketch of the chief symptoms of inflammation, and an outline of the changes to which the process is believed to be due; a sketch doubly valuable to the student, as hitherto he has too generally been deterred, by the size of the *System of Surgery*, from seeking in the articles of Simon and Burdon Sander-son the best account that we have of the process as it bears upon surgery. Then follows early an account of the dressing of wounds, in which due attention is paid to the value of that *questio vexata*, antiseptic dressing. The opinion of Mr. Holmes on this subject will be read with great interest. After speaking of the want of agreement on this point, and having alluded to the practice of Dr. Humphry, who prefers uncovered wounds, and to that of Sir W. Fergusson, who, as a rule, relies on water-dressing, Mr. Holmes goes on to say: "I cannot but express my own strong conviction of the value of Mr. Lister's method. I have frequently ascertained, by thermometric and other observations, and pointed out to others, the perfect immunity from traumatic fever which in some cases follows even the gravest injuries

or operations thus treated" (a very striking instance is given); "and though I quite admit that a similar immunity follows after other methods, yet I think that it is more common after the antiseptic system than any other; and on that account I advocate the use of that system, as well as on account of its utility in hospital practice, as necessitating the dressing of important cases by the surgeons and house-surgeons themselves, and almost excluding the possibility of any subsequent inoculation....."

Passing on, we would recommend to the student's notice the account of pyæmia; and we would only remark that it is to be wished that Mr. Holmes had given more importance to this great pest of surgery by giving a fuller account of the cases and conditions in which it is most likely to appear; and if to the mention of bacteria he had added a short account of what bacteria are believed to be.

Before leaving the account of the complications of wounds, we would draw attention to the very helpful thermographs (rather unusual in a treatise on surgery) which are found here; also to Mr. Holmes's advice as to amputation in traumatic gangrene. The greater number of authorities seem now to be in favour of early amputation, though this question will probably not be settled till we know how far the gangrene is due to inflammation arising from the injury, or from some as yet unknown constitutional cause. The account of the treatment of tetanus is interesting, as Mr. Holmes thinks that, in the present condition of our knowledge of this disease, early amputation may be often advisable; for, though irritation may have reached the central organ, yet "this may be capable of recovery if only the peripheral excitement be removed". As to medicines, Mr. Holmes, after condemning the use of certain remedies which tend to constipation, or which are highly poisonous, thinks aconite the most promising.

The chapter on hæmorrhage and wounds of arteries is written, as might be expected, with especial clearness and fulness; the account of the value of carbolised catgut-ligatures is a proof how the book is brought up to date, the way in which torsion and acupressure are spoken of is an instance of the author's candour, while the mention of the "uncipression" of Professor Vanzetti shows the wide scope of his reading. The "forcipression" of M. Verneuil appears to us to be merely an old method under a new name. In the account of transfusion, no mention is made of the saline solution of Dr. Barnes.

In the chapter on fractures, we should take exception to two statements; one in which the author implies that the American method of treating fractured femur by an extending weight has not been successfully introduced into English practice; the other, where he speaks of the operation of refracture of a bone, e.g., the femur, as "a very simple one". In one case which is especially in our mind, where the patient was fully under ether—and the operator, for physical power, might have taken the first place amongst London surgeons—it was only after three prolonged attempts that the bone gave way at the seat of fracture, though it was only three months after the accident.

The chapter on injuries of the head is one of the best. It opens with a warning instance of the danger of touching with the knife sebaceous tumours of the scalp, and an account of the anatomy of this region. In the treatment of scalp-wounds, we are glad to see Mr. Holmes speaking unhesitatingly of the value of sutures. At one time, when we had an extensive opportunity for testing their value, we thought that catgut-sutures were superior to those of silver mentioned by the author. Sufficient prominence does not appear to us to be given to the frequent occurrence of pyæmia after injuries to the head. Pott's "puffy tumour" is fully described, and the question of trephining is gone into. We cannot leave this chapter without drawing attention to the two characteristic thermographs of compression and traumatic encephalitis; and, as an instance of the carefulness with which the book is written, to the directions for finding the middle meningeal artery when it is necessary to apply the trephine over it. At the close of the chapter on injuries to the back, some helpful remarks will be found as to the diagnosis in that now-a-days too common class of cases known as "railway injury".

In the account of injuries of the face, the reader will find an interesting mention of the two views held as to the mechanism of dislocation of the jaw.

In the chapter on injuries of the neck, we come early upon two very inferior illustrations, viz., figs. 64, 65. In his treatment of scalded larynx, Mr. Holmes writes, "some surgeons prefer tracheotomy to laryngotomy.....but the operation of laryngotomy is sufficient". This may be right as far as the œdema goes; but, considering the early age at which this accident usually occurs, surely the size of the parts calls for tracheotomy, or at least laryngo-tracheotomy.

In the account of injuries of the pelvis, we doubt if anyone would recognise fig. 71 as representing the parts taken from a child aged 5. Further on is an interesting account of ruptured bladder, and a novel

suggestion to open the abdomen, sew up the wound in the bladder, and wash out the peritoneal cavity.

Chapters xiv and xv, on injuries of the extremities, are for the most part very comprehensive. The account of dislocation of the thumb, where Mr. Holmes puts forward very clearly Professor Fabbri's view and treatment, and that of the dislocations of the hip, are especially interesting. We regret that two amongst the most important of the above injuries are very briefly treated, *e.g.*, compound dislocation of the knee, and compound fracture of the patella. In the latter case especially, Mr. Holmes might have transferred to his pages the short rules laid down by the late Mr. Poland in his paper in the *Medico-Chirurgical Transactions*, which is only just mentioned in a note. Throughout these chapters, illustrations are profusely given; but this liberality loses much of its value from the defective character of too many of them, such as those of fractured patella, or of the valuable specimen of subastragaloid dislocation.

Chapter xvii, on the other hand, presents some very capital drawings of sections of tumours copied mainly from the Pathological Society's *Transactions*, and, by way of contrast we suppose, such illustrations as figs. 155 and 156.

The account of syphilis, which is very clear, is clinically the best we know. In the chapter on gonorrhœa, we find a short but interesting notice of gonorrhœal or urethral rheumatism; on the other hand, amongst the complications, cystitis is not given; and we are surprised that Mr. Holmes even mentions a very nasty way which some patients have of giving relief to a chordee.

The chapter on aneurism sustains the reputation of the writer on this subject. Some clear diagrams illustrate the nomenclature used, but the illustrations farther on of ligature of the various arteries, though evidently intended to be as simple and uncomplicated as possible, appear to us insufficient and meagre.

In treating of varicose veins, no mention is made of a method which promises to be useful in these cases. We refer to that brought forward by Mr. Marshall, though previously, we believe, used by Mr. Davies-Co'ley, tying the dilated vein in two places with catgut ligatures, and removing it antiseptically.

Our space will not permit us to do more than allude most cursorily to the remaining chapters of the book. Having wondered at the illustrations which are allowed to mar the chapter on hernia, which is otherwise well worth studying, the reader comes next to the malformation of the lower bowel. This account is abbreviated from that by the author in the *System of Surgery*. Its value, therefore, needs no comment from us.

The completeness of the book is added to by chapters on the eye and ear. The former, by Mr. Brudenell Carter, is especially clear and comprehensive, and more particularly so on recurrent vascular ulcer of the cornea, glaucoma, and intraocular growths. On the other hand, while the question of a "rheumatic" iritis is practically omitted, we think it a mistake that in a treatise like this on general surgery, no fewer than seven pages should have been taken up by the discussion of squint.

The chapters on the urinary organs are full of interest—Mr. Holmes will excuse us if we point out one or two omissions; thus, there is no adequate account of "surgical kidney", nor of the parts cut through in lithotomy. In the treatment of stricture, there is no mention of that form of perineal section which goes by the name of Cock's operation. Again, in his account of puncture *per rectum*, Mr. Holmes does not appear to be familiar with the proper instruments; thus he speaks "of a long curved trocar and cannula", and of a "long piece of gum catheter to retain the cannula". Surely the long trocar must be more difficult of manipulation in the rectum than the proper one of about six inches, and the cannula more easily kept *in situ* by the other retaining and expanding cannula than by a gum-catheter. Where removal of the penis is described, there is not a word about the galvanic cautery, nor of Mr. Hilton's modification of this operation by which the urethra is cut long.

The affections of the testis, the breast, and notably those of the thyroid body, are rather briefly treated—all that is said is very clear; but on each of these subjects we should have been glad to have had more from the author, and perhaps we might have done so, if nearly seventeen pages had not been devoted to diseases of the skin.

In the section amputations the reader will find very clear accounts, and many useful hints, though he cannot but be surprised at the admission of such drawings as those which are supposed to represent stumps after amputation at the shoulder and hip, and also by Mr. Teale's method. If, moreover, the large illustrations showing the various incisions, and which must be of very little use, had been omitted, Mr. Holmes would have been able to give his opinion as to the value of amputation through joints, and to make due reference to the papers of Pollock and Stokes.

In the section on excisions will be found by far the best existing account of each operation; but the fact that the author is known to have paid much attention to, and done much for the advancement of, excisions of joints, makes us regret the more that in this book he scarcely gives any directions as to when to perform them, and we have alluded before to the absence of any discussion as to the contrasted value of amputation and excision.

Before taking leave of the book, we must not omit to mention the excellent index, the pleasant type and paper, and, above all, the luxury of marginal references.

While with all respect to the author we have pointed out a few shortcomings, we are sure that this book supplies a longfelt want. Hitherto students have been in the habit of saying, "we do not know what is the best book to read for the College"; or, again, "in beginning to work for the second fellowship, what is the best book to begin with?" They have now a book ready to their hand, though we would not be understood to say that the highest inducement to read it lies in the fact that it is written by one who will probably be for some time an examiner. All who will give this book the careful perusal that it deserves and requires, whether student or practitioner, will agree with us, that from the happy way in which equal justice is done both to the principles and to the practice of surgery, from the care with which its pages are brought up to modern date, from the respect which is all along paid to the opinions of others, it deserves to take the first place amongst our best text-books of surgery.

When a new edition is called for—and the author, from the care which he has bestowed upon this, deserves that this should very soon be the case—we trust that Mr. Holmes will replace many of the illustrations, and amplify some of the sections, to which, considering his justly high repute as a surgeon and a writer on surgery, he has scarcely done justice.

THE SURGEON'S POCKET-BOOK; being an Essay on the best Treatment of Wounded in War. By Surgeon-Major J. H. PORTER, Assistant-Professor of Military Surgery, Army Medical School, Netley. -London: Griffin and Co. 1875.

It may be remembered that, on the occasion of the International Exhibition of 1873 at Vienna, the Empress of Germany, after visiting the large collection of objects connected with the transport of wounded soldiers in time of war, and their hospital treatment, exhibited in the Sanitary Pavilion, placed a sum of two thousand thalers in the hands of the Central Committee of the German Societies for aid to wounded soldiers at Berlin, to be offered as a prize for the best practical manual of military surgery. Eventually, Professors von Langenbeck, Billroth, and Socin, were constituted a jury to determine the respective merits of the essays which were sent in by the several competitors for this prize, and their decision was published in October 1874. They considered the worth of three of the essays to be so great as to induce them to recommend a division of the prize among them; and to this recommendation the Empress gave her assent. The three selected prizemen, on the sealed packets containing the names of the authors being opened, were found to be Professor Esmarch of Kiel, Dr. Landsberger of Posen, and Surgeon-Major Porter of Netley. Each author had the right to publish his essay; but, if he did not avail himself of it within six months, the essay became the property of the Central Society of Berlin. Surgeon-Major Porter has availed himself of his right, and the book the title of which stands at the head of these remarks is his treatise to which the prize above mentioned was awarded.

It would be superfluous to discuss the professional merits of this manual, after the decision upon them of three such eminent and competent judges as Professors Langenbeck, Billroth, and Socin. All three are surgeons who not only hold the very highest position in surgical science and practice, but who have had also a very large experience in the special requirements of military surgery. Their report on

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the value of the work as a manual of military surgery must, therefore, be accepted as final. We shall confine ourselves to indicating the materials which the work contains, merely premising that they are all laid before the reader in a short and concise form, as is suitable to a "pocket-book"; and that they are copiously interspersed with excellent woodcut illustrations.

After a few general remarks on hygienic regulations, the subject of the conveyance of wounded men from fields of action to the dressing-stations and field-hospitals, is considered, and numerous means of forming extemporary litters, in the absence of regular stretchers, are described. A description is then given of various extemporary appliances to be used as supports for broken limbs; and this is followed by instructions on several modes of forming and applying plaster-of-Paris bandages, and on the uses and manipulation of a variety of surgical apparatus, such as splints of different kinds, irrigating appliances, and others. The modes of examining gunshot wounds, extracting foreign bodies, and their general treatment, follow. Gunshot wounds of special regions are next described in systematic sequence. Operative surgery succeeds, and the modes of performing amputation in different situations, and excision of joints, are described. Each description in the text has its accompanying explanatory drawing. Hæmorrhage; the operations for tying arteries; the principal complications which are from time to time met with in the hospital treatment of wounded men—viz., local gangrene, bedsores, tetanus, hospital gangrene, erysipelas, phlebitis, pyæmia, septicæmia, osteomyelitis, and scurvy—are the subjects which occupy the remaining pages of the strictly professional portion of the work. The construction of latrines, field-ovens, and of extemporary water-filters, scales of diets, classifications of wounds and injuries, a formulary of prescriptions, and a copious index, complete the work.

It will be thus seen that the contents of the *Surgeon's Pocket-Book* are of a very comprehensive character; that they form, indeed, a complete *vade mecum* to guide the military surgeon in the performance of duties which may devolve upon him at any moment in the field. Extensive and numerous as the subjects treated upon are, however, owing to the conciseness of the language in which the descriptions are expressed, and by judicious management of the typography, the whole are compressed into a small book less than an inch in thickness and about four inches square. It can thus, with the aid of its limp leather cover, be carried, like Sir Garnet Wolseley's soldier's pocket-book, in an ordinary pocket, without any inconvenience. Bound up with the book are a dozen blank pages of writing-paper for notes and memoranda, which may prove to be a very convenient appendage under many circumstances in field-practice.

In conclusion, we do not imagine that the author intends his "pocket-book" to take the place of larger and more systematic works on the subjects treated in it; but, these having been studied, as they should be, as a regular part of surgical education, there is no surgeon, especially no surgeon who is liable to be called upon to engage in field-duties, but will find Surgeon-Major Porter's work a no less handy than valuable remembrancer and guide. We can strongly recommend it as one of the most useful companions that a medical officer in any branch of the public service can have with him on active service.

NOTES ON BOOKS.

DR. AVELING'S *Memorials of Harvey* (Churchill) is a pamphlet including some rather interesting letters from and relating to Harvey. These fragments, Dr. Aveling suggests, "will be found useful in compiling that larger and more complete memoir of Harvey which is much needed and must some day be written".

MILNE'S *Materia Medica* (Edinburgh, E. and S. Livingstone). This little handbook is so very skilfully condensed, and presents in so small a compass information often given more diffusely, though not more perfectly, that we are not surprised to find that it has reached a third edition. In this edition, it has been carefully revised and rearranged by Dr. William Craig. Part II, Medicines arranged according to their Uses; and Part III, on Particular Forms of Medicines; with the subsequent sections, including posological tables; a list of poisons, their effects, tests, and antidotes; and the chapter on Prescription-writing,—are all good. The therapeutical part of the book is weak. As examinations go just now, it is a good students' book.

LETT'S *Diaries* retain the characteristics which have given them their world-wide reputation. Among the most useful for medical men will be found the Office Diary, No. 45, interleaved with blotting-paper; No. 8 also, an excellent cloth-bound diary; and for pocket, the well-known Medical Diary, bound in a Russia wallet. This is especially

handsome and serviceable. The Medical Diary is particularly well arranged and well printed, and contains much useful information. These publishers issue a catalogue of a great variety of note-books and diaries for every kind of use.

SELECTIONS FROM JOURNALS.

THERAPEUTICS.

EXTERNAL USE OF TURPENTINE IN THE TREATMENT OF TONSILLITIS.—In the *Leavenworth Medical Herald*, Dr. S. H. Roberts strongly recommends the use of turpentine externally in tonsillitis. He folds the flannel to four thicknesses, wrings it out in hot water, and pours oil of turpentine over a spot of the size of a silver dollar. The flannel is then applied over the subparotid region, and the fomentation is continued as long as it can be borne. After removal, a dry flannel is applied, and the same region is rubbed with turpentine every two hours. This application is continued daily till resolution occurs. He believes, from the evidence of his long experience, that, thus applied early in the disease, the oil of turpentine has almost a specific effect in tonsillitis. That its action is not simply that of an irritant, he has proved by employing mustard, croton-oil, tincture of iodine, etc., in the same class of cases. They always failed to diminish the inflammation of the tonsils, while the turpentine succeeded.—*Philadelphia Medical Times*.

THE TREATMENT OF CHRONIC DYSENTERY.—Mr. R. Donaldson, writing from Rangoon to the editor of the *Indian Medical Gazette*, June 1st, recommends the compound tincture of benzoin as a most efficacious remedy in dysenteric affections. He says that, in Burmah, dysentery is a very common affection, and in the European, as well as in the native, exhibits a marked tendency to become chronic. In many of these cases, ipecacuanha appears to have little or no effect; and persistence in the treatment by large doses of this drug, far from being productive of good, is fruitful of positive mischief. The stomach is rendered so irritable by it, that the patient is unable to retain nourishment; and he then suffers from exhaustion, the combined effect of the disease and innutrition. In these cases, the tincture of benzoin, given in combination with astringents—notably with logwood—has been found extremely useful; often, indeed, acting like a charm; and it may be truly said of it, that its powers of healing diseased mucous membranes equal its performances when applied externally to wounds. The formula recommended is: Compound tincture of benzoin, half a drachm; compound tincture of catechu, one drachm; tincture of opium, ten minims; extract of hæmatoxylin, ten grains; water, to one ounce; for a draught to be given three times a day. If necessary, the remedy may be administered by the rectum. It would appear that the compound tincture of benzoin is an old, and at one time a well known, remedy in dysentery, as well as in simple mucous diarrhoea and in chronic infantile inflammatory diarrhoea, in which the evacuations always contain mucus, and sometimes a little blood.

CHLORAL AS AN ANTIDOTE AGAINST SEA-SICKNESS.—At a recent meeting of the Paris Société de Médecine Pratique, M. Guyot stated that he had in his own person tried the efficacy of chloral as an antidote against sea-sickness. He took two fluid-drachms of a French preparation known as the cream of chloral mixed in half a glass of water before going on board the steamer, and felt no disposition towards sea-sickness, from which he had always suffered severely on other occasions.

THE THERAPEUTIC ACTION OF COTO BARK.—Professor von Gietl writes on this subject in the *Archiv für Pharmacie*, September 1875 (abstract in *Allgemeine Medicin. Central-Zeitung*, November 20th). Coto bark is obtained from a tree in the interior of Bolivia. It is there used in the form of powder or of alcoholic extract in cases of diarrhoea, colic, and neuralgic toothache; also in tincture in rheumatism and gout. The description of it apparently indicates that it does not belong to the cinchona class (though growing in the district where these trees flourish), but that it is probably one of the *Lauraceæ* or *Terebinthinaceæ*. Wittstein finds its chief constituents to be, an ethereal oil; a fluid alkaloid, having a smell of herrings and urine, and thus resembling propylamin or trimethylamin; and hard and soft woody matter. It also contains starch, gum, sugar, oxalic acid, tannic acid, etc. Sixteen patients were treated with it—fifteen males and one female. It was given sometimes in fine powder, sometimes in the form of tincture made with one part of coarsely powdered bark and nine parts of spirit of 85 per cent. The powder was given in eight cases, the tincture in seven; both together in one case. The dose of

the powder was $7\frac{1}{2}$ grains four or six times daily; of the tincture, 10 drops every two hours. The cases in which it was given were, two of diarrhoea in pulmonary phthisis; five of diarrhoea from cold and hospital diarrhoea; six of non-febrile gastro-intestinal catarrh with diarrhoea; three of febrile gastro-intestinal catarrh with violent diarrhoea. The powder and tincture were given together in one case of diarrhoea with phthisis. In one case only, neither the powder nor the tincture could be continued, as both produced severe burning pain in the abdomen and vomiting; the patient was phthisical. In another phthisical case, the powder produced much distress, while the tincture was easily borne. Dr. von Gietl believes that the coto bark is a remedy of very great value in the various forms of diarrhoea.

INTESTINAL OCCLUSION CURED BY ELECTRICITY.—In a case of intestinal occlusion supervening in a washerwoman aged 74, and having lasted fifteen days, during which injections and purgatives had been ineffectually employed, Dr. Dal Monta obtained a cure by electricity. The author employed the electro-magnetic apparatus, introducing one pole into the rectum, and applying the other over the abdomen by a wet plaque. After the first application, lasting ten minutes, there was an abundant emission of gas. On the following day, the second application produced the expulsion, first of gas, and then of faecal matters. (*Movimento Medico.*) The *Bulletin de Therapeutique*, in commenting on this case, recalls an analysis which it gave of a work by Dr. Fleuriot (p. 4, vol. lxxxix), who has collected a number of similar facts, and expresses the opinion that, before having recourse to an operation, it will always be a duty to have recourse to this treatment, which presents no danger.

PHYSIOLOGY.

THE TRANSFERENCE OF MATTERS FROM MOTHER TO FŒTUS.—At the recent meeting of the Association of German Naturalists and Physicians (*Allgemeine Wiener Medizin. Zeitung*, No. 40, 1875), Dr. Benicke described the results of some experiments which he had made by administering to twenty-five pregnant women salicyl in doses of half a drachm shortly before labour. The newly born children and the mothers were catheterised, and the urine examined for salicyl. The results were the following. 1. The interchange between mother and foetus was very rapid. The salicyl was always given as soon as labour-pains began. In two cases, where the birth took place at the end of ten and fifteen minutes, no salicyl was found in the children. In two other cases, where the children were born forty and eighty-five minutes after the commencement of labour, no salicyl was found at first, but it was present in the urine examined some hours afterwards. In all the other cases, salicyl was found in the children's urine immediately after birth; in these cases, the shortest duration of labour was two hours. Thus salicyl had passed into the organism of the foetus in forty minutes, and had appeared in the urine in two hours. 2. The tissue-change in the child was more active immediately after birth than in the uterus. This was shown by the stronger evidence of salicyl in the urine obtained a few hours after birth than in that removed immediately after birth. 3. Salicyl ceased to be found in the mother's urine at the end of twenty-four to thirty-six hours; in the child's urine, it was found up to the third or fourth day. The liquor amnii was obtained in a pure state in four of the cases, and was found to contain no salicyl; nor was salicyl found in the liquor amnii of several women to whom it was given for six to fifteen days before labour, although it was detected in the urine of the children.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

THE FLUID EXTRACTS OF THE UNITED STATES PHARMACOPEIA.

WE have received from Messrs. Ferris and Co., of Bristol, lists and samples of a large series of fluid extracts of the United States of America, of which they keep a stock. Some of these preparations are beginning to be well known here; others which have a high reputation there have yet hardly, if at all, been tested by British practitioners. Among these are *extractum cimicifugæ fluidum*, considered to be a valuable remedy in chorea; *extractum cornûs Floridae fluidum*,

an antiperiodic and tonic; *extractum gelsemini fluidum*, recommended in our columns by Dr. Wickham Legg, Dr. Sawyer, and others, as a febrifuge and nervous tonic, and especially as having valuable odontalgic properties; *extractum pruni Virginianæ fluidum*, extensively employed in America to relieve the anorexia, cough, and debility of phthisis; *extractum spigeliæ fluidum*, almost universally employed there as an anthelmintic; together with many other preparations, with some of which it might be advisable for our practitioners to make acquaintance. They have also a fluid extract of coto bark, imported from Bolivia, which is recommended by Professor von Gietl of Munich, as having something like specific qualities in many troublesome forms of diarrhoea.

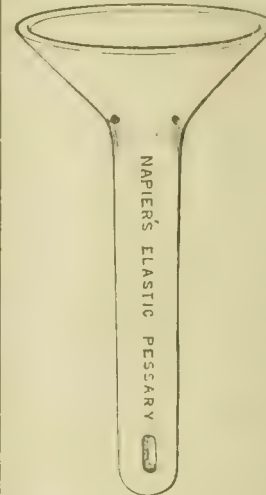
PESSARY OF PERMANENTLY ELASTIC RED INDIA-RUBBER.

THE pessary, of which an illustration (three-quarter size) is here given, is the invention of Mr. William Donald Napier.

Mr. Napier's attention was some time ago directed to the subject of pessaries by Dr. Lee and Mr. Henry Lee of St. George's Hospital; the latter having suggested a form of pessary similar to that which Mr. Napier was working out. The result has been the introduction to the profession of an instrument well calculated to serve the purpose for which it is intended.

The principal advantage which this pessary possesses over others is due to the fact, that it is constructed of a permanently elastic substance, and, like Mr. Napier's catheters, is made in a mould, by which perfection of form, combined with an absolutely smooth surface, is obtained.

The introduction of this pessary into the vagina may, if required, be facilitated by its being drawn, like the catheters alluded to, within a tube from which it is afterwards expelled. An ordinary tubular speculum serves the purpose. The actual means by which the uterus is supported, is (as will be seen by the opening in the stem) through the medium of broad bands placed round the waist or over the shoulder, no resistance being required from the soft parts or pelvic walls. This pessary can be made of any size, and may be obtained from Messrs. Maw and Co., Aldersgate Street, or any surgical instrument maker. The manufacturers are Messrs. Warne and Co., Tottenham.



VENTILATION OF HOSPITALS.

A VERY efficient apparatus for supplying hot air in sick rooms or wards has lately been made for the Hospital for Sick Children in Great Ormond Street by the Messrs. Benham of Wigmore Street, under the direction of Dr. Robert J. Lee. By its means, a continuous stream of mixed hot air and steam may be kept up at a temperature of over 120 deg. Fahr., as it issues from the jet; this can be conveyed by means of a tube to any part of the apartment where specially heated air is required. The obvious advantages of this apparatus are, that the combined stream contains so much atmospheric air as to render it continuously and easily respirable with comfort at quite a short distance from the mouth of the tube; and that by its means the temperature of the air of a small apartment can be considerably raised without causing an undue amount of moisture. These will be great gains in the treatment of cases of tracheotomy and other operations which now call into use the boiling kettle, and will be felt as such not only by the patient, but also by the attendant nurse, a much greater heating effect being brought about with far more comfort and less trouble than by the old method.

This machine acts on the same principle as that lately recommended by Dr. Lee for small "inhalers", enabling patients to breathe continuously heated or medicated vapour uninterrupted by periodic respiratory efforts, which other apparatus generating steam only renders necessary. By the addition, of course, of the various substances used in inhalation, this machine readily impregnates the air of the room with their vapours. It is set going by simply filling the boiler and lighting a small gas-burner, and will then work for ten hours without further attention.

BRITISH MEDICAL JOURNAL.

SATURDAY, DECEMBER 25TH, 1875.

THE ASSOCIATION AND THE "JOURNAL".

IN this, the last number of our volumes for 1875, we may content ourselves with a brief retrospect of a year which has been one of continued prosperity and activity for the Association and the JOURNAL. It has seen a great and in every respect a successful gathering of our members on Scottish soil. The Edinburgh meeting showed how complete is the fraternity of feeling between the practitioners of medicine in Scotland and the other parts of Great Britain, how largely all are interested in a common scientific and professional progress, and how completely great public and professional interests may assist to combine us all in a broad platform, aiming only and by a common effort to "advance medical science and to promote the interests of the medical profession". Upwards of a thousand English, Scottish, and Irish members met there, under the presidency of the chieftain of Scottish medicine, supported by representatives of the most brilliant achievements of British medical science and practice. The moral and political interests of the profession and the public were not forgotten; and two of the Committees then formed—those, namely, for the amelioration of the position of the Poor-law medical officers of Scotland, and the furtherance of legislation for the restraint of uncontrollable inebriates—are now in action, and will no doubt yield good results.

The Scientific Grants of the Association have produced a highly valuable series of reports of original investigations in medicine and the allied sciences, which are in course of publication in our pages, in a form which will allow of their being bound so as to form a separate volume. The full amount granted has not yet been applied for either this year or last. As applications on behalf of suitable researches by skilled observers increase, the means will be at hand to supply them; for, thanks to the continued growth of our numbers (reaching this year to 6,500 members) and the prudent administration of finance, the modest annual subscription of a guinea begins to suffice not only to furnish each member with his JOURNAL weekly free by post, and to meet the demands of organisation, but to furnish the scientific grants, and to leave annually a respectable surplus.

The work which the Association has in hand for the year includes not only the two subjects mentioned, of amelioration of the Poor-law Medical Service of Scotland, and legislation on drink-craving, but also the provision of an adequate standard of qualification in State Medicine, on which subject the Association first moved three years since in a direction which has been followed by many of the Universities and examining bodies, and on which the Committee of Council has now further sent a communication to the General Medical Council. The work of the Association embraces also the further investigation of the question of hospital abuse, which has been referred to the Committee of Council, in virtue of a memorial signed by many hundred leading practitioners.

The programme of action of its Parliamentary Committee includes an effort on behalf of the surgeons of the convict service; the better regulation of the status of ship-surgeons in the mercantile service; and the reform of the present system of sale of dangerous and secret "patent medicines", a prolific cause of injury and of fatal poisoning, especially of children. It is further the duty of this Committee, to which every Branch of the Association sends a representative, to watch over medical interests in relation to Bills introduced in either House of Parliament which may seem to affect those interests.

The number of Branches of the Association has been increased this year by two more Branches in Scotland, now in process of organisa-

tion, having Edinburgh and Glasgow as their respective centres. These Branches will afford to our Scottish members resident in those parts their adequate influence and initiative power in the councils and affairs of the Association, and furnish them with a powerful means of making their wishes known on all public questions affecting their interests, as well as promoting, in many districts now unprovided, the means of frequent scientific and fraternal intercourse.

The JOURNALS of the last year are before our members, and we need say nothing of their contents: the most competent critics at home and abroad have stamped them with the highest meed of approbation. We can but feel encouraged, by the repeated expressions of confidence and satisfaction which reach us on all sides, towards further exertions to make the JOURNAL in every respect worthy of its great constituency, and the faithful representative of the high objects of the Association. We are doubly gratified that the voice of foreign critics ratifies the pleasing verdict, and that the most eminent of French medical journals, the *Archives Générales de Médecine*, recognises the BRITISH MEDICAL JOURNAL as being at the head of English medical periodical literature. Our programme, printed elsewhere, speaks of the principal arrangements for the next year. The JOURNAL now enjoys, we are informed, a considerably larger circulation than any other medical paper in the kingdom; and this, joined to our other resources, places at our disposal a great amount of valuable material, from which we endeavour to select the most important elements for publication. We hope to be able to add to the papers announced some valuable contributions from eminent foreign *savans*, for which arrangements are now in progress. The first of these is an address by Professor Marey, of the Collège de France, on the Applications of the Graphic Method to the Study of Medicine. It will appear, fully illustrated, in early numbers in January.

It remains only to speak of our next annual meeting at Brighton. The arrangements for this are not yet complete; but we may note the inherent natural attractions of this great marine suburb of London; the admirable buildings which are liberally placed at the service of the Association by the Corporation, and which are unequalled for the purposes of meeting and entertainment; the fact that the municipal authorities of Brighton have already intimated to Sir Cordy Burrows, the President-elect, that they will be prepared to do due honour and show public hospitality to the Association; and that provision is in progress for filling agreeably all the evenings of the meeting. Eminent orators have been selected, as will be seen in the programme. The South-Eastern Branch, in whose territory Brighton is situated, is one of the largest and best arranged in the Association, and will certainly spare no pains to assist in making the reception worthy of it, of Brighton, and of the profession. There is every reason, therefore, to hope that the meeting will be not less scientifically interesting than agreeable.

Closing the year 1875 with a satisfactory retrospect, we enter also upon the year 1876 with pleasing and auspicious prospects and with earnest wishes of increased usefulness and prosperity for the British Medical Association and its associates.

THE COST OF MAINTENANCE OF HOSPITAL PATIENTS.

AN important question of hospital administration has arisen at the Metropolitan Asylums Board regarding the different costs of the maintenance of patients at the fever hospitals or "asylums" at Homerton and Stockwell, the cost *per diem* at the latter being nearly half the cost at the former, and the detention of the patients at Homerton being considerably longer than at Stockwell. The matter has come before the Board at several meetings lately, and was discussed on Saturday last, when the reply of the medical officers at Homerton was in the hands of the managers.

The question originally arose on the report of the Finance Com-

mittee, who stated that the cost of provisions *per diem* at Homerton, for each patient, was 7d. a head, and at Stockwell 6½d., while the cost of medical extras at Homerton was 6d. a head *per diem*, and at Stockwell 1½d.; making the total cost of each patient at Stockwell for food and medical extras 7¾d., and at Homerton 1s. 1d. On the motion of Dr. Cortis, reports were demanded from the two asylums as to the number of days' residence of those who died and of those who recovered, and the answer was that, at Stockwell, the average duration of residence of those who died was 8.8 days, and of those who lived 38 days. At Homerton, the average days' residence of those who died was returned as 12.5, and of those who recovered 58. It was then referred to the committee to report upon the causes of these differences, and the report was presented on Saturday last.

The Committee said that, after consideration of the respective references and of the order of the Local Government Board, stating that "the paupers shall be dieted in such manner as the medical superintendent shall in writing direct", and that "when any pauper has recovered, and the medical superintendent is of opinion that such pauper may leave the asylum without risk of communicating infection or contagion, he shall be discharged",—they came to the conclusion that the medical officers were alone responsible; and they had called upon Drs. Collie and Gayton, in whose medical skill and science the Committee had every confidence, to report, and the Committee had formed the conclusion that the replies were satisfactory. With regard to the concluding paragraph in Dr. Collie's report, and to the question of the time patients should be retained in the hospitals, the Committee had directed the medical superintendents to conform to the regulations of the Local Government Board relating to the discharge of patients.

The report which Dr. Collie presented was of considerable length. As, however, it discusses matters of great medical interest, we abstract it fully.

"The difference in the cost of maintenance of patients at Homerton and Stockwell is considerable, and is explained by the more liberal diet and the more liberal use of stimulants at Homerton. Full diet at Homerton contains seven ounces of cooked meat, and at Stockwell six ounces; but, as during the last half-year not a single full diet has been used at Stockwell, the ordinary diet at Stockwell, which contains four ounces of meat, corresponds to the full diet at Homerton. That the full diet in use at the Homerton Fever Hospital is more liberal than that in use at Stockwell is perfectly correct, and the medical officer of the Homerton Hospital thinks it superfluous to prove that seven ounces of cooked meat is not too much for an adult recovering from an attack of fever, just as he thinks it superfluous to attempt to prove that four ounces is too little. A reference to the children's diet at Homerton will also aid in explaining the difference in cost between the two hospitals; for at Homerton each child has two eggs daily, two pints of milk, and four ounces of meat, whereas at Stockwell they have no eggs and little over half a pint of milk, and only three ounces of meat. The medical officer of the Homerton Hospital is of opinion that the dietaries in use at this hospital are not only not too liberal, but are sometimes found inadequate, and have to be supplemented by extras. As compared with Stockwell, the medical extras appear large; but, deducting fish and a proportion of the eggs, the cost falls from 6d. to 3½d. There still remains a difference to be accounted for, arising from the more liberal use of stimulants at Homerton. The use of stimulants in disease is a question on which there is some diversity of opinion; but there are considerations which lead us to expect that alcohol will prolong the life of patients. At Homerton, where stimulation forms an important element in the treatment, the average duration of residence of those who die is 12.5 days; while at Stockwell, where a contrary plan of treatment is adopted, it is 8.8 days: apparently showing that, by the treatment adopted at Homerton, cases which prove fatal are kept alive just one-half longer than at Stockwell. At the London Fever Hospital, the cost of stimulants per patient daily is 2d.; at Homerton Fever Hospital, it is 2½d. This slight excess in the cost of stimulants at Homerton might be explained by the fact that the patients in the Homerton Fever Hospital, being paupers, and therefore in a more deteriorated condition, require a greater amount of stimulant. That the cost of maintenance of patients at Homerton is not excessive is shown by the fact that, in other institutions, for instance, Poplar and Stepney Sick Asylum, the cost of maintenance for each patient per day is 1s. 1d., being the same as at

Homerton; while at Bow Infirmary it ranges from 11d. to 1s. As regards the residence of patients, the practice here has been to retain them, they being paupers, until such time as they might be able to resume their employment immediately on their discharge from the hospital. If, on their discharge, they are unable to work, it is impossible for them to obtain the means wherewith to purchase suitable food, and consequently, with meagre and insufficient nourishment, their constitutions, weakened by an attack of fever, might be impaired for life. As to children, the more delicate nature of a child's constitution, its greater susceptibility to succumb to disease in general, and, in particular, to diseases due to defective nourishment, make it a matter of the first importance that children, on recovering from an exhausting disease, should not be discharged to the custody of poor parents until they are in good physical condition. If it be the opinion of the managers that patients should be discharged so soon as they have recovered from fever, and are unable to communicate infection to others, the cost of maintenance would be reduced to some extent; but, if the method be adopted, the medical officer feels that he cannot accept the responsibility of discharging patients in this state without distinct instructions."

After some conversation, in which the report was adversely criticised, it was agreed that the reports from Dr. Collie and Dr. Gayton (the latter being in most respects like the former) should be adjourned until the next meeting, and that they should not appear on the minutes.

DR. NEVINS' STATEMENTS ON THE CONTAGIOUS DISEASES ACT.

We have, as requested, carefully looked into the Parliamentary Paper (No. 266, June 1875) criticised by Dr. Nevins in a printed paper of which he has forwarded a copy to us. It is signed W. M. Muir, Director-General; and it relates, we find, solely to the "working of the Contagious Diseases Acts as regards the Army". Dr. Nevins's description of it, therefore, as a statement on "the influence of the Contagious Diseases Acts upon venereal diseases", is incorrect and misleading. Still more so, following upon this incorrect description, is his complaint that a paper which relates to disease in the army contains no contradiction of the alleged increase of disease in the navy; and that the navy is given up as indefensible. How entirely this is contrary to the fact will be apparent by reference to the Report on the Health of the Navy for 1874, just published as a blue-book, which we elsewhere notice.

His next complaint is that "it contains no contradiction whatever of the alleged increase of secondary syphilis in the army. The increase of this most serious form of disease is therefore admitted." The paper contains no such admission. It does not allude to secondary syphilis at all; for the reason that it was, at the outset, found impossible to frame returns which would show the comparative frequency of secondary disease at protected and unprotected stations; for, in consequence of the interval required for the development of this form of disease, it will constantly be contracted at one station, and not make its appearance till the soldier has been removed to another. There is no reliable proof that secondary disease has increased at the stations under the Acts; on the contrary, there is abundant testimony from military surgeons that they have found it not only less frequent, but also much less severe.

The only point on which we are able to agree with Dr. Nevins is with reference to gonorrhœa; for the statistics shew, and the paper states, that "the Acts have not reduced the prevalence of gonorrhœa amongst soldiers materially".

There remains the question of primary venereal sores, the improvement in which Dr. Nevins has alleged to have been checked since the passing of the Acts. Instead of this being the case, the following are the facts set forth in the paper in question. For the four years 1860 to 1863, before any Act was passed, the average of primary sores per 1,000 of strength was 130 at the group of stations which have since been placed under the Acts, and 116 at the stations which have never been placed under the Acts. In 1869, by which time the Acts had

been brought into tolerably efficient operation, the ratio had fallen in the protected stations to 66 per 1,000, while it had risen to 128 per 1,000 at the unprotected stations. In 1873, after four years' efficient working, the ratio was 50 at the former as compared with 102 at the latter, or, taking the average of the four years ending 1873, 52 to 108.

The returns for 1874 are characterised by Dr. Nevins as fallacious and of no value; because an order was issued in October 1873, punishing men who became diseased, and they were therefore induced to conceal their complaints. Probably the order had this effect, for less disease is recorded at both sets of stations; but, as it operated equally on both, we find, as might have been expected, the comparative rate remaining as before, the figures being respectively 42 and 88.

How is this striking difference to be accounted for, if not by the operation of the Acts? Let Dr. Nevins, instead of ignoring it as much as possible, explain, if he can, why this form of disease is less than half as prevalent at the protected as at the unprotected stations. This would be more to the purpose than dwelling, as he does, almost exclusively on variations in the comparative rate of decline at the two sets of stations. It is idle to argue that the Acts are a failure because the rate of decline has occasionally been greater at the unprotected stations, when, comparing the average of the four years 1860-63, without any Acts, with that of the four years 1870-73, with the Acts in full operation, the total decline has been from 130 to 52 per 1,000, or 60 per cent., at the protected stations; and only from 116 to 108, barely 7 per cent., at the unprotected. We believe, moreover, that even this 7 per cent. is mainly, if not entirely, the result of the Acts, being, in fact, caused by the constant transfer of healthy troops from protected to unprotected stations; while the former are subject to the disadvantage of an equivalent influx from the latter of men with a high rate of disease.

In commenting upon the tables framed to show the ratio of men constantly in hospital for primary sores, Dr. Nevins says, "the absence of any benefit from the Acts in the subjected stations when compared with the unsubjected ones, as shown by this paper, is somewhat remarkable". To demonstrate this, however, he can only point out that, in 1870, the number constantly sick at the protected stations was 4.46 per 1,000, and, at the unprotected, 9.74 per 1,000; whereas, in 1873, the corresponding numbers were 4.45 and 8.86, thus showing a fractionally greater decrease of about seven-eighths of a man per 1,000 for that particular year at the unprotected stations. But he is obliged to admit that the average of the four years 1870-73 was 1-34th below 1870 at the protected, and only 1-37th below 1870 at the unprotected, stations, the difference being, therefore, slightly in favour of the former; a difference, however, as he truly says, "so small as to be without weight in deciding upon the alleged sanitary value of the Contagious Diseases Acts". The same remark might be made about the decrease of seven-eighths of a man in 1873, which is all Dr. Nevins has to rely upon to establish the "remarkable absence of any benefit from the Acts".

All this is mere trifling with the question. We say, again, let Dr. Nevins explain, if he can, why the number of men constantly sick at the protected, is less than half that at the unprotected, stations; the average for the four years 1870-73 being 4.33 per 1,000 at the one, and 9.48 per 1,000 at the other.

The parliamentary paper says: "It is believed that the two groups of stations are fairly comparable". Dr. Nevins says that there is a "difference of every description between the circumstances of the towns and garrisons in the two sets of places". The difference is, however, entirely in favour of the Acts and against Dr. Nevins' arguments; for, before any Act was passed, the ratio of disease was considerably higher at the now protected, than at the unprotected, stations; the average of the four years 1860-63 being 130 per 1,000 at the former, against 116 at the latter, which, therefore, started with the advantage in the rate of disease of 14 per 1,000.

HYPODERMIC MEDICATION.

M. VIBERT (*Journal de Thérapeutique*, 1875, No. 4, *et seq.*) has studied this interesting subject practically, and his observations are worthy of note. He commences by observing that the state of the pupil may be considered as a manometer which should be at every instant consulted. The contraction of the pupil has nothing in it peculiar or capital, that is to say, it does not prove a toxic effect. It shows itself as soon as there is a happy modifying influence under the influence of morphia; but once this contraction has commenced, its degree is proportionate to the quantity of morphia injected, at the same time that its impressionability by light will diminish more and more, and the contracted pupillary circle will end by being immobilised even in case of passage from full light to darkness. Hence, as long as complete pupillary atresia with immobilisation is not obtained, a further dose of morphia may be injected, if no relief from suffering have been obtained; and, on the other hand, farther morbid phenomena, such, for example, as vomiting, occurring after injection, if this pupillary atresia be wanting, need not be attributed to the injection, and are not, therefore, contra-indications to a new injection. M. Vibert, indeed, as has been noted, goes not only as far as pupillary atresia, but, if necessary, as far as pupillary atresia persisting in darkness. This action on the pupil is produced at the end of about fifteen to twenty minutes. The desideratum wanting here is the previous knowledge of the relative impressionability of the subject to morphia. In the absence of information on this subject, not more than two to three *milligrammes* (0.03 to 0.45 grain) should be injected; then a quarter of an hour should be allowed to pass, the pupil interrogated, and the second injection made if there be ground for it.

Subcutaneous injection of morphia can cure almost instantly an access of asthma, during which the pupil is dilated. It was moreover, indeed, this pupillary dilatation which led M. Vibert to try hypodermic injections of morphia, and the cases which he cites are very conclusive. However serious the case, relief always ran parallel with the progress of the pupillary contraction. The relief commenced at the end of ten to twenty minutes, by an agreeable sensation of interstitial, general, and internal warmth. Here morphia thus employed realised the author's ideal of a diffusible stimulant.

Cardiac lesions, the complication of anasarca, and pleural effusions, are not, in his experience, contraindications to the employment of the endermic use of morphia against the oppression, although they would be generally considered to be so.

Injections of morphia are very efficacious against delirium tremens, but the dose must be considerable, up to eight *centigrammes* (1.2 grains) in a few hours by successive injections. In acute mania the author has failed three times, succeeding twice. It is in the form of delirium, called by M. Gubler asthenic, in which there is a defect of incitation (eye pale and pupil large), and which indicate excitants, that morphia injections succeed. In the second form, hypersthenic irritation, delirium, with congestion of the eye and contraction of the pupil, blood-letting, digitalis, quinine, and bromide of potassium are indicated.

The great power with which morphia in injection manifests its effects as a diffusible and anodyne excitant, induces the author to recommend it as sovereign against sporadic cholera with violent colic; and he has obtained from it also the best results in dysentery. To arrest a miscarriage, injections of morphia are preferable to opiate potions or enemata, by reason of the facility with which the dosage of the medicament is obtained.

The employment of subcutaneous injections of morphia against nephritic and hepatic colic, against pleurodynia and all portal pains, symptomatic or not of pleurisy or pneumonia, is already well known. It succeeds admirably against lead-colic; but the dose must be strong enough—about two to three *centigrammes* (0.3 to 0.45 grain). It is capable of favouring the reduction of strangulated hernia.

Although lauding highly injections of morphia in cases of neuralgia,

the author insists on the point that here they constitute a treatment which is simply symptomatic; the neuralgia of zona yields very well to this mode of treatment. Hysterical crises are curable by this treatment; the author has injected as much as seven *centigrammes* of morphia in the space of five to six hours. M. Vibert relates the case of a young lady in whom he has for seven years injected an average of twenty to twenty-five *centigrammes* of morphia for a horrible anguish experienced in the epigastrium. The failure of the treatment in tetanus is complete; and in paralysis agitans very nearly so.

M. Vibert supplements morphia injections by the endermic application to a blistered surface of the size of a sixpence of four to eight *centigrammes* of morphia. The morphia plaster should be left on for several days. He insists on the advantages to the digestive canal of the hypodermic injection rather than the internal administration of opiates. He employs a solution of acetate or hydrochlorate of morphia, of 1 part in 20; prefers an India-rubber cork to the bottle, and hollow steel to gold needles; he pierces the skin perpendicularly, and, before throwing in the injection, he separates the syringe from the needle in order to see that no blood flows, so as to avoid direct injection into the circulatory system. He considers the injection of some bubbles of air as insignificant; he desires local action of the drug, and chooses, therefore, as the spot for injection, the subcutaneous abdominal tissue, the skin of the belly being the least sensitive, and especially the cicatrices which it may present as the traces of pregnancy. M. Vibert cites two unfortunate cases; the lesson which he draws from them is, that cyanosis with pronounced venous stasis annuls the action of morphia on the phenomena of oppression. Finally, he rejects from antineuralgic medication subcutaneous injections of atropine.

FURTHER investigations of Sir William Gull and Dr. Sutton on the subject of arterio-fibrosis are, we believe, nearly ready for publication, and we expect shortly to be able to present to our readers the papers from those authors on this subject which have been previously announced.

SIR ROBERT CHRISTISON was, at a recent meeting of the Academy of Medicine in Paris, elected a corresponding member by forty-six votes, against sixteen given for M. Donders, the celebrated ophthalmologist of Utrecht.

THE Council of the Pathological Society of London has decided, with justifiable and gentlemanly good feeling, that Mr. Pollock shall not be the first victim of his proposition to abolish the biennial tenure of presidency, and have arranged to nominate him again for the office in the ensuing year.

A BIRMINGHAM correspondent informs us that the Rev. George Inge has given a freehold site for the Medical Institute, and a donation of £100 to the Building Fund.

THE *Times* mentions that, last week, Miss Isabel Clark passed the major examination of the Pharmaceutical Society of Great Britain, and received the diploma of Pharmaceutical Chemist. It states that there are several ladies on the official register as chemists and druggists, but that this is the first lady who has been placed on the roll of Pharmaceutical Chemists.

THE newly enrolled Pharmaceutical Society of Ireland has also unanimously resolved to admit ladies to the examination for the diploma of Pharmaceutical Chemist in Ireland.

THE Royal Commission to inquire into the practice of subjecting live animals to experiments for scientific purposes, met at 13, Delahay Street, on Monday. It is understood that the examination of witnesses is now concluded, and the Commission have now nearly completed their report. It is not, however, expected that it will be issued before February.

MEANTIME, some vivid reports of vivisection in sport have occupied a prominent place in the daily papers, whose special correspondents have sent home descriptions of encounters between wild animals of various sizes and descriptions, presented as spectacles on occasions graced by the presence of a Royal Prince.

NOTICE is given that the Senate of the University of London have appointed a Meeting of Convocation to be held on Tuesday, January 18th, 1876. Members of Convocation who may wish to bring forward any business at the meeting are to give to the clerk specific notice in writing of such business, not later than the 28th instant.

M. TARDIEU has resigned his office of President of the General Medical Benevolent Society of France. This step, which is rendered indispensable by the necessity for cessation from too much work felt by M. Tardieu, is much regretted by the Association generally, to which his lucid intellect and excellent conduct of affairs have rendered essential service.

OUR number for January 1st will include lectures by Professors Marey and Macleod, the conclusion of Sir William Fergusson's paper, and an important paper by Dr. George Johnson. The immediately succeeding numbers will contain lectures by Drs. Broadbent, Southey, and John Duncan, and Mr. Christopher Heath; the Harveian lectures of Dr. Sibson, and original papers by Mr. W. Adams, Mr. Lund of Manchester, Dr. Otis of New York, etc. Most of these papers will be fully illustrated.

EVERY one must have been deeply concerned to see that the misbehaviour of certain London "medical students" at a music hall has once more come under notice at a police-court. However small a minority may be concerned in such degrading displays of misconduct, the disgrace is reflected upon the whole body to which they belong. The school authorities will not fail to notice this misbehaviour with the proper severity; but it is to the students themselves that we must look to mark, by the most distinct disapproval and condign contempt, the conduct of those who have dragged in the mixe the honourable name of London students of medicine. Above all things, students must be gentlemen. Persons worthy of that name do not take part in low broils and pot-house quarrels. The man who does such things is unworthy of the fraternity of medicine, and should be treated by his fellows as what he has shown himself to be.

WE learn, with sincere regret, the death of Professor Boeck of Christiania, the eminent syphilographer, whose visit to this country many will remember, and whose ardent labours in the prophylaxis and cure of syphilis were inspired by an unselfish devotion to what he believed to be a labour useful to science and humanity. His suggestions, fairly tried here, yielded no good result; and his travels throughout the world left him many friends, but few followers.

THE MANCHESTER MEDICO-ETHICAL ASSOCIATION.

THIS Association has just issued a report on the working of the Manchester Provident Scheme, which has lately been the subject of a correspondence in our columns. When this scheme was started, nearly three years ago, the Medico-Ethical Association regarded it favourably, and co-operated with it. According to the present report, it still holds that the scheme, as originally proposed, was sound, and, if thoroughly carried out, would be beneficial to the poor and satisfactory to the profession; but it maintains that the scheme has not been carried out in its entirety. In particular, it says that the necessary checks and safeguards against the admission of unsuitable members have not been applied; that the inquiries are not genuine; that an objectionable system of canvassing and advertising has been used; and that much has been sacrificed to an over-eager desire to make the scheme self-supporting. If these points be rectified, and if the charities which have not yet joined in the scheme be induced by the pressure of public opinion to submit their out-patients to an efficient system of inquiry, the Medico-Ethical Association "still believes that the good elements

will preponderate; and, instead of falling (as seems now to be threatened) into a worse evil than the one it was intended to remedy, the scheme will be a boon to the mass of the poorer people, and a relief to the routine labours of the public charities".

THE NEW EXAMINING BOARD OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following is an alphabetical list of the candidates for the Board of Examiners in Anatomy and Physiology for the Fellowship and Membership of the Royal College of Surgeons. The gentlemen whose names appear in italics and marked with an asterisk were recommended by the Committee appointed for that purpose, and were duly elected at a meeting of the Council on the 20th instant. Messrs. J. E. Adams, London Hospital; W. M. Baker, St. Bartholomew's Hospital; T. H. Bartleet, Queen's College, Birmingham; R. Barwell and E. Bellamy, Charing Cross Hospital; **J. Birkett*, J. N. C. Davies-Colley, A. E. Durham, and **J. C. Forster*, Guy's Hospital; **G. G. Gascoven*, St. Mary's Hospital; **C. Heath*, University College Hospital; **L. Holden*, St. Bartholomew's Hospital; **T. Holmes*, St. George's Hospital; H. G. Howse, Guy's Hospital; J. Langton, St. Bartholomew's Hospital; B. T. Lowne, Middlesex Hospital; J. McCarthy, London Hospital; F. Mason, St. Thomas's Hospital; H. Morris, Middlesex Hospital; A. T. Norton, St. Mary's Hospital; T. W. Nunn, Middlesex Hospital; **H. Power*, St. Bartholomew's Hospital; U. Pritchard, King's College; W. Rivington, London Hospital; **W. S. Savory*, St. Bartholomew's Hospital; W. Thomas, Queen's College, Birmingham; W. W. Wagstaffe, St. Thomas's Hospital; **J. Wood*, King's College. In the above list, the following gentlemen retain their seats as members of the Court of Examiners; Messrs. Birkett (Chairman), Forster, Holden, Holmes, and Savory.

THE EFFECT OF COLD ON CHILDREN.

THE atmospheric changes which have lately occurred, and which have occasioned a great reduction of temperature, succeeded by excessive humidity, will produce distinct effects as usual upon the mortality of those who are most sensitive to the influence of cold. The old and the young, whose health and even existence depend very much, if not entirely upon others, are the chief sufferers at this period of the year. The nervous system in old age and in infancy is similarly affected by the depressing influence of cold. It is important, therefore, that those who have the care of either young or old should consider their responsibilities, and endeavour to carry out judiciously such precautions as may oppose the dangers of our winter season. It is more particularly to the important question of the care of the young that we think attention should be directed, for the moral responsibility which attaches to the duties of those who have such care is greater than in the case of the aged. The notions which prevail about some of the most simple means which may be used to protect children from the effects of cold are singularly at variance. We hear, for example, the satisfaction with which an English mother tells us that her infant of three months old has been out every day, except, perhaps, once or twice, when the weather was really too bad for the nurse to take it. The English mother has a love of hardy children, and thinks fresh air, or even the atmosphere of London streets, is of vital importance to their health. The idea of having no fire in the bed-rooms is another of her favourite maxims; and amongst the wealthier classes the luxury of seeing the arms, neck, and legs of those just commencing to practise the art of progression in the erect position seems to be peculiarly delightful. We find no other country where these ideas exist. We do not certainly desire to see the system of swaddling introduced into England which prevails in France, nor that our young ones should, like those of Northern Europe, resemble little round bundles of clothes more than anything else. But we seriously think that many lives are sacrificed to ignorance and erroneous ideas. Amongst the poor, the scantiness of children's clothing is quite remarkable. Winter and summer are not distinguished by any change of dress;

short sleeves, bare necks and legs, are not the exception, they are the rule; cotton or thin stuffs are not changed for woollen or flannel; and so in all other respects; beyond a shawl or some such addition, there is very little difference between their clothing in summer and winter. And yet this system is not the result of carelessness. It has become a custom, and one that has many supporters. There is no doubt that, if used to test the character of the child, very much as we see a boy holding up a terrier by its tail or its ear to show its pluck by its silence, it has certain advantages. "Would you keep the child indoors all the winter?" is the question that is asked in somewhat an aggrieved tone, when the opportunity of reading a lecture presents itself to the medical man after just seeing a victim of this system suffering with acute bronchitis. It does not occur to most people that the air inside their houses, if they are properly ventilated, is as pure as the air outside. We should say that no child too young to walk or run should be taken out when the external temperature is below 50 degs.; that the rooms in which they live and sleep should never be below 58 degs.; and the day room should be three or four degrees warmer. The practice of wheeling children about in perambulators, sitting or reclining in one position without exercise, is particularly harmful. We would earnestly appeal to mothers to put aside all feelings of vanity, or what is sometimes miscalled natural pride, and cover the arms, neck, and legs of their children as a simple sanitary precaution. High frocks, long sleeves, and warm stockings should be worn out of doors; hats which cover the head, and boots which keep the feet as dry and warm as possible. On coming in from our streets, nearly always damp, both boots and stockings should be changed; and if the feet be cold, a warm foot-bath should be used for a few minutes. The exquisite pain of chilblains could be saved to many children by this use of hot water for hands and feet. We see that flannel has yielded to merino, chiefly on account of the greater convenience of ready-made under clothing; but there is nothing equal to flannel in the property of preserving warmth. There is one important point which is the question of the day with mother and nurse, and that is, the morning bath. It requires a strong mental effort to recall those sad scenes of early life, when the battle of the bath was fought out in the cold and gloomy nursery. Resolute, not unkind determination, struggled too successfully with vociferating opposition, and all this trouble was for nothing but harm. Let the room be well warmed before the child is taken out of bed, and let those who think a cold bath an absolute necessity, remember that on a summer morning their children enjoy it; and if they keep the temperature of the water the same all the year round, that is, about 55 or 60 degs., they may obtain all the benefit possible. Let them think how unreasonable it is to take water not much above freezing point, and attack the nervous system already depressed, by a shock which is followed by a reaction which requires the whole morning to recover from. We have no hesitation in recommending a warm bath early in the day, followed by a simple douche of cold water, as far preferable to the cold bath; or a warm bath at night for the sake of cleanliness, and none at all in the morning. It may be taken as a rule that, in the case of children, sudden changes of temperature are dangerous, and that 58 to 60 degs. may be taken as the safe average temperature in which they should be constantly kept. We feel certain that the members of our profession could soon remedy some of the evils to which we have referred, not dogmatically, but by availing themselves of those physiological principles, which they generally apply to therapeutic good. There are few subjects more important to society, or more satisfactory in its results, than that of the prevention of many of the effects which arise from the climatic influence peculiar to this country, and which are so fatal to their children.

POPULATION STATISTICS OF THE GERMAN EMPIRE.

THE official returns for 1873 show that in that year there were 416,048 marriages in the German empire; 252,507 being in Prussia. The births were 1,715,132; viz., males, 882,945; females, 832,186; one child is described as asexual. There were 67,165 still-births. Of the

living children, 708,800 males and 720,303 females were born in wedlock; and 76,570 males and 93,527 females were illegitimate. The proportion of illegitimate to legitimate children was thus about 1 to 10. Among the still-born children, the proportion of illegitimate children was much greater than of legitimate; the number of the former was 59,337, of the latter 7,827; the latter being in proportion to the legitimate still-born children as 13 to 100. Including the still-births, the deaths were 1,241,120; 647,206 males and 593,913 females. The births exceeded the deaths by 474,012.

THE HEALTH OF THE NAVY.

DEPUTY INSPECTOR-GENERAL MAX KAY prefaces the statistical report of the health of the navy for the year 1874, just published, with the following statement.

"The advantages derived from the operation of the Contagious Diseases Act continue to be maintained. On referring to the remarks on the station, a table will be found showing the decrease in the ratio of cases of those diseases against which the Acts operate particularly directed from the year 1864, when they came into operation, to the year 1874, as compared with the ratio of the three years preceding; viz., 1861 to 1863 inclusive. From this table, it will be seen that the ratio has been reduced from 104.4 per 1,000, the average which obtained from the year 1861 to 1863 inclusive, to 56.0 per 1,000, the average ratio for the years 1866 to 1874 inclusive. In 1874, the ratio of disease was 48.6 per 1,000, as compared with 104.4, the average ratio for the three years before the Acts came into force.

"On the Mediterranean Station, cases of enteric fever, although not very numerous, occurred in the squadron, and, as heretofore, were mainly contracted at Malta. The general and comprehensive scheme of sewerage of the principal towns surrounding Malta Harbour, which has been submitted to and approved by Government, is to be carried into effect at once, and will, doubtless, prove an inestimable boon to the island, as well as to the naval force on the station, of which Malta Harbour is the head-quarters.

"The comparative absence of yellow fever from the North American and West Indian Station caused a reduction in the death-rate of the station, compared with the previous year, to the extent of 7.6 per 1,000. The sanitary condition of the force on the station was good.

"On the South-East Coast of America Station, however, an outbreak of yellow fever of a fatal character caused an increase in the death-rate, compared with the preceding year, to the extent of 26.1 per 1,000. The cases were almost entirely confined to the receiving ship permanently stationed at Rio de Janeiro, and in some respects the character of the fever was such as to induce the belief that it was of a malarious origin, and not what is recognised as specific yellow fever. The details in connection with the fever will be found on referring to the report on the station.

"The operations on the West Coast of Africa and Cape of Good Hope Station in connection with the Ashantee Campaign were productive of much invaliding; the ratios of cases entered on the sick list, and of mortality, were, however, lower than in the preceding year. The duties devolving on the Naval Brigade and Marine Battalion employed on shore on the Gold Coast are fully detailed in the reports on the station.

"On the East Indian Station, the sanitary condition of the squadron was comparatively good, although cases of remittent fever were of somewhat frequent occurrence among the crews of ships employed on the East Coast of Africa, where there is much boat and river service in connection with the suppression of the slave trade. Cases of sunstroke and heat-apoplexy were also rather numerous.

"There was nothing calling for particular notice in connection with the China or Australian Stations, or the Irregular Force. An interesting report on the Physical Geography and Climatology of the Fiji Islands, which are within the boundary of the Australian Station, will be found in the appendix.

"Upon the whole, the sanitary condition of the service afloat in the year 1874 may be considered very satisfactory. The ratio of cases of disease and injury entered on the sick list was below that of the preceding year, and, although there was an increase in the ratio of invaliding to the extent of 2.0 per 1,000, it was attributable altogether to the exceptional character of the duties devolving on the squadron on the West Coast of Africa. There was also an increase of 1.1 per 1,000 in the death-rate, mainly due to the fatal outbreak of yellow fever on the South-East Coast of America; but the ratio of mortality of the total force for 1874 was below that of the average taken for eleven years by 1.5 per 1,000."

THE DEANSHIP OF THE FACULTY OF MEDICINE IN PARIS.

OUR Paris correspondent writes:—The Faculty of Medicine of Paris has at last found a successor to the deanship vacated by M. Wurtz. Professor Vulpian, well known as an experimental physiologist and pathologist, has, at the unanimous recommendation of his colleagues, been appointed to the post, and was officially installed on the 9th instant. Professors Broca and Sappey are designated as assessors, but their appointment is not yet officially announced.

QUESTIONS EXAMINED.

WE have expressed ourselves strongly as to the great want of judgment, common sense, and propriety, which Dr. Hardwicke has shown on the recent occasion in holding an inquest on the remains of the late Mr. Acton, when there was medical evidence and a medical certificate at hand, showing that the cause of death had been ascertained to be fatty disease of the heart. The following extract, however, exemplifies a practice prevalent among non-medical coroners far more dangerous and far more common, of which examples constantly recur, and to which it is desirable that the attention of the Lord Chancellor should also be directed, that of holding inquests and directing verdicts without any adequate or skilled evidence as to the cause of death. We reported lately an inquest on an infant found in the water, at which the sole evidence as to the cause of death was that of a police-constable, who stated that he imagined (!) that a medical man would find it difficult to say whether the infant had breathed or not. In the following case, the verdict is given on a verbal expression of probability. The case might well be one either of suicide or poisoning, so far as the evidence goes. We quote the report from the *Western Daily Press*.

"*Peculiar Death at the Hotwells.*—Yesterday afternoon, the coroner, Mr. H. S. Wasbrough, held an inquest at the Stork Hotel, Hotwells, on the body of Louisa Newman, aged 40, who was found dead under rather peculiar circumstances. She was the wife of a hotel-keeper living at Cardiff, but had been separated from her husband for some time, and had been employed as barmaid at the Stork. Deceased was to have left her situation on Monday morning, and went upstairs about nine o'clock to pack up her box. She had occasionally been the worse for liquor, but when last seen alive was perfectly sober, and appeared to be in good health. A servant who went into her room about a quarter-past nine, found deceased lying on the floor, with her chin resting on the edge of an open box, quite dead. Mr. Grier, surgeon, was sent for, and, on his arrival, pronounced life to be quite extinct. Mr. Grier, who was examined by the coroner, said he could not form any opinion of the cause of death. There was no trace or indication of poison, the face was very pallid, and death must have been sudden. Deceased might, therefore, have died from heart-disease, but he could not say so with any certainty. A juryman said that the deceased came to his shop a few days since, and then complained of heart-disease. She was then so affected that she had to sit down in the shop. The coroner said he would adjourn the inquest if the jury wished. There was no evidence at present to show how death had occurred, but the circumstances made it very probable that it was from heart disease. The jury returned a verdict of 'Found dead in her room, probably from an affection of the heart.'"

OXFORD EXAMINATIONS.

WE have received copies of the very excellent papers of questions set for the first and second examinations for the degree of M.B. at the University of Oxford. The examination is searching, not only in the scientific but in the practical and clinical departments of study. We note with pleasure in the second examination for the degree of Bachelor of Medicine, a paper on Practical Hygiene, containing the following two questions.

"1. The city engineer, or a person appointed by him, will accompany you to portions of the drainage works. Make any observations or notes you think fit, and return to the Museum at 1, to write an account of what you have seen. (Note-books and pencils will be furnished.)

"2. Make a written report on one of the substances marked A, B, C, D, with reference to the adulterations, if any, they might be expected to contain. Examine A microscopically, and state if there is any obvious or readily detectable foreign matter in B, C, D. If there is, prove it."

EXTRACT OF MEAT.

OUR Paris correspondent writes:—In a recent lecture at the School of Medicine, Professor Bouchardat addressed his audience on the hygienic and therapeutic use of the so-called extract of meat. He stated that those who laud the extract assume that it fully represents the nutritive properties of meat, whilst its detractors look upon it as of doubtful utility as an aliment, and allege that, in certain conditions and exaggerated quantities, it may, after long-continued use, become injurious to the constitution. After describing the immediate principles of the extract, M. Bouchardat went on to say that the nutritive qualities of this substance can on no account be compared to those of the expressed juice of raw meat. The latter contains the albuminoid substances in a form which renders it more favourable for assimilation, and hence its great utility in those cases in which raw meat is refused. With fresh vegetables, however, the extract of meat would make excellent soup, and, as it contains the salts necessary for the reconstitution of muscle, it might, to a certain extent, be usefully substituted for meat in the soup. It may constitute an useful addition to sailors' rations, as the latter consist almost exclusively of salt meat, which is deficient in the very salts which the extract of meat contains.

THE MEDICO-CHIRURGICAL TARIFFS.

WE observe with pleasure, that at the last East Kent District Meeting of the South-Eastern Branch held at Canterbury, the recommendation of the Committee that a copy of the Shropshire Ethical Branch tariffs should be issued to each member, was unanimously adopted. Indeed, as we remarked when reviewing them in the JOURNAL of November 28th, 1874, it would be much for the advantage of the profession if the tariffs were in the hands of every general practitioner in the kingdom. We shall be glad to see other Branches adopt a like course.

SIR THOMAS WATSON ON DR. LATHAM.

IN the new volume of *St. Bartholomew's Hospital Reports*, vol. xi, Sir Thomas Watson contributes a biographical notice of the late Dr. Peter Mere Latham, which will be widely read, both for the sake of the subject and of the writer. It has many passages of scientific interest apart from its literary value and from its beauty as a sympathetic study of the high type of intellectual morality, of which Dr. Latham appears to have presented an example. We select the following, as illustrating certain gains to medicine from the growth of precise knowledge.

"*Treatment of Continued Fever.*—Dr. Latham's first project, in the publishing way, after the commencement of his work at St. Bartholomew's, proved abortive. For ten years he had been collecting and arranging materials for, and was about to put forth, a book on continued fever. His clinical clerks had been chosen with care, his case-books had, by them, been regularly and accurately kept, and their contents analysed and digested by himself. It appeared that he had bled from the arm one in every four of his fever patients, and leeches nearly all of them, with a mortality of seven in the hundred. All that died of the fever were found to have ulcerated bowels. Then, suddenly—it was just after the first invasion of the cholera—a startling change took place. He no longer dared to bleed any of his fever patients; on the contrary, he was obliged to uphold them. Their skins were mottled with an eruption, and often spotted with petechiæ. So numerous became the deaths, that time could not be found for examining many of the dead bodies. I think he told me that the mortality was doubled.

"We know now the solution of this perplexing change. The fever which he had been so long watching was typhoid, or enteric fever; the new cases belonged to a severe epidemic of typhus. At that time, the distinction between these specifically different forms of continued fever had not been recognised. His intended book never saw the light."

And we also quote this weighty and ponderable sentence on our modern methods of medical education.

"I (Sir Thomas Watson) would refer to one paper in particular, on medical education, in the first volume of the BRITISH MEDICAL JOURNAL for 1864, because it contains an admirable exhibition of the doctrine, always strenuously maintained by him, that we attempt to teach

our students too much science, to the displacement of practical knowledge. 'The practice of physic', I have heard him say, 'is jostled by quacks on the one side, and by science on the other.'

DEATH FROM ETHER.

THE *Boston Medical and Surgical Journal* for November 25th, 1875, contains the following statement abridged from the *New York Herald* of November 22nd. A man, aged 54, went to the homœopathic college in New York, on Saturday, November 20th. "He was complaining of pain in the left upper jaw extending to the head, with great nervous prostration. There were four openings in the jaw, all discharging fetid pus. On introducing a probe, caries of the upper jaw was found, and the patient was advised to have the bone removed." "He was placed under the influence of ether, and *laid on the table*" (the italics are ours). "A physician was constantly feeling the patient's pulse while the ether was being given." An "incision was made into the upper jaw, and four teeth extracted". The operator was "about to extend the incision, when he noticed the face of the patient become blue. Artificial respiration and the galvanic battery were applied, but they were unavailing; he was dead". The editor of the Boston journal makes the following comment on the case. The reputation of ether, in doses even of a pound or two, has been hitherto pretty good. It has been tried on patients with hearts variously fatty. It will be difficult to persuade us that two and one fourth-ounces of this hitherto beneficent agent proved so suddenly fatal, without any previous gradual diminution of the pulse. It should be conclusively shown that the patient died of nothing else. This patient, so far as we can judge, died of asphyxia from blood in the trachea. In the first place, after he was etherised, he was laid on his back. An "incision" was made in the jaw, and time enough elapsed to extract four teeth. Dead bone always makes the soft parts vascular. There was ample time for blood to fill the trachea. Until it is shown that there was no blood in the fauces and trachea, this must stand as the cause of death. The necropsy is silent on this point. The suddenness and the lividity both belong to asphyxia and neither to etherisation. In the Massachusetts General Hospital, operations on the mouth are usually done in the erect posture, with special attention to keeping the fauces clear of blood.

HUMAN ANATOMY AT CAMBRIDGE.

THE Board of Natural Sciences Studies has issued a report recommending that human anatomy should occupy a more prominent and definite position in the examination for the natural sciences tripos. The reasons assigned for the proposal are, first, that medical students who are candidates for the tripos, find it necessary to relinquish the study of human anatomy till after the examination for the tripos; and many are therefore deterred from making the attempt to obtain a degree with honours. Secondly, the more distinct recognition of human anatomy in the examination for the tripos cannot fail to elevate the character of the teaching and study of it in the University as a branch of science, especially as it is contemplated by the Board that the subject of human anatomy shall include the mechanism of the human body, the comparison of its parts with those of lower animals, its development, etc. Thirdly, the addition would also help to maintain the connection between the schools of natural science and medicine. In the discussion which took place on the subject in the Arts Schools, it was objected by Dr. Bradbury, that human anatomy, especially relational anatomy, is not a good subject of education, though it might be necessary to instruct in it students who were preparing to be physicians and surgeons. To this it was replied by Professor Humphry, that, if taught simply as a collection of facts, and with reference only to the requirements of the medical examination, he quite admitted that it did not constitute a good educational subject. The object of the report was to redeem it from this position, to associate it with the thoughts and views which properly belong to it, and to maintain its study in a manner worthy of the University. If studied as it ought to be, and as it could only be by being made a subject in the tripos, it was an excellent medium of education, combining, in as great a degree as any other

study, the exercise of thought with the observation of facts. Encouragement would thus be given to the students to pursue it in a higher and better manner. Mr. Trotter also thought human anatomy, in the wider sense in which the term was used in the report, was a very fair subject for examination, and he wished to see the connection between the medical and natural science schools kept up.

FOREIGN CRITICS OF THE BRITISH MEDICAL ASSOCIATION.

DR. NOEL GUENEAU DE MUSSY has recorded his impressions of the meeting of the British Medical Association at Edinburgh in a series of brilliant *feuilletons* published in successive numbers of *La France Médicale*. He notes with gratification the appreciation accorded to the labours of the French physicians and surgeons, and regrets that his colleagues, Claude Bernard, André Bouillaud, Duchenne de Boulogne—the two latter of whom have since passed away—could not have been present to enjoy the warm reception with which they would have been welcomed at Edinburgh. He then proceeds to speak of the pleasure he felt in hearing justice done by the eminent surgeons present at the meeting to the labours of Chassaignac, and the valuable methods with which he had enriched the art of surgery. Dr. Gueneau de Mussy remarks on the importance of the part played by the British Medical Association as compared with any medical society in his own country, and notes the utility of the Association in amicably bringing together all the strength of the profession at some given city of Great Britain, there to report the progress of medical science and its latest discoveries; and to discuss the most important questions of State Medicine and of professional interest. Hence, writes Dr. Gueneau de Mussy, the eminent men who preside over the great centres of medical education are brought yearly into contact with their colleagues, whose duties place them in a more restricted sphere; and from these meetings there result a considerable spread of enlightened opinion, and the formation of a firm bond of fellowship. Dr. Gueneau de Mussy, who was also present with Mr. Gladstone at the London meeting, attributes to the British Medical Association a considerable influence with the ruling authorities of the State, and traces to its efforts a large share in the improved sanitary legislation and organisation of the country, in the reform of the educational establishments, and the formation of the General Medical Council. He has not failed to appreciate the successful exertions of the British Medical Association on behalf of the Military, Naval, and the Poor-Law Medical Services; whilst the British Medical Benevolent Fund also receives its meed of approval from our kind and able critic. The *Archives Générales de Médecine*, the leading medical periodical of France, also reviews at length the proceedings of the Edinburgh meeting, gives a brief summary of the organisation of the Association, and flatteringly places the BRITISH MEDICAL JOURNAL at the head of the medical periodicals of Great Britain; a complimentary judgment which we are proud in any degree to have merited, and shall do our utmost to deserve.

SCOTLAND.

MR. JAMES M. MILNE of Glasgow has been appointed Public Analyst for Dunfermline.

AT the annual meeting of the subscribers to the Kilmarnock Fever Hospital and Infirmary, the report was read, stating that 291 patients were admitted during the year, of whom 26 died. The total income was £1,615, while the amount actually expended was £983.

THE scheme of Mr. Gale for supplying Mid-Lanarkshire with water may be now said to be practically rejected. The boroughs of Wishaw and Motherwell prefer supplying themselves to joining in the undertaking; and the Local Authority of Cambusnethan, a large centre of population, refuse to entertain Mr. Gale's scheme.

It is stated that the total expenditure on the New Infirmary, Edinburgh, will not be less than £300,000, of which about £140,000 has already been spent, including the purchase of the site.

AN Edinburgh tobacconist was last week fined in the mitigated penalty of £50 for having in his possession tobacco which, on examination, was found to contain sugar and liquorice. The full penalty for the offence is £200.

AT a recent meeting of the Royal College of Surgeons of Edinburgh, Dr. Joseph Bell was appointed Secretary and Treasurer of the College, and Dr. J. Blair Cunynghame Conservator of the College Museum. We understand that it is intended to make more use than has hitherto been done of this magnificent collection, in the interests of medical science, and for the instruction of medical students.

PROPOSED HOSPITAL ACCOMMODATION FOR DUMBLARTON.

A CONFERENCE was held last week, between the Dumbarton Local Authority and the representatives of the Bonhill and Cardrop Local Authorities, for the purpose of considering the propriety of uniting to provide hospital accommodation. After a long discussion, it was agreed that an arrangement should be come to, whereby the Dumbarton Local Authority might retain the management of the hospital, and, by the payment of a certain sum, the other parishes could obtain the right to a certain number of billets; and a committee was appointed to draw up a basis of agreement.

BIRTHS AND DEATHS IN SCOTLAND.

FROM the Registrar-General's return for the past month, we learn that there had been registered in Scotland the births of 3,545 children, 1,866 being males, and 1,677 females. Of these births, 305 were illegitimate—that is to say, 8.6 per cent. of the whole, the rate ranging considerably in the large towns, from 5.8 per cent. in Paisley to 13.4 in Perth. The deaths of 2,465 persons were registered, being 270 below the average. The highest rate of mortality was in Greenock, being there equal to an annual mortality of 36 per 1,000; the lowest among the large towns was Perth, with 20 per 1,000. In Greenock, 64 per cent. of the persons who died were under five years of age. Zymotic diseases constituted 23 per cent. of the total mortality; this rate was exceeded in Edinburgh owing to the prevalence and fatality of scarlet fever; and, in Greenock, from the simultaneous presence of scarlet fever, measles, and whooping-cough. Scarletina alone caused 7.2 per cent. of the whole mortality; while in Edinburgh, 16.9 per cent. of the registered deaths were ascribed to this cause. Of the whole mortality, 21.5 per cent. was due to inflammatory affections of the organs of respiration.

VENTILATION OF DRAINS AND SEWERS.

AT a recent meeting of the Royal Scottish Society of Arts, Dr. Stevenson Macadam read a paper on the Ventilation of Drains and Sewers, and the Cleansing of House Cisterns. The water-carriage system of disposing of sewers he thought pernicious; it poisoned the streams and the air above them, and promoted disease in households. He drew attention to a mode by which the evils of the present system might be lessened or modified. In order to prevent the return of foul gases from the main sewer, he suggested, in addition to the ordinary syphon-trap at the water-closets, there should be an U-shaped trap between the main sewer and the house, from which trap a fine clay pipe should lead to the air with a charcoal absorbent cage at the top. There followed upon the paper a discussion on the general subject of sanitary arrangements, in which the Liernur system found pretty general approbation.

THE MILK IN FOOT-AND-MOUTH DISEASE.

AT a meeting of the local authority for the parish of Cambusnethan, the sanitary inspector gave in a report which stated that, on November 18th, Dr. Millar, of New Mains, had called the attention of the in-

spector of poor and himself to the cases of a number of children in the village of Waterloo who, he thought, had been made ill with milk supplied by a dairyman in Carluke. He had visited seven different families at Waterloo who had been supplied with the milk, and found that all who had used the milk had been taken ill. Altogether, about thirty persons had been affected; but none of the cases ended fatally. Samples of the milk had been sent to Dr. Wallace, of Glasgow, for analysis; but he could find no poisonous substance in it. It was not known at that time, however, that the dairyman's cattle were affected with foot-and-mouth disease. After a discussion, the Board came to the conclusion that it could do no more in the matter than had been done already.

UNIVERSITY OF ST. ANDREW'S.

AT the last meeting of the General Council of the University of St. Andrew's, Dr. Benjamin Ward Richardson, F.R.S., was unanimously appointed Assessor to the University Court, in place of Patrick Anderson, Esq., resigned. Dr. Richardson was proposed in an appropriate speech by Dr. Archibald, and seconded by Mr. Robb, M.A. This is the second time that Dr. Richardson has had the honour of being elected Assessor.

IRELAND.

THE deaths in Dublin for the week ending December 11th, exceeded the average by 35, which was attributable to the low temperature, the mean for the week being 9.2 degrees under the average for the corresponding week of the years 1865-74.

SCARLATINA NEAR LURGAN.

AT the present time, scarlatina is exceedingly prevalent about Lurgan, and a number of deaths are daily taking place from this malignant disorder. On last Saturday, within a short distance of the town, seven deaths took place, and such an outbreak has not been remembered for many years.

LUNATIC ASYLUMS.

THE Report of the Inspector of Lunatic Asylums in Ireland for 1874 is an interesting one, and from it we learn that the number of lunatics in Ireland was increased by 80 over that of the preceding year. The number of registered lunatics had increased, and that of the unregistered—those at large—had diminished. The slight increase is explained by the fact that more extended views of lunacy now exist, and many mental conditions are now placed under the head of insanity which formerly were not; besides this, asylum accommodation has greatly increased, so that more patients have been able to avail themselves of the advantages of seclusion and proper treatment. The average number of lunatics has been placed at 2.14 per 1,000 of the population, and it is remarkable that in Ireland the married bear to the single the proportion of 2 to 5; the exact reverse, we believe, taking place in England. The accommodation of the district asylums is at present insufficient for existing wants, the inmates being about 1,000 in excess of what the number ought to be. Attached to the various asylums are small farms, which are cultivated by the lunatics; and the Inspectors recommend the enlargement of these farms when practicable, as no curative agent or sanitary treatment is more calculated to benefit the patients than outdoor exercise combined with employment. The inspectors draw attention to the inconsiderate and unreflecting way in which magistrates commit lunatics to asylums as dangerous, without taking the proper and necessary precautions to ascertain the true facts of the case. As regards the curability of insanity, it may be confidently stated, that the sooner the treatment is commenced, the greater will be the ultimate restoration to reason. Out of 1,176 patients discharged from the asylums cured or improved, 429 were sent out within four months, 339 in less than eight months, whilst 361 were discharged in perfect health under the age of 30, and 569 between the ages of 30 and 40.

TESTIMONIAL TO PROFESSOR APJOHN.

ON last Wednesday, the 22nd inst., a portrait in oil painted by Mr. Jones, P.R.H.A., was presented to this gentleman at the College of Physicians, Kildare Street, Dublin. The likeness is an admirable one, and bears on a plate attached to the frame the following inscription:—
“Presented to Professor Apjohn, M.D., by a few of his friends and former pupils, December, 1875.”

THE MEDICAL COMMISSIONERSHIP OF THE IRISH LOCAL GOVERNMENT BOARD.

UNPLEASANT rumours as to the probable suppression of this office are still afloat in Dublin, but we believe we have good grounds for holding to the opinion expressed some time since, that the Government has no present intention of abolishing the office. It may be well to remind our readers, that the Irish Government has only two medical officers employed in its executive departments in Dublin, namely, the Medical Commissioner of the Local Government Board, and the Medical Superintendent of Statistics at the General Register Office. In short, upon these two gentlemen alone can the Government rely for official medical advice. To abolish either office at the present time would be most inopportune; especially to abolish that office upon which, it may be said, the efficiency of the whole sanitary and civil medical service of Ireland depends. We understand that Dr. McDonnell has not yet resigned his Commissionership, and, until his resignation has taken place, it would be useless to state in any authoritative manner who will be his successor. We may, however, mention that the question has been much discussed in Dublin, and that by general consent Dr. Burke of the General Registry Office is admitted to be the most likely successor to Dr. McDonnell. Of other candidates, there is one in the field of unusually high qualifications; but, unquestionably, should the Government decide to select Dr. Burke, they will secure an active, able, and highly experienced head for the most important medical department in Ireland.

SURGEONS' FEES IN DUBLIN.

A CASE, not only of very considerable interest, but also of professional importance, has just been decided in the Dublin courts. Mr. Croly, the well known surgeon to the City of Dublin Hospital, was consulted by a wealthy country gentleman with regard to a disease of the rectum. Mr. Croly found that operative interference was necessary. The patient, accordingly, acting on Mr. Croly's advice, took lodgings in Dublin, and placed himself under Mr. Croly's care. An operation was performed, and the patient progressed favourably; but, being of a nervous and hypochondriacal disposition, he was not satisfied with the amount of attention Mr. Croly gave him, and was constantly and unnecessarily sending for Mr. Croly to attend him at all hours of the day and night. Not only did the patient himself demand all this excessive, and in Mr. Croly's opinion unnecessary, attention, but on many occasions he requested Mr. Croly to prescribe for members of his family. The result was, that Mr. Croly paid the patient and his patient's family over four hundred visits; many of these visits were at night, and many of them included advice to several patients. Mr. Croly, not having been paid his proper fees, made a demand for the very moderate sum of £300 for this laborious attendance, the operation included. Mr. Croly was refused this fair demand, and brought an action for the amount claimed. The defendant paid £200 into court, but the jury awarded the full amount claimed, apparently on the ground that a demand for one guinea for each ordinary visit, and two guineas for each visit at night, were not excessive charges, and that Mr. Croly had made a very moderate charge. Many members of our profession would shrink from running the risk of the “uncertainties of the law” in such a case, and would rather take what they could get than enter upon litigation. We think Mr. Croly was right in submitting his case to a jury; and, while we congratulate him on his success, we have to thank him for fighting out at great risk and inconvenience a battle, the result of which will be a lasting benefit to our profession in Dublin.

THE NEW EDINBURGH, FIFE, AND LOTHIANS BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE adjourned meeting of the new Branch of the Association, which is to include the members residing in Fife and the Lothians, took place in Edinburgh, on Friday, December 17th. In the unavoidable absence of Sir Robert Christison, Dr. Matthews Duncan took the chair; and the meeting passed, with some modifications, a code of laws which had been drawn up by the committee appointed for that purpose at a previous meeting. The following gentlemen were elected office-bearers—*President*: Sir R. Christison, Bart. *Vice-Presidents*: Dr. Matthews Duncan and Professor Lister. *Treasurer*: Dr. Coghill. *Council*: Dr. Begbie, Dr. Keiller, Dr. Macrae (Penicuik), Dr. Gillespie, Dr. Ballantyne (Dalkeith), Dr. Mc Kendrick, Dr. Gordon (Juniper Green), Dr. J. W. Moir (St. Andrew's), Dr. Tuke, Dr. Constable (Leuchars), Dr. James (Dunbar), Dr. Hunter (Linthgow). *Secretary*: Dr. C. E. Underhill (Edinburgh). All members of the Association residing in the above-named counties are invited to join the Branch. The secretary will be glad to receive the names of those who intend joining.

THE NEW GLASGOW AND WEST OF SCOTLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

AT Glasgow also, as we last week announced, it has been resolved at a special meeting of the profession to form a Branch of the British Medical Association, respecting which our Glasgow correspondent writes to us this week as follows.

We believe that, with the simultaneous formation of Branches in Edinburgh and Glasgow, the British Medical Association will greatly increase its membership and strength in Scotland. From anything we can learn, the Glasgow and West of Scotland Branch is likely to meet with very general and extensive support. Of course, little can be said about this till after the next general meeting; but there are signs which seem to indicate a much greater amount of sympathy with its objects than could almost be looked for. To the members of the Association living in large towns in the West of Scotland, or in populous country districts, we would point out a means by which this Branch might be made peculiarly useful to them. That is by forming district societies under the Branch. This is done in connection with the South-Eastern, Southern, and other Branches in England, and we can conceive that societies of this kind would be a very useful means of drawing the profession closer in our larger towns, where they might take the form of mutual improvement societies, for reading papers, showing cases and specimens, and so on. We would commend this to the attention of members outside of Glasgow. As to Glasgow itself, it is clear to everyone that it has enough of purely medical societies already. There is undoubtedly abundant room for a Branch of the Association, but it will probably confine itself, so far as Glasgow is concerned, to occasional special meetings, and an annual gathering or congress of the profession, at which subjects of general professional interest may be discussed, and, if necessary, special committees appointed to report. We conceive that such a meeting and organisation will be of the greatest use; it will help to elevate the profession, and draw closer the bonds of professional brotherhood. We have no doubt that the Branch will be a thorough success.

THE ROYAL COLLEGE OF PHYSICIANS.

A MEETING of the Comitia Majora of the Royal College of Physicians was held on Monday last, the Treasurer of the College (Dr. Farre) being in the chair, in the absence of Sir George Burrows, who was suffering from indisposition, and was unable to attend. After the transaction of some formal business, such as the granting of licenses, fixing the seal of the College to the diplomas of Fellows, and receiving a communication from the General Medical Council, formally applying for a return of qualifications granted by the College during the year, a report was presented from the Leprosy Committee, in answer to a communication received from the Colonial Secretary, Lord Carnarvon, in which he called the attention of the College to some statements made in the *British and Foreign Medical-Chemical Review*, and asked the College whether the opinion already expressed by it on the subject would be influenced by the statements contained therein. The Committee recommended the College to express as its opinion that there

was nothing sufficiently definite in the statements to justify the Committee in recommending the College to modify its opinions formerly expressed. The report further recommended that it should be suggested to the Colonial Secretary that, in any case where it was necessary to report on the occurrence of disease and other professional matters in the colonies, an effort should be made to obtain comprehensive and precise statements of the conditions upon which an opinion could be formed. The report was adopted; and it was ordered that a communication in accordance therewith should be addressed to the Colonial Secretary.

A Report from the Committee appointed to inquire into the regulations of the College on the use of the title of "doctor" by persons not being graduates in medicine of an University, was read and ordered to be considered at the next meeting. It was desired that the report should be regarded as confidential until after its discussion by the College. We feel at liberty, however, to say that, in our opinion, the report of the Committee will be alike satisfactory to the College and to the profession.

AMERICAN CENTENNIAL CELEBRATION: INTER- NATIONAL MEDICAL CONGRESS.

WE are requested to publish the following, which will commend itself to the attention of our readers.

The Medical Societies of Philadelphia, animated by a just spirit of patriotism, and an earnest desire to unite with their fellow-citizens in celebrating the Centennial Birthday of American Independence, have taken the initiatory steps for the formation of an International Medical Congress, by the appointment of delegates from their respective bodies, who were empowered to organise and perfect a scheme for the above purpose. In accordance with the authority thus given, the delegation has organised "The Centennial Medical Commission", with the following officers—*President*: Samuel D. Gross, M.D., LL.D., D.C.L. Oxon. *Vice-Presidents*: W. S. W. Ruschenberger, M.D., U.S.N., and Alfred Stillé, M.D. *Recording Secretary*: William B. Atkinson, M.D. *American Corresponding Secretaries*: Daniel G. Brinton M.D., and William Goodell, M.D. *Foreign Corresponding Secretaries*: Richard J. Dunglison, M.D., and R. M. Bertolet, M.D. *Treasurer*: Caspar Wister, M.D.

Arrangements have been made for holding the Congress in the city of Philadelphia, to begin on the 4th and to terminate on the 9th of September, 1876. The Commission propose the following general plan for the organisation and business of the Congress.

I. The Congress shall consist of delegates, American and foreign, the former representing the American Medical Association and the State and Territorial Medical Societies of the Union; the latter the principal medical societies of other countries.

II. The officers shall consist of a president, ten vice-presidents, four secretaries, a treasurer, and a committee of publication, to be elected by the Congress at its first session, on the report of a committee of nomination.

III. The morning sessions of the Congress shall be devoted to general business and the reading of discourses; the afternoons to the meetings of the sections, of which there shall be nine, viz: 1. Medicine, including Pathology, Pathological Anatomy, and Therapeutics. 2. Biology, including Anatomy, Histology, Physiology, and Microscopy. 3. Surgery. 4. Dermatology and Syphilology. 5. Obstetrics and Diseases of Women and Children. 6. Chemistry, Toxicology and Medical Jurisprudence. 7. Sanitary Science, including Hygiene and Medical Statistics. 8. Ophthalmology and Otology. 9. Mental Diseases.

IV. The language of the Congress shall be the English, but not to the exclusion of any other language in which members may be able to express themselves more fluently.

Gentlemen intending to make communications upon scientific subjects, will please notify the Commission at the earliest practicable date, in order that places may be assigned them on the programme.

In order to impart to the Congress a thoroughly international character, invitations to send delegates will be extended to all the prominent medical Societies in Europe, Mexico, the British Dominions, Central and South America, the Sandwich Islands, the East and West Indies, Australia, China, and Japan. Invitations will also be tendered to medical gentlemen of high scientific position; and distinguished visitors may be admitted to membership by a vote of the Congress.

Among the advantages arising from such a convocation as this, not the least important will be the opportunity afforded its members for the interchange of friendly greetings, the formation of new acquaintances, and the renewal and cementing of old friendships.

The Centennial Medical Commission tender in advance to their brethren in all parts of the world a cordial welcome, and a generous hospitality during their sojourn in the "Centennial City".

The Congress will be formally opened at noon, on Monday, the fourth day of September, 1876. The registration book will be open daily from Thursday, August 31st, from twelve to three P.M., in the Hall of the College of Physicians, north-east corner of Thirteenth and Locust Streets. Credentials must in every case be presented.

Gentlemen attending the Congress can have their correspondence directed to the care of the College of Physicians of Philadelphia, north-east corner of Locust and Thirteenth Streets, Philadelphia, Pennsylvania.

There is every reason to believe that there will be ample hotel accommodation for all strangers visiting Philadelphia in 1876. Further information may be obtained by addressing the corresponding secretaries.

All communications must be addressed to the appropriate secretaries (all in Philadelphia): Wilham B. Atkinson, 1400 Pine Street, *Recording Secretary*; Daniel G. Brinton, 2027, Arch Street, and William Goodell, Twentieth and Hamilton Streets, *American Corresponding Secretaries*; Richard J. Dunglison, 814, N. Sixteenth Street, and R. M. Bertolet, 113, S. Broad Street, *Foreign Corresponding Secretaries*.

SPECIAL CORRESPONDENCE.

BIRMINGHAM.

[FROM OUR OWN CORRESPONDENT.]

The Queen's Hospital.

THE following is an abstract of the regulations adopted by the Committee of the Queen's Hospital, Birmingham, for the working of the non-privileged system of admission. This is the first instance of a large general hospital adopting the free system controlled by inquiry and selection. The regulations, therefore, are offered subject to modification and correction by experience. It is further premised that the hospital is designed to deal with two classes of cases: 1. Those who, from accidents or attacks of acute disease in a serious form, must pass at once into the wards; and 2. Those who, not needing in-door treatment, need the advice of skilled consultants or specialists.

As regards the former, the sole consideration for admission must be physical necessity, and no inquiry or payment is proposed; as regards the latter, many trivial cases now treated at the hospitals ought to be left to dispensaries, sick clubs, and private practitioners; so that the staff of the hospital may have leisure to deal effectually with cases of a more serious character. The operation of a registration fee, combined with inquiry into circumstances, will, it is believed, lessen the number of such cases, and promote a reform urgently needed. Those patients also for whom provision is made out of public rates must be regarded as unfit for hospital treatment, unless specially recommended by the parochial medical officer. With regard to the inquiry, it is obvious that other than pecuniary circumstances must sometimes be taken into account, such as the nature of the case, previous efforts to obtain relief, etc., regard being always had to the essential feature of hospital charity; namely, that no applicant whose necessities entitle him to assistance shall be denied access to the best means of advice or restoration which the hospital can afford.

The following are the regulations. No further tickets of admission will be issued, excepting (if they desire it) to life-governors. On and after January 1st next, patients will be required to apply to the secretary between the hours of 9 and 10 A.M. for town patients, nine and eleven for country patients, for orders of admission; and, on receiving such order, each applicant shall pay one shilling as a registration fee, such fee to cover the whole period of attendance. Serious accidents and urgent medical cases, *i.e.*, acute disease of recent origin, will be at once admitted to the wards without inquiry or payment, subject only to the available beds and the judgment of the medical staff as to necessity. In all cases other than accidents or emergencies, inquiry shall be made into the fitness of the applicant for hospital relief; inquiry as to available income, number and ages of family, nature and duration of ailment, and any special circumstances. In ordinary cases, an income of thirty-five shillings a week, with not more than four children, or six persons, in a family, will be regarded as the limit of pecuniary fitness. If satisfied as to such fitness, an admission to be given.

Any special case, having been under the care of a qualified medical man, and recommended by him, is to be received.

Those in receipt of parish relief are to be received only on the recommendation of the parochial surgeon.

Appeal in all cases is to lie to the House Committee, who will have general superintendence of the carrying out of the above regulations.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

Proposed Removal of the Infirmary.—The Manchester Medical Society.

THE question whether it is desirable to remove the Infirmary is still left unanswered; and the result of the quarterly meeting held last Monday (December 20th) is that the whole question will have to be gone into again. At a meeting of trustees held at the Town Hall in October, the original motion, "that it is advisable to dispose of the Infirmary site, and remove the institution", was passed, with the proviso that, in any negotiations for the sale of the property, due regard shall be had to the preservation of an open area of land not materially less than that which at present exists. The effect of this amendment was to so seriously interfere with the plans proposed, that they had to be abandoned. At the last quarterly meeting, it was moved and seconded, that the minutes of the special boards held during the quarter be confirmed. To this, the ex-mayor submitted an amendment, to the effect that the proceeding of the weekly board be confirmed, with the exception of that relating to the sale or disposal of the Infirmary site. The amendment was passed. The ex-mayor also moved, and his proposition was carried, that the weekly board be requested to summon a special general meeting of trustees for the purpose of appointing a Committee to consider: 1. Whether it is desirable to change the site of the Infirmary; 2. If so, to determine what steps to be taken for the disposal of the property; and, 3. As to the application of any moneys which may be obtained. We shall anxiously look forward for the answers of the Committee to the above questions. It has been unanimously decided by the medical staff that the removal of the Infirmary would be to the advantage of the classes for whom it was established; that the present building is utterly insufficient and bad in construction. The objectors to the scheme speak of the central position of the building; but a receiving house, with about fifty beds, in the immediate vicinity, would have been provided had the proposition of the weekly board been adopted; so that this objection at once falls to the ground.

The library of the Medical Society, consisting of about twenty thousand volumes, has been safely deposited in the new medical school building connected with Owens College; and the meetings of the Society will henceforward meet in a room provided by the College. The microscopical section will hold its meetings in the Physiological Laboratory, where plenty of microscopes are kindly lent for the use of the members.

GLASGOW.

[FROM OUR OWN CORRESPONDENT.]

Glasgow University and the Recognition of Andersonian Lectures.—The Chair of Physiology.

A RECENT action of the University Court of Glasgow University has, perhaps, hardly received so much attention as it deserves. This body has, for the first time since its constitution, recognised the lectures of one of the teachers in Anderson's University. Those who know the history of Anderson's University, have not been surprised that Glasgow University has withheld recognition from its lecturers. It was founded according to the will of a professor in Glasgow University. This learned gentleman, having quarrelled with his own school, resolved to found one which should rival and ultimately eclipse the national institution. His will bears the impress of hatred towards the University, and the resolve to do his best to supplant it. No one having the remotest connection with the old University is to be allowed to hold office as one of the eighty trustees of the new. It was natural that the University should have scruples in recognising an institution whose foundation was a menace to itself. But there were other reasons for being chary in giving this recognition. The chief of these was the name assumed by the institution, which, according to the will, was called Anderson's University. Now, we state no more than what has come under our own personal observation repeatedly, when we say that this name has been the means of misleading students. We can well suppose that a student in the South of England or in Wales will hardly understand the difference between Anderson's University in Glasgow and the University of Glasgow, especially when he finds the advertisement of the former occupying half a page of the weekly medical journals, and that of the latter half a column. We know of several who have joined the Andersonian, expecting to get a degree there; and who only learnt, too late, that their classes would not count for Glasgow University. We believe that even some of your readers are not aware that the Andersonian is a purely private institution, having

no royal or other charter. A short time ago, it was reported that some one interested in the Andersonian, but somewhat ignorant of its true position, while in conversation with a well known member of the profession, spoke of the advisability of trying to get powers by which they could grant degrees in medicine. In order to this, he thought they might apply for a new charter. "Faith," was the answer, "you had better get an old one first." We have mentioned these facts to show that, in recognising a teacher in this institution, the University Court have given evidence of their intention to admit free trade in teaching. So long as there was no medical teaching outside the University, except in the Andersonian, they seemed to hesitate to recognise teachers there, because it would be like recognising the institution, and it would be encouraging the idea of a corporate body of teachers. But now, when there seems a likelihood of numerous teachers springing up in connection with the Royal Infirmary, they seem to be prepared to recognise all. This is a most important step, and one likely to give a great impetus to medical education in Glasgow.

The note in your pages of last week concerning the vacancy in the Chair of Physiology has taken some of the Glasgow people rather aback. Some have felt that the strong advocacy of one of the candidates at this early date is rather premature, especially as there is a well known Glasgow man in the field. Dr. Eben Watson will, no doubt, be a candidate; and he is recognised as a man of very decided ability and attainments. It is not for us to speak of the respective merits of the several candidates; but it seems a pity to prejudge the case at once, and your observations should not be read in that sense.

ASSOCIATION INTELLIGENCE.

BATH AND BRISTOL BRANCH.

THE next meeting of the above Branch will be held at the York House, Bath, on Thursday, January 20th, 1876, when a discussion on Cerebro-spinal Meningitis (based on Dr. Cole's paper, printed at page 667 of the JOURNAL) will be opened by Dr. Brabazon.

R. S. FOWLER, Bath. } *Honorary Secretaries.*
E. C. BOARD, Clifton. }

Bath, December 15th, 1875.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT MEETING.

A MEETING was held on December 9th, 1875, at the Greyhound Hotel, Croydon; T. R. ADAMS, M.D., in the Chair. There were present, thirty members and six visitors.

Perforate Bronchia.—Dr. HOLMAN stated, that the second attempt by actual cautery to close the still perforate bronchia, mentioned by him at the last meeting, had succeeded.

Papers were read by Dr. Wiltshire, on Puerperal Hyperpyrexia treated by Dry Cold; by Dr. Tilbury Fox, on Lichen Planus or Ruber; by Mr. C. Heath, on a Case of Suppression of Urine for Calculus in the Urethra; by Dr. Duncan, on various Forms of Apoplexy, with reference to Prognosis; by Dr. Holman, on a Case of Partial Placental Presentation with Contracted Os. Mr. Christopher Heath exhibited specimens of Cystine Calculi.

Next Meeting.—It was agreed that the next meeting should be held at the Crystal Palace Hotel on March 9th; J. H. Galton, Esq., in the Chair.

Dinner.—Twenty-seven members and five visitors sat down to dinner.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE second ordinary meeting of the session was held at the College Green Hotel, Bristol, on Thursday, December 9th, at half-past seven o'clock; W. M. CLARKE, Esq., President, in the Chair. There were present thirty-nine members and five visitors.

New Members.—Dr. James Stewart, Dr. E. Markham Skerritt, Dr. Donald Campbell of Calne, and Mr. W. H. Harsant, were duly elected members of the Association and of this Branch.

Communications.—1. Dr. SWAYNE read a case of Thrombus of the Vulva during Labour, and also a case of Inversion of the Uterus.—Mr. BARTNUM made some remarks; and Mr. J. PARSONS mentioned two cases of thrombus which had occurred in his practice.

2. Mr. THOMPSON brought before the meeting the case of a Female Lunatic who had swallowed thirteen Iron Screws, each weighing upwards of 700 grains, the patient being still alive, and having passed five of the number.—Dr. MARSHALL read a record of the case of a

Sailor who had swallowed forty Clasp Knives in ten years, and who died soon after swallowing the last six or seven.—Dr. SWAYNE, Dr. CADDY, Dr. EAGER, Mr. TIBBITS, and Mr. W. M. CLARKE, also mentioned similar cases.

3. Dr. MARTYN read an interesting case of Double Thrombosis of both Middle Cerebral Arteries in a Syphilitic Patient, and exhibited the specimen. This led to a lively discussion on the connection between syphilis and arterial disease, in which Dr. Fyffe, Dr. Beddoe, Dr. Spender, Mr. Lansdown, and Mr. W. M. Clarke, took part.

4. Mr. R. M. STONE exhibited two large Calculi spontaneously expelled by an aged female.

The attention of the meeting was called to the fact that, at the next meeting, the discussion would be on cerebro-spinal meningitis.

CORRESPONDENCE.

PREVENTION OF PYÆMIA IN HOSPITALS.

SIR,—I wish to suggest two methods of ventilating wards that would prove effectual against those scourges, erysipelas, pyæmia, etc.

1. To drive pure warm air twice or oftener daily through the wards by a portable engine constructed with a stove and air-chambers, and a supply-pipe passed out of a window. The windows would be opened, and the engine would be worked after the manner of a fire-engine.

2. Free exposure to pure cold air twice or oftener daily, by all the windows being fully opened, whilst the patients are enveloped in tarpaulins or impervious bed-clothing.—I am, sir, your obedient servant,
FREDERICK J. BROWN, M.D.

Rochester, December 11th, 1875.

HOSPITAL ABUSES.

SIR,—The enclosed letter, which by an accident only reached me to-day, puts in a very clear light the injury which our present hospital system does to many of our provincial brethren, and entirely supports the statement made by Mr. Wordsworth a few months ago in the JOURNAL, that the abuses connected with in-patients are quite as great as those connected with out-patients. Can anything be more absurd than that people moving in good society in the country—one "the aunt of a banker", another a gentleman "worth thousands"—should, upon a question of the amount of fee arising between them and their surgeon, be able to say, "Very well, we shall go to London, and get it done for nothing; and the surgeon there will not only raise no objection, but most likely will solicit us to come into his hospital"; and, alas! be able to say this with truth? The cool impudence of the thing strikes one at once; and, did we not know it for a fact, we could hardly believe that a system which rendered such imposition possible would be upheld by any man belonging to the same profession as the surgeon, and, least of all, under the sacred name of charity.

December 7th. I am, etc., H. NELSON HARDY.

"Dear Sir,—I was pleased to see your letter in the BRITISH MEDICAL JOURNAL; but I do not think you see quite the spirit of the motion. It was particularly directed to the great encouragement given by hospital surgeons to cases of operation, which they only too willingly take as *in-patients*, and thus rob their country medical brethren. It is the old dog-and-manger system. If the person cannot pay the regular fee of the London hospital surgeon, the system is to do it for nothing, rather than the provincial general medical man shall do it for a fee that will quite remunerate him. Of late, it has been getting so bad, that people coolly tell country surgeons that, unless you do it on their terms, they will go to London and get it done for nothing. At this present time, I have a patient the aunt of a banker, who moves in the best society, but has the impudence to tell me that, if a large fee be charged, she will go to a charitable institution. She has been operated on before. This lady positively looks down on the medical profession as being a grade beneath her.

"I could tell you of dozens of cases; in fact, it is getting most monstrous. Even to-day, a man worth thousands is threatening similarly, unless the operation is performed at his price. A patient the other day told me that the London surgeon begged her to come into the hospital, although she was quite willing, as she said, to pay a fair fee, and had agreed with a surgeon for that fee. Some of the surgeons of Moorfields perhaps sin in this way more than any other surgeons; but almost all London operating surgeons do it more or less. No wonder we have so many starving members in our profession, when the big fat fish in our community think it honourable thus to swallow the small fish. If you can do anything to lessen this increasing evil, you will deserve the thanks of all the country general practitioners."

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, DECEMBER 21ST, 1875.

G. D. POLLOCK, F.R.C.S., President, in the Chair.

Hæmorrhagic Periostitis.—Mr. THOMAS SMITH exhibited drawings, and gave an account of a case of this nature. He gave it this name because he could not find a more appropriate one for it. It occurred in a female child, twenty-three months old, which was brought to the Children's Hospital. It was a hand-fed child, free from syphilis. It had never walked alone. Eleven months before admission, its feet had swelled with redness; in the summer, it quite recovered. Two months before admission, its feet again swelled. On admission, it was found pale and rickety; its bowels loose; urine red; a bad cough; œdema of the lower extremities; and at its knee-joints could be heard crepitation at the epiphyses. Its abdomen was natural; temperature 101.4 deg. Several epiphyses were loose. Steel wine and iodide of potassium were given, but the cough continued; and the child died seven days after its admission. A *post mortem* examination was made twenty-four hours after death. Extravasation of blood was found in the muscles of the lower limbs. The periosteum of the femur was quite loose all over, and thickened. The shaft of the bone was also loose from its epiphyses, and surrounded by a maroon coloured clot. There was no suppuration. In the left tibia, the same condition was found, but less marked. There were also in the leg extravasation of blood and loose epiphyses, with detached periosteum. The left fibula was in a like condition; the ankle was healthy. The right side was much the same. There was crepitus at the shoulder. The abdominal viscera were healthy, and so was the heart. In the lung, there was a patch of congestion.—Mr. WAGSTAFFE asked if there was any hæmorrhagic diathesis.—Mr. SMITH replied none that could be made out. The periostitis came first, and the hæmorrhage after.—Dr. GOODHART said that a similar case occurred at Guy's Hospital some time ago. The left leg was amputated, and the periosteum was found detached.—The PRESIDENT agreed with Mr. Smith's view, that the hæmorrhage was secondary to the periostitis and the detachment of the epiphyses. He had seen a case lately at St. George's Hospital, a boy aged 10, who had disease of the hip-joint, and an abscess had formed. There was bleeding into the abscess from some accidental condition.—Mr. MAUNDER said he had had two cases where pus was supposed to be under the periosteum, but a red fluid escaped.

Fatty Tumour of the Spinal Cord.—Dr. GOWERS showed a spinal cord, with a fatty tumour upon it, from a man who had empyema, and also locomotor ataxy. There was sclerosis in the posterior columns of the cord. The tumour was half an inch long, and a third from side to side, and of crescentic form. Some of the nerves of the cauda equina were embedded in the tumour. The tumour consisted of cells about a two-hundredth of an inch in diameter, amidst fluid. There were also found in the front of the tumour fibres about a two-hundredth of an inch in diameter, which possessed transverse striæ. The striæ varied somewhat in the distance betwixt them. These were striated muscular fibres, and betwixt them was loose fibrous tissue. He had not been able to find a similar tumour in the London museums—at least, one with the dura matral sheath of the cord. There was no degeneration of the cord from pressure. The coincidence of the sclerosis and the tumour was accidental.

Epithelioma of the Chin.—Mr. CHRISTOPHER HEATH showed a case of epithelioma of the chin following epithelioma of the lip four years ago. The man was shown. He was fifty-five years of age. His lip was removed in 1872. In September 1874, a lump was felt in the chin. It became a tumour six inches by five and a half. The skin was adherent to the bone. There were ulcerated openings. The chin was first sawn off, and then the galvano-caustic *écraseur* applied. As the operation did not open into the mouth, there was no difficulty in feeding him. The gap was well filled up, and there was no appearance of a return of the disease; but, whether the cure would be permanent or not, could not be said.

Epithelioma of the Tongue.—Mr. HEATH also exhibited a case of epithelioma of the tongue, which had been shown to the Society in November last. The patient was now quite well.

Tumour of the Thyroid.—Mr. LENNOX BROWNE described a case of tumour of the right lobe of the thyroid pushing the trachea to the left, and interfering with its form. Some derangement of the sympathetic nerve had ensued, and the right side of the face did not perspire.

The right pupil was contracted. Both optic discs were anæmic. Vision was unaffected. There was a difference of 1 deg. in the temperature of the axilla; the left axilla being a degree higher than the normal. The pulse was 100, and weak. There was increased tension in the right radial pulse. The patient first felt unwell at Luton fifteen years ago. Goitre is common at Luton. There was considerable shortness of breath, so that she had to sit up in bed; but there were no attacks of dyspnoea. She had right ptosis, and was menorrhagic. The pressure on the trachea caused the difficulty of breathing. No treatment had been adopted as yet. It would be interesting to see if the sympathetic disturbance was affected by any local treatment.

Recurrent Epithelioma.—Mr. GODLEE brought forward a case of recurrent epithelioma from a man aged 56. He was a strong man, and had a tumour of the tongue. It had formed rapidly, so an attempt was made to reduce it by puncture, which failed. It was an oval tumour, covered with epithelium over its inner surface. Mr. Erichsen operated upon it; and the hæmorrhage was so great that tracheotomy had to be performed and the blood sucked out of the air-passages. The case made a good recovery. The man next presented himself for a tumour upon the middle toe of the right foot. The tumour was of the size of a hen's egg, and had a granular surface. The man at the same time suffered from an attack of jaundice, and was yellow and weak. There was also an enlarged gland in the right groin. There were great cough and pain in the chest, with a tumour in the right side. There was expansile pulsation in both tumours at each heart-beat. On the *post mortem* examination, there were found a tumour of the chest, and another in the right lung. There was a mass of enlarged glands in the mediastinum. There was adherent pericardium, with several nodules of similar character on it. There was no recurrence of the disease in the tongue. The interest of the case lay in the question, How did the recurrence take place? Was it before or after the removal? If the view of after was espoused, it would seem that there was a constitutional tendency to cancer—and to one form of cancer too. If before, then the constitution was implicated without the glands being affected. Or was it that pieces of cancer had been drawn into the lungs and thus infection produced? A similar case had been recorded by Dr. Moxon, where the lungs were secondarily affected. There was a close analogy betwixt such a process and the establishment of diffuse cancer of the peritoneum after the rupture of a cyst.

Tumour of Clavicle.—Mr. WALSHAM showed (for Mr. HANCOCK) a case of tumour of the clavicle. It occurred in a girl aged 14, at Leicester. She had suffered from a dull aching pain locally, and noticed a tumour forming. It was about the size of a hen's egg at its greatest diameter. The family history was good. The tumour, the clavicle, and some glands, were all removed together. The patient made a good recovery. The tumour was periosteal. On microscopic section, small cells were found in a finely granular fibrillated substance. It was a case of round-celled sarcoma of malignant character.—The PRESIDENT asked for the case to be submitted to the Morbid Growths Committee.

Aneurism of the Aorta.—Dr. FREDERICK TAYLOR brought forward a case of aneurism of the aorta. It occurred in a man aged 53, a pipe layer of good health, but who had a cough for some years. For five months he had suffered from much cough and tightness of chest, together with shortness of breath and dysphagia. Very little food could he take, and it often regurgitated. The heart was displaced outwards and downwards. The pulse was alike in both radial arteries. The respiration was bronchial at the right apex and diminished at the left apex. There was pulsation at the right side of the sternum. After being in hospital ten days, the man was sitting up in bed, when he fell back and died. On *post mortem* examination, a large aneurism was found in the third part of the aortic arch. The stomach was found distended by a two-pound clot of blood. Near the œsophageal end of the stomach was a smooth ulcer, with a nipple-like projection. This led to a channel which ran up by the side of the gullet, formed by the ploughing-up of the muscular wall of the œsophagus. At the top of the channel was an opening, which would admit a cedar pencil. There was also some hæmorrhage into the subpleural tissue with openings therefrom. There was a large aneurism six inches by two. The aorta below was normal.—Dr. CRISP asked if the man had had syphilis. The answer was in the negative.

Arrest of Development of both Forearms.—Mr. ALBAN DORAN showed a case of arrested development of both forearms from an old pauper woman aged 54. All that could be learnt was that this deformity had always been so. There were no scars; all the articulations were freely movable. The hands were well formed. The synovial cartilages were normal; the bone was friable. There was no rickets. The radii were four and a half inches long. The lower ends were softened and disintegrated. There were senile changes. The arrest could

scarcely be due to infantile paralysis, as there was no atrophy of the muscles; while there were no traces of rickets, and the tibiae were straight and slender. The probability was the arrest was congenital.—Mr. WAGSTAFFE asked if there were any history of "maternal impressions". The answer was in the negative. The PRESIDENT asked if the movement of the elbow was free.—Mr. DORAN replied that it was quite free.

Recurrent Sarcoma of the Leg.—Mr. SPENCER WATSON related the sequel to the case of Mr. Walker's, related in the twenty-second and twenty-fourth volumes of the Society's *Transactions*. The patient, a lady aged 30, had had five operations performed; after each the wound healed, and she got well. In September 1873, she noticed a little enlarged gland in the groin, about the size of a walnut. Her health was deteriorated, and she wished the tumour to be removed. An operation was discontinued. The swelling suppurated and a slough escaped. Severe hæmorrhage followed, which, though temporarily checked by styptics, returned, and she sank in a few days; three years and eight months from the commencement of the case. The growth was spindle-celled sarcoma. The tying the femoral artery in the last operation had retarded the growth of the tumour.

Embolic Infarct in Heart-Muscle.—Dr. GOODHART gave an account of a case of a girl with presystolic bruit and dropsy, who died at the age of 15, with the usual symptoms of mitral disease. On the *post mortem*, the usual changes were found, and along with them an extravasation of blood into the structure of the left ventricle. Was it an embolism? No plug was found; but there was discoloration of the outer surface of the clot, and other points of hæmorrhage to be found. The next point was the bearing of such infarct on the formation of a fibroid condition of the heart-wall. There was fibrous tissue betwixt muscular bands in such cases. Was the embolism primary here, and the fibrous condition secondary? If so, the muscle had wasted, and a fibrous condition was left. Or was it that blood was effused into the changing muscle? In a like case of sudden death, where there was found empyema at the necropsy, there was a similar extravasation into the structure of the heart.—In answer to a question from Dr. GOWERS, Dr. GOODHART said that the infarct had probably existed three or four days ere death.—A discussion then took place as to the occurrence of sudden death during the washing out of the chest, in which Messrs. Butlin, Heath, Morris, Doran, and Drs. Godlee and Douglas Powell took part.

The PRESIDENT announced that a discussion on Syphilis would take place in February, which would be opened by Mr. Jonathan Hutchinson. The heading of the discussion would be furnished before the discussion took place. The meeting then adjourned.

MEDICAL SOCIETY OF LONDON.

MONDAY, DECEMBER 20TH.

C. H. F. ROUTH, M.D., President, in the Chair.

On the Physiological Action of Alcohol. By T. LAUDER BRUNTON, M.D., F.R.S.—The author observed that alcohol in small quantities increases the secretion of gastric juice and the movements of the stomach, and thus aids digestion. Although unnecessary in health, it is useful in exhaustion and debility. It increases the force and frequency of the pulse by acting reflexly through the nerves of the stomach. In large doses, it impairs digestion by precipitating pepsin and over-irritating the stomach. It may produce death reflexly by shock. After absorption into the blood, it lessens the oxidising power of the red blood-corpuscles. This property renders it useful in reducing temperature. When it is constantly or very frequently present in the blood, it causes accumulation of fat and fatty degeneration of organs. It undergoes combustion in the body, maintains or increases the weight of the body, and prolongs life on an insufficient diet. It is, therefore, entitled to be reckoned as a food. If large doses are taken, part of it is excreted unchanged. It dilates the blood-vessels, increases the force and frequency of the heart, imparts a feeling of comfort, and facilitates bodily and mental labour. It does not give additional strength, but merely enables a man to draw upon his reserve energy. It may thus give assistance in a single effort, but not in prolonged exertion. The same is the case with the heart, but in disease alcohol frequently retards instead of quickening this organ, and thus economises instead of expending its reserve energy. By dilating the vessels of the skin, alcohol warms the surface at the expense of the internal organs. It is thus injurious when taken during exposure to cold, but beneficial after the exposure is over, as it tends to prevent congestion of internal organs. The symptoms of intoxication are due to paralysis of the nervous system, the cerebrum and cerebellum being first affected, then the cord, and lastly the medulla oblongata. The apparent immunity which

drunken men enjoy from the usual effects of serious accidents is due to paralysis by the alcohol of the nervous mechanism through which shock would be produced in the sober condition.—Drs. Broadbent, Drysdale, Edmunds, Sansom, Symes Thompson, and Bartlett took part in the discussion, which was adjourned until January 10th, 1876, when Dr. Milner Fothergill will reopen the subject.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, DECEMBER 1ST, 1875.

T. GRAINGER STEWART, M.D., in the Chair.

Operations for Relief of Extensive Destruction of the Vesico-Vaginal Wall.—Mr. JOSEPH BELL read a paper on this subject. After referring to a previous paper which he had read some years before, in which he gave the results of a number of cases of vesico-vaginal fistula cured by the usual operation of bringing the edges of the fistula together by silver wire passed by means of small curved needles welded on to the wire, he gave an account of various plans adopted by Herrgott of Nancy, Vidal, Wüter, Beraud, Bozeman, Simon, and others, in which they endeavoured to remedy more severe cases of destruction of parts by operations involving partial or complete closure of the vagina; he discussed the points connected with the relations, social and domestic, of the sufferers both before and after such operations, and then detailed three cases in which he had performed operations of this kind. In the first case, other surgeons had failed in five operations to close an extensive fistulous opening between the upper part of the vagina and bladder, from the complete denudation of the vagina up to the anterior lip of the os uteri. Mr. Bell determined to utilise the posterior lip, and after denuding it, brought it into connection with the lower edge of the fistula, thus making an artificial retroversion of the uterus, and shutting up the os uteri into the bladder. The first operation succeeded only partially, as, after the patient had been dry for seven days, a small opening resulted. This was completely cured by a second operation, and the patient remained quite dry. The operations were both extremely difficult and tedious, as a Marion Sims's speculum could not be used. The result was excellent; a tolerably capacious vagina being left, though of course the patient was sterile, as the uterus opened into the bladder, through which menstruation took place with wonderfully little pain. In the second and third cases, the destruction of parts was so great that no attempt could be made to re-establish the vesico-vaginal septum, so the operator and the patient had to face the question of almost complete closure of the genital fissure. To this both patients consented. Mr. Bell, without removing any mucous membrane whatever, split the labia on each side, so as to enable him first to bring into accurate connection the edge of mucous membrane, by numerous closely set catgut sutures. He then, by means of deep stitches of silver secured by buttons or quills, brought the broad surface of each labium into accurate apposition, after which, the actual skin edges were to be secured by sutures of fine silk or horsehair. A small opening was left as close up to the mons Veneris as possible, in which was placed a lead catheter, bent so as to fit the curve of the orifice and pubes. This was retained till the wound is soundly healed, after which a silver one is made, and fitted to the ordinary boat-shaped urinal, by which means the patient could be kept perfectly dry, and in a condition of comparative comfort. Both cases were successful. One required two operations, as the first one did not close the lower or posterior angle of the fissure, as the patient had suffered from a perineum split almost into the anus; one operation sufficed for the other case.—The PRESIDENT said, that the relief afforded to the unfortunate sufferers must have been indescribable, and the plan adopted by the operator seemed to commend itself as being simple and satisfactory.—Dr. A. R. SIMPSON said that, though cases of vesico-vaginal fistula were much rarer now than in former days, still many were seen. Most of these could be cured easily enough, if not at the first, yet generally at the second or third trial. He had now operated pretty frequently, but had not as yet met with cases so severe as those reported by Mr. Bell. He had, however, seen one in his uncle's practice in a girl of sixteen; there had been so much sloughing of the vaginal septum, that the only chance of relief was by closing the genital fissure, by making the labia raw, and uniting them with iron wire. She wore a boat-shaped shield only, but he thought that the catheter as suggested by Mr. Bell was an improvement. He had lately seen a case somewhat like Mr. Bell's first case. In it, the os uteri had by cicatrices been so tilted forward as to be concealed in the bladder, and at first the state of affairs was puzzling, the uterus being enlarged. An abortion at the third month threw light on it; and after she had fairly recovered, he united the fistula in such a way as to put the uterus into the bladder, and to leave a vagina only long

enough to admit the forefinger to the second joint. He found that he could not use the speculum, and felt that there was a considerable risk of opening into the peritoneum in Douglas's space; no bad results followed, the aperture was healed, and the patient menstruated twice by the bladder with ease. He related another case, in which the operation was rendered very difficult by the extreme narrowness of the vagina. All these operations required patience, but gave most excellent results and great satisfaction, as Mr. Bell had often experienced. He thought such cases encouraged the performance of similar operations in cases where no other means of damming up the flow of urine remained.—Dr. JOHN DUNCAN thought that there was one point in Mr. Bell's paper which deserved more than a passing notice. He had himself only a single experience of the operation for vesico-vaginal fistula, and he had never met with cases of such severe destruction as Mr. Bell's. But he believed the method described of not removing any tissue when paring the labia, was one deserving greater extension, and might be employed, not only in all cases of vesico-vaginal fistula, but in other surgical proceedings. He himself, in a case of preternatural anus after a hernia, found that, after various plans had been adopted for destroying the septum, a plastic operation was still necessary to close the wound. Most of these operations had been unsuccessful; but he, instead of merely exposing a raw surface of skin to the irritation of the fæces, managed, by splitting up the bowel all round the orifice, to bring from it a surface of mucous membrane, which he secured by catgut stitches, and on these brought the edges of skin in contact by iron wire. The result was a cure, except one small aperture, which eventually yielded to a touch with wire at a white heat.—Mr. BELL had little to add in reply. He was interested in Professor Simpson's case, in which retroversion had followed the cicatricial displacement of the uterus. In his own case, the chief difficulty had been to get the uterus so to tilt as to undergo the partial retroversion necessary in the new position of the cervix, and he was glad to find that Professor Simpson had experienced the same difficulty he had in the use of the speculum, as he had feared it might have been due to his own awkwardness. He had a distinct recollection of Dr. Duncan's case, and had used the same splitting plan in many cases of ruptured perinæum, harelip, and the like. He referred to a note lately published by Mr. Mauder on the use of a similar method in the operation for ruptured perinæum. He himself had used it at least ten years ago.

Persistent Constipation in a Child.—Dr. CUTHBERT read a paper on a case of torpor of the liver and bowels from birth. The patient was a boy, six years of age, troubled with obstinate constipation only relieved by purgatives, such as aloes, etc. There was, when he came under Dr. Cuthbert's charge, enormous distention of the abdomen, so that no organs could be defined; and there was also alteration of the apex beat of the heart. Liquorice powder and oatmeal diet, along with occasional enemata, had no effect. But by removing fecal masses from the rectum, injections of olive-oil, and the internal use of gray powder and Easton's syrup, frequent stools were produced, blue in colour at first, but ultimately natural. He thought that the case was interesting as a complaint rare among children. It was most probably due to torpidity of the liver, and therefore the beneficial action of mercury on this organ was shown. The good general health enjoyed by the boy was also worthy of note.

PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, NOVEMBER 27TH, 1875.

ROBERT McDONNELL, M.D., F.R.S., President, in the Chair.

Enteric Fever.—Dr. WILLIAM MOORE submitted an example of the intestinal lesions of enteric fever in a child, aged 10, in whom death was caused by a perforation situated a little above the ileo-cæcal valve, and capable of admitting a goose-quill. The temperature never ranged very high, but rose-spots, diarrhoea, and tympanites were present, and the child screamed incessantly.

Large Gall-Stones.—Mr. F. T. PORTER exhibited two large gall-stones, each weighing one hundred and twenty grains, from the body of a man who was both very fat and the subject of great muscular development.

Uterine Myoma.—Dr. McCLINTOCK showed a tumour which weighed nine ounces, and which had almost destroyed the patient's life by hæmorrhage. It was removed with a wire *écraseur* under chloroform.

Transverse Fracture of the Patella.—Mr. H. G. CROLY showed a specimen, dating back to 1854, which was united partially by bone and partially by ligament. During his life, the man enjoyed free motion in the injured knee. On removing the fractured patella after death, the first thing that Mr. Croly noticed was that the cartilage was eroded on

the external condyle of the femur. On looking at the patella, a line was seen where the fracture ran, and corresponding with that line below there was an osseous deposit. Then there was a very narrow line of ligament, not as wide as appeared when the bone was examined in front. The line between the fragments was extremely small, and filled with ligamentous tissue. There was a considerable deposit of bone above and below the seat of the fracture.

Calculi of the Urates.—Mr. STOKES laid on the table a cluster of calculi of urates, which he had removed by Allarton's median operation from the bladder of a man, aged 45.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS OF IRELAND.

WEDNESDAY, DECEMBER 8TH, 1875.

SAMUEL GORDON, M.B., President, in the Chair.

Case of Continued Fever of Unusually Long Duration.—Dr. JAMES LITTLE read notes of four cases, in which for more than forty days pyrexia existed, although, as far as he could make out, it was not symptomatic of any local inflammation, or due to any of the acknowledged types of essential fever. He had seen three other cases very similar in character during the past five years. The patients were obliged to keep their beds for three or four weeks, during which time the temperature of their bodies was higher and the pulse more frequent than in health. They were all depressed and apathetic, and very weak, but presented no symptom or physical sign which justified a precise diagnosis, and ultimately recovered without the development of chronic, thoracic, or abdominal disease. All the persons in whom the author had observed this state appeared to him to be of the lymphatic diathesis, and the pyrexial condition, he considered, was associated with some general irritation and overgrowth in the lymphatic glands.—Dr. GRIMSHAW thought that the true explanation of these cases was, that a comparatively slight attack of enteric fever set up a lymphatic glandular inflammation, which produced a fever of the subtypical character described by Dr. Little. His note-books contained many cases of this sort, and he had put them all down as cases of enteric fever. He had always looked on them as rather serious; and, if the patient had chronic lung-disease, they were very likely to terminate in some form of phthisis.—The PRESIDENT said that within the last few months he had seen several cases bordering somewhat on those described by Dr. Little. He considered them to be all more or less typhoid, although for a considerable time, at all events, there had been little if any diarrhoea, and in very few cases rose-coloured spots.—Dr. DOYLE asked Dr. Little if cases of typhus fever of a bad type had occurred in the vicinity of any of the cases which he had described. In the *Medical Times and Gazette* of February 1874, a translation was given of some cases described by Professor Jürgensen of Tübingen, under the term of continued fever, and he accounted for them by supposing that the patients had received the secretions of typhus fever, and had become affected with a fever of a modified type.—Dr. G. F. DUFFEY said that during the five years he was in Malta he saw a large number of cases of an anomalous form of fever, commonly called "Maltese fever", which were entered in the official returns under the head of Common Continued Fever, but which he believed to be enteric fever. The type of this fever was essentially what Dr. Little had described.—Dr. J. W. MOORE gave the particulars of a recent outbreak of fever in Dublin, which was traceable to infection of a dairy by the poison of enteric fever. Several of the cases were treated in the Meath Hospital, to which they were admitted from the house in which the enteric fever first appeared, from a dairy infected from that house, and from a large girls' school in turn infected from the dairy. The cases presented marked varieties, and some of them closely resembled the nondescript fever described by Dr. Little. Others were unequivocal examples of severe enteric fever.—Dr. LITTLE, in reply, said that the suggestion of Dr. Doyle commended itself to him more than any of the others that had been thrown out, because he could hardly believe that his were cases of true enteric fever, unless that expression were used in a sense so vague as to deprive it of very much significance. In the instances he had recorded, he could not ascertain that any other persons in the families had fever of any kind, and he should have expected, if those were cases of slowly developing enteric fever, that some other members of the family would have exhibited the disease in a more typical form. In several of the cases, he had ascertained that the persons had been exposed very much to fecally contaminated air. In two cases, of which he had given no record, this had happened. Therefore, he was disposed to think that the disease was not true enteric fever, but some modified form of fever arising from the absorption of fecal emanations.

Typhoid Fever in the Dublin Garrison.—Surgeon-Major GORE read a

paper on this subject. It was given in abstract in the BRITISH MEDICAL JOURNAL, December 18th (p. 765).—Dr. H. KENNEDY made some remarks on the bearing of the amount of intestinal lesion on the duration of enteric fever, on the occurrence of this fever in the presence of a strumous diathesis, and on the morbid anatomy of enteric fever and of scarlatina (*proventric*).—Dr. GRIMSHAW said that enteric and typhus fevers had been on the increase during the latter end of last year and the beginning of this. It was also evident that there had been an increase in enteric fever lately. He did not think there was evidence to prove that the troops of the Dublin garrison were more unhealthy than troops similarly situated in towns where the sanitary condition of the population was the same and the death-rate so high as in the city of Dublin. It could scarcely be expected that troops introduced into Dublin would not fall into the same condition of health as the rest of the population. Dr. Grimshaw referred at length to the sanitary conditions of the barracks of Dublin, and particularly of Beggar's Bush Barracks, which he had minutely inspected, and reported on in April last. The Constabulary Depôt in Phoenix Park, a well drained and healthy locality, also furnished constant cases of enteric fever. In the treatment of this disease, his practice was to leave the patient as much as possible alone. Unless the diarrhoea were excessive, we should be cautious about checking it; but, in the recent cases of enteric fever he had seen, the bowels were usually confined. He had tried the cold water treatment, and he did not intend to try it again. Temperature could be more safely reduced by quinine, which would also act as a tonic, and he found it of the greatest possible value in most cases of enteric fever. He believed the mortality in the hospitals in which cold water had been tried was much higher than in the Dublin hospitals. He had not seen any patients that he would be inclined to bleed.—Surgeon-Major LAWRENCE (Grenadier Guards) said that there had been only two cases of enteric fever, both among officers, in Beggar's Bush Barracks since April 1874, and it was a moot point whether in these cases the disease had not been contracted out of barracks. They had had six or eight cases among the men, every one of which, however, came from the Pigeon House Fort. The situation of Beggar's Bush Barracks was low, and when the tide was out a quantity of gas collected in the drains, which was afterwards driven back into the barrack by the flow of the tide. He did not, however, believe that the drainage of the barrack was in such a deplorable state as they had been led to believe.—Dr. GRIMSHAW said that an engineer officer in charge of the barrack at the time he visited it pointed out to him four places where the drains were choked, at the rear of premises where an officer had died of typhoid fever. He was shown where new ventilating shafts had been erected, and he reported that the arrangements appeared to be such as would prevent anything of the sort from occurring in future. What he stated was, that the conditions which existed previously to the improvements were such as, if there were any truth in the ideas with regard to the cause of enteric fever, would give rise to it. He did not say that they did give rise to it in Beggar's Bush Barracks.—Surgeon-Major GORE approved of the use of milk and the employment of very little medicine in the treatment of enteric fever, the idea being to guide the disease in its course. In one case in which the diarrhoea was interfered with, the disease terminated fatally. The Registrar-General's returns did not show an increase of fever in the present year. In the beginning of the present year, the number of zymotic cases was 323, as against 510 in the same quarter of 1874; for the July quarter the numbers were 166 less; and the numbers for the October quarter were 366, as against 540 for the same quarter of last year. It was believed that the Dublin garrison was worse off as regarded disease than civilians; but he found, from military returns, that zymotic disease during the quarter ending the 1st of October was, for civilians, 5 per 1,000, and for the garrison only 1.7 per 1,000. As to the tide driving the gas of sewers upwards, the same thing occurred at the Royal Barracks.

OBITUARY.

LORENZO EDWARD DESMOND, M.A., M.D., LIVERPOOL.

DR. DESMOND died on December 10th, after a few days' illness, from an attack of bronchopneumonia, brought on by exposure to cold and fatigue in his professional duties; and he may thus be truly said to have died in harness. He was a native of Ireland, studied and graduated in Dublin, and, after a short time spent in India, practised in Liverpool for upwards of a quarter of a century. His high professional character, great urbanity, geniality, and gentlemanly bearing, had won the respect and regard of his professional brethren.

Although actively engaged in an extensive practice, chiefly as an

obstetrician and gynaecologist, he took a prominent and eminently useful part in all professional movements and institutions. As a member of many years' standing, he had done good service to our Association, having with much credit served as President of the Lancashire and Cheshire Branch, and for several years was a regular and faithful representative of his Branch on the Parliamentary Bills Committee of the Association. He was also an active and influential member of the Liverpool Medical Institution; and, had his life been prolonged, would no doubt, at no distant period, have been chosen as its President. He was also a member of several local scientific institutions, a Fellow of the Obstetrical Society of London, and had filled successively the offices of Honorary Surgeon and Consulting Surgeon to the Liverpool Dispensaries, and Surgeon to the Lying-in Hospital, and at the time of his death was Assistant-Surgeon to the 4th Lancashire Artillery Volunteers. He was followed to the grave by a numerous gathering of his professional brethren, including nearly every one of the leading practitioners of Liverpool and the neighbourhood, as well as a large number of grateful patients and sorrowing friends, thus testifying to the high esteem in which he was held while living, and the profound and widespread grief his premature and unlooked-for death had occasioned.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE POOR-LAW MEDICAL OFFICERS' ASSOCIATION.
OF ENGLAND.

At the meeting of the Council of this Association, held on October 14th last, it was resolved—that a letter signed on behalf of the Council by the President, Dr. Lush, M.P., should be forwarded to all medical gentlemen holding office under the Poor-Law Department of the Local Government Board, inviting their support, and soliciting their co-operation in one more vigorous effort, to remove the anomalies and redress the grievances of the service. We call attention to it, and heartily support its avowed objects.

MORTUARIES FOR THE METROPOLIS.

We have recently made application to the medical officers of health of the various district boards in the metropolis as to how far the 27th and 28th clauses of the Sanitary Act (1866), permitting such boards to construct mortuaries and rooms for *post mortem* purposes, have been complied with; and we now lay before our readers a tabular statement of those boards which have established them, and those which have failed to do so, together with the population of each district, so far as the returns have reached us.

District.	Population.	Medical Officer of Health.	Mortuary Accommodation.	Post Mortem Room.	Remarks.
Battersea . . .	65,225	Mr. Kempster	One provided for cholera	There is to be	
Bermondsey ..	8,413	Dr. Parker	For several	Yes	
Poplar	112,001	Dr. Ellison	For 40	No	
Hackney	142,300	Dr. Talbot	For 8	Yes for 4	
Lambeth	208,342	Dr. McCutcheon	For 12	Yes	Just built
Lewisham	50,000	Dr. Wilkinson	For 4 or 5	Yes	A small building with lean-to roof
St. Saviour's ..	30,253	Mr. Bianchi	For 3	No	
St. Mary, Newington	90,000	Dr. Hill	Extra large number	Yes	Is a railway arch
City of London	113,137	Dr. S. Saunders	18	Yes	The best building of the kind in London
St. Olave's	14,873	Mr. Viner	No proper place	No	
Eltham	4,528	Dr. King	No	No	Only the work-house
Hampstead ..	38,710	Mr. Lord	No	No	Dead house
St. George's-in-the-East	47,709	Dr. Rydgate	No	No	Ditto
Kensington ..	146,000	Dr. Duffield	No	No	
Mile End, Old Town		Dr. Corner	No	No	Only the work-house
St. Pancras ..	230,000	Dr. Stevenson	No	No	Dead-house
Whitechapel . .	76,573	Mr. Liddle	No	No	Ditto
Hotborn	43,119	Dr. Gibbon	No	No	One in construction for 12, etc.
St. George's, Southwark	56,083	Dr. Bateson	No	No	There is to be a post mortem room
St. Luke, Middlesex	54,969	Dr. Pavy	For 12	No	Accommodation in building

From the medical officers of health of the other districts we have received no reply; but having had the opportunity of examining the abstract of the answers to a circular letter addressed to the clerks of the various boards, on the motion of Dr. Joseph Rogers, member of the Strand Board of Works, we find that no mortuary accommodation exists in St. James's, Westminster, nor in the Strand, except the mortuary in Dean Street, belonging to the parish of St. Anne's, Soho, which was built twenty years ago; nor is there any in Greenwich, with some 105,000 inhabitants; nor in Bethnal Green, with 120,213. In St. Pancras, with its 230,000 inhabitants, spreading over an area three miles long, there is only the dead-house of the workhouse; and several of the so-called mortuaries are, as regards site and construction, totally unfitted for the purpose, and calculated to deter the poor from temporarily depositing their dead therein. We hope to return to this important public question before long. It concerns the provinces not less than London.

POOR-LAW MEDICAL APPOINTMENTS.

BOAST, Boanerges R., L.R.C.P.Ed., appointed Medical Officer for No. 3 District of the Henstead Union, Norfolk, *vice* A. M. F. Morgan, M.R.C.S.Eng., resigned.

DAVIS, David, M.R.C.S.Eng., appointed Medical Officer and Public Vaccinator for the No. 4 or Leigh District of the Martley Union, Worcestershire.

DONOVAN, John I., M.D., appointed Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Ballinacoly Dispensary District of the Cork Union, *vice* G. A. Rountree, M.D., deceased.

FOWLER, Trevor, L.K.Q.C.P.I., appointed Medical Officer for the Thoydon Garnon District of the Epping Union, Essex.

GRAY, John R., M.B., appointed Medical Officer for the Borrowby District of the Northallerton Union, Yorkshire, *vice* J. H. Buchanan, M.D., resigned.

GOVETT, Philip W., M.R.C.S.Eng., appointed Medical Officer and Public Vaccinator for the No. 5 District of the Plympton St. Mary Union, *vice* J. E. Adkins, M.R.C.S.Eng., resigned.

HARRISON, Thomas W., L.R.C.P.Ed., appointed Medical Officer for the Doneraile Dispensary District of the Malton Union.

WILLAN, Reginald M., M.R.C.S.Eng., appointed Medical Officer and Public Vaccinator for the No. 4 District of the North Witchford Union, Cambridgeshire, *vice* J. M. Wilson, M.B., resigned.

MILITARY AND NAVAL MEDICAL SERVICES.

SURGEON-MAJOR STANHOPE H. FASSON, M.D., vacates his appointment as medical officer of the Royal Military Academy, Woolwich, on being promoted to the rank of Deputy Surgeon-General. Dr. Fasson, who has held the appointment since July 1872, is succeeded by Surgeon-Major Edmund H. Roberts, late of the 9th Regiment.

THE ALDERSHOT INQUIRY.

We have been for some time prepared to announce to our readers the decision of the Board recently assembled at Aldershot for the purpose of assessing loss of stores in connection with the first station hospital, but have waited until we could ascertain whether their recommendations had been fully endorsed by head-quarter authority. Nothing, however, has transpired beyond the bare fact that Major-General Primrose and his colleagues have recommended the deficiency to be made good by the department, and that Sir Thomas Steele has most strongly supported their views.

We trust that the Commander-in-Chief and Secretary of State for War will concur in this recommendation, and thus prevent the saddling of a meritorious medical officer with a liability which was, so to speak, forced upon him, and the responsibility for which was weakened, if not destroyed, by informality in the documents submitted to him by the Control. Others, however, may not be so strong in their defence; and we would point out the gross injustice of holding surgeons in charge of station hospitals individually liable for deficiencies which they are merely expected to assess on the Army Hospital Corps. Our combatant brethren would, no doubt, consider it strange were the colonel of a regiment called upon to pay the entire barrack damages committed by his officers and men during their occupation of a particular station. But here is a precisely similar case; and, even as the commanding officer distributes these charges equitably among the companies under his jurisdiction, so is the surgeon expected to transmit the damages to those with whom he is most immediately concerned, *i.e.*, the Army Hospital Corps; and it is absurd, and probably illegal, to hold him individually responsible for one penny beyond his proper share. The department have clearly taken up a false position in this matter. For some unexplained reason, they took over the charge of hospital stores from the Control, who were by no means anxious to relinquish it, and have given it to their own staff, without any counterbalancing indemnity either in money or position.

A good opportunity of retrieving their error is now afforded them, and we hope to see this cumbrous appendage of medico-military duty finally swept away.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Licentiate on December 20th, 1875.

Atkinson, Francis Edward, 32, Regent Square
 Bartlett, Henry, 153, Great Dover Street
 Barton, James Kingston, 12, Doughty Street
 Birch, Philip, Lichfield
 Cadge, William Hotson, 23, Woburn Place
 Cobb, Robert, St. Bartholomew's Hospital, Chatham
 Crétin, Eugène, M.B. Lond., St. Bartholomew's Hospital
 Foley, Samuel, St. David's
 Harper, Robert Russell, Holbeach
 Hastings, George, M.D. Brussels, St. Bartholomew's Hospital
 Hawkins, Alexander Frederick, 32, Regent Square
 Miller, Frederick Daniel, Angles Road
 Morris, Henry, Wickham
 Morris, William Whytehead, East Bridgford
 Richardson, Timothy, 304, Commercial Road
 Sheehy, William Henry Patmore, St. Bartholomew's Hospital
 Smalley, Herbert, East Thurrock, Grays
 Strugnell, Frederick William, Queen Charlotte's Hospital
 Verco, Joseph Cooke, M.B. Lond., 24, Ovington Street

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following members of the College, having undergone the necessary examinations for the Fellowship, on November 25th, 26th, and 27th, were reported to have acquitted themselves to the satisfaction of the Court of Examiners; and at a meeting of the Council on the 20th instant, were admitted Fellows of the College.

Messrs. Thomas Jones, M.B. Lond., L.S.A., Royal Infirmary, Manchester, diploma of membership dated May 17th, 1870, of Guy's Hospital; Robert Lyell, M.D. Lond., L.S.A., Penge, January 25th, 1871, of the King's College and Middlesex Hospitals; William Thomas Law, M.D. Edin., L.S.A., Seamen's Hospital, Greenwich, May 16th, 1871, of the Guy's and Edinburgh Schools; William Garton, M.B. Edin., L.S.A., St. Helen's, Lancashire, July 26th, 1871, of St. Thomas's Hospital; Lewis Mackenzie, L.R.C.P. Lond., Tiverton, Devon, November 15th, 1871, of the London Hospital; Walter Hamilton Acland Jacobson, B.A., M.B. Oxon., November 13th, 1872, of Guy's Hospital; Augustus Winterbottom, Chelsea, November 13th, 1872, of St. George's Hospital; Albert Boyce Barrow, Newmarket, January 24th, 1873, of King's College.

Six candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for twelve months.

The following gentlemen, elected Fellows at previous meetings of the Council, were admitted as such.

Messrs. Thomas Bruges Flower, F.L.S., Bath, diploma of membership dated July 9th, 1841; and John Briscoe, L.S.A., Oxford, August 15th, 1842.

At the same meeting, the following members were elected Fellows of the College.

Messrs. James Bratton, L.S.A., J.P., Shrewsbury, diploma of membership dated May 20th, 1836; and William Nash Spong, L.S.A., Faversham, Kent, August 1st, 1842.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 16th, 1875.

Buckell, Ernest Hook, University College Hospital
 Haselden, Robert, Bolton, Lancashire
 Macintire, John Henry Lee, 95, Gower Street, W.C.
 Reeve, Henry, Victoria Park, Hackney
 Richardson, Arthur, Rusholme, Lancashire

The following gentlemen also on the same day passed their primary professional examination.

Dalton, C. J., London Hospital
 Gay, C. W. E., King's College
 Morgan, John, Guy's Hospital
 Prior, E. T., St. Bartholomew's Hospital
 Rigley, W. B., St. Bartholomew's Hospital
 Scallon, E. O., King's College
 Symons, J., King's College
 Walsh, W. A. S., King's College
 White, W. R., King's College
 Whitley, F. G. H., St. Bartholomew's Hospital

UNIVERSITY OF OXFORD.—The following candidates have passed the First Examination for the Degree of Bachelor in Medicine in Michaelmas Term, 1875.

Burn, Stacey Southernden, B.A., Corpus Christi College
 Cottle, Ernest Wyndham, B.A., St. Alban Hall
 Kidd, Percy, B.A., Balliol College
 Moulin, James Alfred, M.A., Pembroke College

Wood, John, B.A., Pembroke College
 Wright, George Arthur, B.A., Unattached
 The following candidates have passed the Second Examination for the Degree of Bachelor in Medicine in Mechanics' Hall, 1875.
 Champeuss, Francis Henry, B.A., Brasenose College
 Hartley, John Fleming, M.A., Brasenose College
 Jacot, Ernest Henry, B.A., Corpus Christi College
 Orr, T. J., Joseph Andrews, B.A., Jesus College
 Sharkey, Seymour John, B.A., Jesus College
 West, Samuel Hatch, B.A., Christ Church

UNIVERSITY OF CAMBRIDGE.—The following gentlemen passed the first examination for the M.B. Degree.

H. Bate, Claus; W. Collier, Jesus; F. Dale, Camb.; J. Duncuff, Trinity; W. Foster, John; W. C. Gardner, Claus; A. Hill, Deven; G. S. Lewis, Claus; W. B. Richards, Claus; A. Sidgwick, Trinity; H. Tooth, John; and A. P. Wells, Claus.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND. Monthly Examination Meeting, December 14th, 15th, and 16th, 1875.

Licenses to Practise Medicine and Midwifery were obtained by

Eyre, John Joseph	Reede, Samuel Thomas
Henderson, William G. Hunt	Smith, George
O'Reilly, George J. An	Webster, James J. An

The License to Practise Medicine was also obtained by
 Mara, William Francis

MEDICAL VACANCIES.

The following vacancies are announced:—

ARDWICK and ANGOATS DISPENSARY, Newcastle.—Resident House-Surgeon.
 BELHELVE, Parish of.—Medical Officer.
 BERKS COUNTY ASYLUM, Maidenhead.—Assistant Medical Officer. Salary, £100 per annum, with board, lodging, and washing.
 BIRKENHEAD BOROUGH HOSPITAL.—Senior House-Surgeon (General). Salary, £150 per annum, with board and residence in the house. A pleasure to R. S. Smith, Esq., 4, Hamilton Square, on or before January 15th, 1876.
 BOOTLE BOROUGH HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board, furnished apartments, and washing. Applications to the Honorary Secretary.
 BRIMPTON HOSPITAL.—Resident Clinical Assistant. Applications, with testimonials, on or before January 1st, 1876.
 CARMARTHEN UNION.—Medical Officer.
 CHORLTON UNION.—Medical Officer. Salary, £700 per annum, with fee, right, attendance, and furnished apartments. Applications on or before the 30th inst.
 CHORLTON-ON-MEDLOCK, RUSHOLME, and MOSS SIDE DISTENSARY, Manchester.—House-Surgeon.
 DENBIGHSHIRE INFIRMARY.—House-Surgeon. Salary, £25 per annum, with board, washing, and residence.
 DUMFRIES and GALLOWAY ROYAL INFIRMARY.—Assistant House-Surgeon. Board and washing. No salary. Applications to the Secretary.
 GENERAL HOSPITAL and DISPENSARY FOR SICK CHILDREN, Pendlebury, near Manchester.—Superintendent. Salary, £100 per annum, with everything found.
 GLOUCESTER INFIRMARY.—Surgeon and Assistant-Surgeon. Applications before January 7th, 1876.
 HARDINGSTONE UNION.—Medical Officer for the Bradfield District. Salary, £45 per annum, in addition to which the person appointed will receive fees for midwifery and surgical operations. Applications, with testimonials, to the Clerk, on or before January 1st, 1876.
 HUDDERSFIELD INFIRMARY.—Physician.
 KENT and CANTERBURY HOSPITAL.—Assistant House-Surgeon and Dispenser. Salary, £50 per annum, with board, lodging, and washing. Applications on or before the 31st instant.
 LEEDS UNION.—Medical Officer. Salary, £200 per annum, with unfurnished residence, coal, gas, water, and rates. Applications on or before Dec. 25th.
 LIVERPOOL DISPENSARIES.—Assistant Resident House-Surgeon (unmarried). Salary, £108 per annum, with £5 additional each year till the salary reaches £120, furnished apartments, coal, gas, and attendance. Applications on or before the 20th instant.
 MALE LOCK HOSPITAL.—House-Surgeon.
 MOFFAT HYDROPATHIC ESTABLISHMENT.—Medical Man to take charge. Applications to Messrs. Brace and Kerr, W.S., Edinburgh.
 PARISH OF LISMORE AND APPIN, Letchmore.—Medical Officer. Salary, £200 per annum. Applications to the Rev. P. Dewar, Manse, Appin, Argy.
 RADCLIFFE INFIRMARY, Oxford.—Dispenser for In- and Out-patients (unmarried). Salary, £120 per annum. Applications to the Secretary not later than January 1st, 1876.
 RIPON DISPENSARY.—Resident House-Surgeon. Salary, £150 per annum, with furnished apartments, attendance, coal, and candle. Applications on or before January 1st, 1876.
 ST. LUKE'S HOSPITAL.—Clinical Assistant for six months, from 1st Jan. 1876.
 ST. PANCRAS and NORTHERN DISPENSARY.—Resident Medical Officer. Salary, £100 per annum, with residence, and £10 for servant's wages.
 SHEFFIELD GENERAL INFIRMARY.—Physician. Applications on or before January 6th, 1876.
 STROUD GENERAL HOSPITAL.—House-Surgeon. Salary, £60 per annum, with board, furnished rooms, attendance, and washing.
 SURREY DISPENSARY.—House-Surgeon. Salary, £120 per annum, with furnished apartments. Applications on or before January 15th, 1876. Candidates are requested to attend the Committee on Tuesday, January 11th, to produce their testimonials, etc.
 THARSI'S MINES, Province of Huelva, Spain.—Medical Practitioner. Salary, £250 per annum. Applications to the Secretary, 136, West George Street, Glasgow.

TONGUE and FARR, District of, County of Sutherland.—Medical Officer. Salary, £150 per annum, and house.
 TRINITY COLLEGE, Dublin.—Professor of Botany. Applications on or before January 22nd, 1876.
 WANDSWORTH and CLAPHAM UNION.—Resident Medical Officer. Salary, £250 per annum, with furnished apartments, ratons, washing, gas, and coal.
 WESTMINSTER GENERAL DISPENSARY.—Honorary Surgeon. Applications on or before the 15th instant.
 WHITCHURCH (Hants) UNION.—Medical Officer for the St. Mary Bourne District. Salary, £77.10 per annum. Applications on or before the 27th inst.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

Allen, Richard C., M.R.C.S. Eng., appointed Resident Physician to the Queen's Hospital, Birmingham.
 BARR, John, L.R.Q.C.P.L., appointed House-Surgeon to the Royal Infirmary, Liverpool.
 BLOOMER, Samuel F., M.R.C.S. Eng., appointed House-Physician to the Royal Infirmary, Liverpool.
 BOOKLESS, James P., M.D., appointed Physician to the Kelso Dispensary.
 BRANFOT, Henry S., M.D., appointed House-Physician to the Radcliffe Infirmary, Oxford, vice C. A. Riving, M.B.
 CROSS, Francis R., M.R.C.S. Eng., appointed Medical Tutor and Subdean at King's College, vice J. H. Philip, M.B., resigned.
 GREENFIELD, William S., M.D., appointed Physician to the Royal Infirmary for Children and Women, vice E. I. Sparks, M.B., resigned.
 DAVIS, Francis V., M.B., appointed House-Surgeon to the Royal Infirmary, Liverpool.
 DOBBIE, Robert J. A., M.R.C.S. Eng., appointed Resident Medical Officer to the Fever Hospital.
 EDWARDS, Frederick S., M.R.C.S., appointed House-Surgeon to St. Bartholomew's Hospital.
 GIBSON, Charles, L.R.C.P. Ed., appointed House-Surgeon to the Bootle Borough Hospital.
 HASKELL, Henry F., M.R.C.S. Eng., appointed Registrar to the London Fever Hospital.
 HOUGH, James, M.R.C.S. Eng., appointed Surgeon to the Borough Gaol, Cambridge, vice J. Hammond, F.R.C.S., deceased.
 KEBTLEY, Charles B. B., L.R.C.P., appointed Assistant Demonstrator of Anatomy at St. Bartholomew's Hospital.
 LEVING, Benjamin T., F.R.C.S. Eng., appointed Ophthalmic Surgeon to the Great Northern Hospital, vice B. J. Vernon, F.R.C.S., resigned.
 M'LAIDLAN, Samuel F., M.B., appointed House-Surgeon to the Cholton-on-Medlock Dispensary, vice R. A. S. Daly, L.R.Q.C.P., resigned.
 M'MASTER, Robert D., M.D., appointed House-Physician to the Royal Infirmary, Liverpool.
 MITCHELL, Hugh, M.D., elected Physician Accouchour to the Glasgow Maternity Hospital, vice J. G. Wilson, M.D., and Consulting Physician.
 RAYNE, Charles A., M.B., appointed Assistant Physician to the Manchester General Hospital and Dispensary for Sick Children.
 SHAIN, William F., M.R.C.S. Eng., appointed House-Surgeon to the Royal Infirmary, Liverpool.
 SHILLING, James, LL.B., M.B., appointed Assistant Demonstrator of Physiology at St. Bartholomew's Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

Notices for inserting announcements of Births, Marriages, and Deaths, should be forwarded in stamps, with the communication.

DEATH.

WILLIAMS.—On December 17th, at Foston, Oxon, Sarah, widow of the late George Woodward, Esq., Surgeon, aged 82.

WEST KENT MEDICO-SURGICAL SOCIETY.—The third meeting of this Society was held on Friday, December 3rd, at the Royal Kent Dispensary, Greenwich Road. Dr. Prior Parvis (in the unavoidable absence of the President, Dr. J. N. Miller) in the Chair. Dr. Tilbury Fox's paper on Ringworm was (in his absence) postponed until Friday, February 4th, 1876. Mr. E. J. B. Burroughs of Lee brought before the members a typical case of Congenital Syphilis treated by Mercurial Inunction. Mr. J. B. Saundry showed a very fine specimen of Gelatinous Polypus, removed by him during the week from the right naves of a woman. The remainder of the evening was spent in a discussion on syphilis, in which most of the members present took part, illustrating their remarks by appropriate cases. Dr. Peacock will read a paper on Friday, January 7th, 1876.

LONDON FEVER HOSPITAL.—On December 20th, a handsome clock with suitable inscription was presented to Mrs. Puddington, the matron of the London Fever Hospital, by the members of the Committee of that institution, in the presence of all the nurses and officers. Mr. Hugh Owen, the Honorary Secretary, in making the presentation, referred to the care, tenderness, and conscientiousness with which Mrs. Puddington had, during a period of twenty-five years, performed her duties, first as nurse and then as matron. Dr. Broadbent, physician to the hospital, and Dr. Buchanan, a former physician, bore personal witness to Mrs. Puddington's faithful services. Some beautiful engravings of Landseer's works have recently been kindly given to the hospital by Mr. Graves of Pall Mall, and contribute greatly to the cheerfulness of the wards.

OPERATION DAYS AT THE HOSPITALS.

MONDAY	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAY	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.
FRIDAY	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAY	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

NOTICES TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, in forwarding their Annual and other Reports, favour us with Duplicate Copies.

AUTHORS desiring reprints of their articles published in the JOURNAL, are requested to communicate beforehand with the printer, Mr. T. Richards, 37, Great Queen Street, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor: those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C.

UNDERGRADUATE should apply to the Deans of the respective Universities. The examinations must be passed on the spot and in the language of the country.

MIDWIFERY CONTRACTS.

SIR,—In reply to your correspondent H. in last week's JOURNAL, in reference to midwifery engagements, I beg to say that county court judges hold different views on the subject. I determined some time since to try a case in the county court, and very sorry I was for doing it, as the judge laughed me to scorn, and, in fact, kept the whole court amused for about ten minutes with his remarks on the absurdity of a medical man expecting to be paid for work he had not done. In short, he ruled that the contract was not binding on either side. I replied that, in case of a doctor being engaged to attend a woman, and not doing so when sent for, he would be liable for damages (in the event of accident). The judge said no; a doctor can only be expected to use due diligence in attending any case to which he is called, whether he has been previously engaged or not.

My object in troubling you with this long letter is to prevent other medical men from placing themselves in such a humiliating position as I found myself on the occasion mentioned above.—Yours truly,
J. WILLIAMS, M.B., M.A.
Barrow-in-Burness, December 14th, 1875.

MR. G. C. STERT (Hampstead).—See BRITISH MEDICAL JOURNAL, May 21st, 1870, and May 11th, 1872; also *London Medical Record*, January 20th, 1875. Our correspondent will also very probably find information on the subject in the pages of *Nature* and the *Pharmaceutical Journal*.

CROTON-CHLORAL.

A. C. D.—According to Liebreich (BRITISH MEDICAL JOURNAL, December 20th, 1873), croton-chloral administered internally rapidly produces sleep, but without (as is the case with chloral) lowering the pulse and respiration. It is especially successful in cases of facial neuralgia, according to German reports, and to the reports of correspondents of the BRITISH MEDICAL JOURNAL, whose notes have appeared in past volumes. It is, however, far from being so generally tolerated as chloral. It may be given dissolved in half an ounce each of glycerine and water, with two or three drops of oil of peppermint and some syrup.

WHOPPING-COUGH.

The Attorney-General v. the Hyde Chemical Company.

SIR,—Among notices to correspondents in your last issue, an affidavit is quoted, in which it is deposed that the medical men here had within the last month sent about forty children suffering from whooping-cough to the above manufactory, to inhale the fumes of pitch. Permit me, for myself (and, I think, I may safely say also for the four qualified gentlemen in practice here), to contradict the flattering imputation. But as there are at least five unqualified men in extensive practice in the town, an equal number of prescribing druggists, and still more numerous body of bone-setters, herbalists, and other irregular aspirants to medical fame, the novel method of treatment may have emanated from some of the latter body of practitioners.—I am, s. r., yours respectfully,
THOS. C. LEAH.
Hyde, near Manchester, December 18th, 1875.

E. T.—"Après la soupe, une coupe d'excellent vin
Tire un écu de la poche du médecin."

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

THE QUESTION OF THE ADMISSION OF LADIES TO THE MEMBERSHIP OF THE BRITISH MEDICAL ASSOCIATION.

SIR.—Referring to the appeal recently put forth to the members of the above-named Association, for their decision as to the expediency and the rightfulness of admitting women as members of that Society, I venture to submit that a more preposterous notion than the one here suggested cannot be brought under the consideration of professional men. I quite concur with Mr. Lindsay, who, in this day's JOURNAL, in sustaining his answer "No," gives, as his first ground of objection, the indisputable fact, that a professional union and fellowship with women would at once weaken or destroy that influence and power hitherto possessed by the British Medical Association, in respect of governing bodies, and even legislative assemblies. I go further, and say that such an amalgamation would probably at no distant period lead to subversion of the policy and general objects of the Association, and all this through the presumption of women, as abandoning their natural sphere of life and taking upon themselves duties proper only to men, for connected with this Association is a fund for the relief of widows and orphans of medical men. Let ladies come amongst us, and thus assert an equality with men in this striving world, and then we may reasonably be called upon to act upon one of two suggestions—either to abolish the fund already established, or to institute a second fund for the relief of widows and orphans of medical women. This notion may appear absurd enough to some readers; but when women take upon themselves the functions of the medical profession, and for themselves the revenues of that profession, they and we may contend that women are no longer of the weaker sex. In looking, however, at Mr. Lindsay's second reason for opposing the admission of women, I confess that I am not prepared to believe, as he seems to believe, that a female practitioner may, as well as a male practitioner, contribute "to the advantage of the science of the profession". And here we are led from the one question of eligibility of women as members of our Association, to the other question of their fitness for the exercise of the medical profession. I at once affirm their incompetency, and say that their assumed position as church preachers, lawyers, or auctioneers, would be far less offensive to common sense and decorum than is their determination for the medical profession. It is true that a woman may vaccinate, open an abscess, do the operation of tapping, or read a compilation on some medical subject, and call it her paper, but we can never expect to find her in the practice of really serious and important operations, or adding to the science and practical skill of surgery or medicine. Then, with respect to her physical powers for the discharge of professional duties, I say there is not a woman in England who could endure for six months the fatigue necessarily connected with country medical practice: but perchance she soars above that, and lays herself out for town practice, to the expulsion, perhaps, of good men for country districts. As, however, we now cannot know what a woman may prefer, let us suppose her selecting a rural district for practice. Will she ride on horseback, or will she drive her carriage? and, taking to the vehicle, will she also take the whip, or employ a driver? Adopting the latter course, will she patronise a woman or a man? A man, to be sure; for a man has more strength than a woman, more presence of mind, and more self-reliance—qualities, indeed, which are absolutely required in the practice of the medical profession.

For these reasons, then, and for others not here stated, I in my answer to the question of "Yes" or "No" have written the words "No, most positively"; and at the bottom of the paper I have taken the liberty of making the gratuitous declaration, "When women are admitted as members of the British Medical Association, I go out of it"; and by way of justifying such determination, it seems to me that I cannot do better than quote the language of Copland's edition of Richerand's *Elements of Physiology*: "The reproduction of the species is, in woman, the most important object of life; it is almost the only destination to which Nature has called her, and the only duty she has to fulfil in human society. Wherever the earth is fruitful, and furnishes man with abundant means of providing for his wants, he dispenses with the services of woman in obtaining from it means of subsistence; he releases her from the burthen of social obligations. Whatever withdraws woman from this primitive destination, whatever diverts her from this end, is to her injury. It is the scope of all her actions and habits; everything in her physical organisation has evident reference to it."—I am, sir, your obedient servant,
WILLIAM MOORMAN.

Saint Columb, Cornwall, December 4th, 1875.

STUDENT.—*Part VII.*: Partitis vicibus, in divided doses. *Hora decub.*: Hora decubitus, at bed-time. But every student should have a Latin dictionary, and know how to use it.

THE DISPENSING OF MEDICINES.

SIR,—I am surprised that the subject of general practitioners dispensing their own medicines has not been taken up with the spirit that the subject of medical titles was a short time ago, and discussed with much vigour week after week in the columns of the JOURNAL, as it is one of very great importance to the welfare of the profession. Either the principle of general practitioners dispensing their medicines is right or wrong. If right, why should it not be continued? or if wrong, let it be given up. The general practitioners of the present day are much more highly educated men than their predecessors of even twenty or thirty years ago, and the tendency of the age in almost everything is division of labour; and the time, no doubt, will come, if we continue to increase and prosper as a nation as we have done during the last half century, when pharmacy and dispensing will be entirely relegated to chemists and druggists. Still, for a young man commencing practice as a general practitioner, it is a great mistake for him not to dispense his own medicines, which, with coated pills, and concentrated infusions, etc., can be easily done, and without much expense. Giving a prescription, and charging a fee of 2s. 6d. or 3s. 6d., especially in chronic cases, is ruinous practice to a young general practitioner. By so doing, he plays into the hands of his patient and the druggist, who are the real gainers, whilst he and his wife and family, should he possess such blessings, may starve at home; and did not midwifery come to the rescue, many a young general practitioner must pay the penalty of such folly by going to the wall.

The very sensible letter of A Junior Member in your impression of October 23rd I fully endorse, and should advise all young general practitioners to follow his example. The contrast of M.D. Edin. is most remarkable. I never heard of such ruinous practice as an M.D. visiting a patient and prescribing for him for 1s. 6d. I cannot but deeply commiserate such a poor brother, and advise him to follow some such plan as that of a Junior Member.—I am, yours faithfully,
November 29th, 1875.
A SENIOR MEMBER.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

PERCHLORIDE OF IRON IN POST PARTUM HÆMORRHAGE.
SIR,—Dr. Weir's case of *post partum* hemorrhage was, no doubt, simply a case of inertia uteri, from defective power; and had he used, as contemplated, the forceps, I feel sure it would not have taken place; if so, to a much less extent: at any rate, it shows how necessary in these cases it is to be energetic. I quite agree in the recommendation not to pull too much at the cord, but rather to give the placenta good time, as I can well recollect a case wherein hemorrhage was increased, if not induced, by such. I have always found it better to allow the uterus to expel the hand, as Gooch says, instead of frequently introducing, as contraction is then better, and of longer duration.

As to the second case of "chronic hemorrhage", it is not stated if it were due to fibroid of the uterus, which is possible. In that case, no doubt, the perchloride solution would stop it for a time; but inasmuch as there is (this case) a foreign body already in *utero*, which of itself would retain secretions that must decompose, and give rise to all the fatal symptoms of purulent infection, I for one fail to observe the great benefit of filling the uterus with perchloride of blood-clots, setting aside the tanning of the muscular walls. We know the perchloride of iron is not the safest remedy for removing *nævi*; and in wounds where it is used, very often get sloughing results, as much from the agent as from the injury. These cases we can see; in the partially closed uterus it is more difficult—I am, sir, your obedient servant,
November 23rd, 1875.

A. H. MORRILL, M.R.C.S.E.,
Late House-Surgeon Lying-in Hospital.

PUBLIC VACCINATOR.—A very good statement of the subject is to be found in Ross's *Vaccinator's Handbook*, p. 44. "In regard to insusceptibility, it will be observed that no medical practitioner is justified in giving a certificate to that effect, unless he has at least three times unsuccessfully vaccinated the child (30 and 31 Vict., c. 84, sec. 20), and that the form of certificate provides for the insertion of the number of times the child has been so unsuccessfully vaccinated, and also for the operator's opinion that the child is insusceptible. A certificate omitting either of these particulars should be rejected by the vaccination officer, and not registered; for the fact of numerous unsuccessful attempts is not of itself evidence of insusceptibility, nor is the statement of the operator's opinion to be accepted as conclusive, unless he states, as the basis of such opinion, the number of attempts he has made. The statement of having had small-pox in the old form of certificate—that under the Act of 1867—(30 and 31 Vict., c. 84, schedule, Form C) was followed by an expression of the medical practitioner's opinion that the child was 'insusceptible'. This, however, it will be seen, is otherwise in the new form; and it appears to be intended that the receipt by the vaccination officer of a certificate that the child has had small-pox will justify him, after recording such certificate in his report, in treating the case as finally disposed of, without any reference to the medical practitioner for his opinion as to the child's susceptibility or insusceptibility of the vaccine disease. It is desirable to mark this distinction between the old certificate and the new, though even under the Act of 1867 the mere fact of having had small-pox was recognised as an excuse for non-vaccination." (See secs. 20 and 31.)

SUPPRESSED MENSTRUATION FROM RESIDENCE AT THE SEA-SIDE.
EARLY in the month of June, Mrs. H., aged 31, the mother of three children, the youngest of whom is three years old, left her home in Northumberland for the purpose of visiting her parents in the Orkney Islands, where she remained for five weeks, the menstrual flow being regular as to time and quantity up to the date of her leaving home. The next "show" ought to have appeared during her residence there; but though it was irregular, she satisfied herself that it would appear at the next monthly period. Being disappointed in this, however, I was asked to visit her, and, on careful inquiry into the history of her case, could find no satisfactory explanation for this sudden cessation, as she was in the normal standard of health, and gave the assurance that there was no reason for her thinking herself pregnant. The only thing of which she complained was a slight discharge at the regular monthly period, which continued for a few days, and was attended with the same kind of local and general disturbance that we see associated with the proper uterine discharge. The case did not seem to me, therefore, to call for any very active line of treatment, and the patient was asked to wait, in the confident assurance that times all would come right with her. The following month, however, proved only to be like the previous, though she complained more of the discharge, and, in addition, a little pain, when it occurred to me that there might be some ulceration to account for this; but, on examination, it was found to consist of only a little leucorrhœa, which seemed an attempt on the part of the uterus to furnish the true sanguineous secretion. The saccharine carbonate of iron was now prescribed for her, in the form of two five-grain pills three times a day, the use of the ordinary remedies usually applied in such cases being advised a day or two before the next period, when, much to her satisfaction, the catamenial flow appeared. It appears, therefore, that this cessation of menstruation was altogether unconnected with any pathological condition, and could only be accounted for from the effects of the marine atmosphere during her stay in the north.
Matfen, November 20th, 1875.

ROBT. TORRANCE, L.R.C.S.E.

L. M. A.—The Midwifery Board met on the 15th instant, only the second time in this year. The following gentlemen are members of the Board—viz., Mr. Prescott Hewett, chairman, and Drs. Arthur Farre, Robert Barnes, and W. O. Priestley.

CHLORAL AND CHLOROFORM.

SIR,—May I direct your attention to an oversight which occurs in a paragraph at p. 710 of this week's *JOURNAL*? Chloral is there twice referred to as "solidified chloroform", and as chloroform "in the solid state". With the general intention of the notice in question every one must cordially agree, and on this account it is the more to be regretted that it should be complicated with a scientific inaccuracy such as that quoted. The formula for chloral is $C_2H_3Cl_3O$; that for chloroform is $CHCl_3$; from which it will be seen that the latter contains no oxygen, and only half the amount of carbon contained by the former. The physiological effects are, I think, as different in the two cases as is the chemical composition. The practical danger to be apprehended from considering chloroform and chloral as identical is this: a person who had acquired the habit of taking chloral with apparent impunity might naturally, under this impression, think it equally safe to inhale chloroform, so incurring a risk the magnitude of which could scarcely be exaggerated.—I am, sir, yours truly,
December 6th, 1875.

CHAS. ELAM.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, no later than *Thursday*, twelve o'clock.

BOGUS DIPLOMAS.

SOMEWHERE SAYS the Paris correspondent of the *Times* there would seem to be a great trade in what the Americans call "bogus" diplomas, for, since the recent exposures in the *Times* and other papers, the dealers in these distinctions have hit upon a plan for obtaining vouchers, about whose authenticity there can be no doubt. Several Parisian doctors have been the victims of these speculators under the following circumstances. Not long ago, this advertisement appeared in several French papers:

"1,000 to 2,000 francs lent to every doctor in medicine or health-officer on the simple presentation of his diploma.—Address M., etc."

Several young men who had just taken their degrees, and whose practice was as yet not equal to their wants, were entrapped by this tempting bait, and hastened to the address given. They were most politely received, and asked to leave their diplomas for verification with the affable gentleman who was to make the loan, to return in a week; but, on revisiting the house, the victims found that money-lender and paper had both disappeared. Doubtless at the present moment the writing on these documents has been carefully erased, and some impudent quack is practising as a licentiate of the Sorbonne.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The *Hastings and St. Leonard's News*; The *Belfast News-Letter*; The *Sheffield Daily Telegraph*; The *Chester Guardian and Record*; The *Hereford Times*; The *Bristol Daily Post*; The *Statesman*; The *Birmingham Morning News*; The *Cork Constitution*; The *Newcastle Weekly Chronicle*; The *Worcester Journal*; The *Hobart Town Mercury*; The *Weekly Times*; The *Mid-Weekly Hampshire Independent*; The *Lincolnshire Herald*; The *Sunderland Daily Echo*; The *Co-operative and Financial Review*; The *South Wales Daily News*; The *Maclesfield Courier*; The *Glasgow Herald*; The *Croydon Advertiser*; The *Glasgow News*; The *Hastings and St. Leonard's Chronicle*; The *Metropolitan*; The *London and Surrey Sentinel*; *Saunders's News-Letter*; The *Tenby Advertiser*; The *Eastern Daily Press*; The *Craven Pioneer*; etc.

* * We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Sir William Fergusson, Bart., London; Dr. G. M. Humphry, Cambridge; Dr. G. H. B. Macleod, Glasgow; Mr. Crompton, Manchester; Mr. Salkeld, Durham; Surgeon-Major Fleming, Netley; Dr. T. Clifford Allbutt, Leeds; Mr. Leach, Hyde; Dr. W. R. S. Jefferies, Lochmaben; Dr. Hill, Birmingham; Dr. Skinner, Liverpool; Dr. W. Sedgwick Saunders, London; Dr. Haddon, Manchester; Mr. W. Mac Cormac, London; Dr. Eben Watson, Glasgow; Dr. J. W. Moore, Dublin; Mr. J. V. Solomon, Birmingham; Dr. Murchison, Dumfries; Dr. Morgan, Manchester; Dr. John Duncan, Edinburgh; Dr. Morgan, Oxford; Dr. Vintras, London; Mr. M. C. Soutter, London; Dr. Percy Boulton, London; Dr. Sneddon, Beith; Dr. Irvine, Liverpool; Mr. James Williams, Holywell; Dr. J. W. Langmore, London; Dr. Robertson, Glasgow; Our Dublin Correspondent; Dr. Meymott Tidy, London; Mr. J. Ffrench Blake, London; Mr. W. Draper, York; Mr. G. C. Coles, London; One of the Boys, Epsom; Mr. Feegan, Belfast; Mr. W. Hodgkins, Oxford; Mr. Valentine Stone, Lawrence Kirk; Mr. Dyke, Long Ashton; Mr. Henry Custance, London; Mr. W. Fairlie Clarke, London; Dr. Sidney Ringer, London; Dr. Goldie, Leeds; An Associate; Dr. J. Milner Fothergill, London; The Registrar-General of England; Dr. Edis, London; The Registrar-General of Ireland; Mr. H. E. Stewart, London; Dr. Tilbury Fox, London; M. Marey, Paris; The Registrar of the Royal College of Physicians, London; Mr. Roche Lynch, London; The Secretary of the Manchester Medico-Ethical Society; Mr. A. Woodforde, Plaistow; Mr. T. P. Lucas, London; Mr. J. R. Lane, London; Dr. J. W. Moore, Dublin; Mr. Davy, Bradford; Mr. Johnstone Macfie, Tottenham; Dr. John Duncan, Edinburgh; Mr. J. Barras, Rotherham; Mr. T. Holmes, London; Our Edinburgh Correspondent; Mr. Warrington Haward, London; Dr. Wilks, London; Dr. Brunton, London; Mr. Davy, London; Mr. Shirley Murphy, London; Mr. S. D. McConnell, London; Dr. Claye Shaw, Leaveness; Mr. Hamilton Cartwright, London; Mr. Martin G. B. Oxley, Liverpool; Dr. Pye-Smith, London; Mr. Galton, Croydon; Mr. Cresswell Hewitt, Southampton; Mr. Christopher Heath, London; etc.

BOOKS, ETC., RECEIVED.

A Guide to the Microscopical Examination of Drinking-Water. By J. D. Macdonald, M.D., R.N., F.R.S. J. and A. Churchill: 1875.
Quain's Anatomy. Eighth Edition. Vol. 1. By Dr. A. Sharpey, Dr. A. Thomson, and E. A. Schafer. Longmans, Green, and Co. 1875.
Syllabus of Materia Medica. By Alexander Harvey, M.D., and A. D. Davidson, M.D. Third Edition. London: H. K. Lewis. 1876.
Relations of the Urine to Diseases of the Skin. By L. Duncan Bulkley, A.M., M.D. Sampson Low and Co. 1875.
Analysis of One Thousand Cases of Skin-Disease. By L. Duncan Bulkley, A.M., M.D. Sampson Low and Co. 1875.
A Treatise on Human Physiology. By J. C. Dalton, M.D. J. and A. Churchill, New Burlington Street.
Descriptive Catalogue of the Dermatological Specimens contained in the Museum of the Royal College of Surgeons of England. By Erasmus Wilson, F.R.S.
Cholera Epidemic of 1873 in the United States. Two vols. By John M. Woodworth, M.D. Washington: Government Printing Office. 1875.

1876.

THE BRITISH MEDICAL ASSOCIATION.

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The ANNUAL MEETING of the Association for 1876 will be held in BRIGHTON under the Presidency of

SIR JOHN CORDY BURROWS, F.R.C.S.Eng.

The ADDRESS in MEDICINE will be delivered by EDWARD H. SIEVEKING, M.D., F.R.C.P., Physician to St. Mary's Hospital, and Physician Extraordinary to the Queen.

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Will be awarded for the best Essay "On Diphtheria: its Pathology, Diagnosis, and Treatment".

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Will be awarded for the best Essay "On Pyæmia".

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Gentlemen desirous of becoming Members of the Association should communicate their wish to the HONORARY LOCAL SECRETARIES, or to the General Secretary, F. FOWKE, Esq., 36, Great Queen Street, Lincoln's Inn Fields, London, W.C.

For the Annual Subscription of One Guinea, paid in advance, the BRITISH MEDICAL JOURNAL is forwarded weekly to Members, free by post. Orders enclosing remittances should be addressed to FRANCIS FOWKE, Esq., at the Office of the Journal, 36, Great Queen Street, London, W.C.—For persons not Members of the Association, the Annual Subscription is Twenty-eight Shillings.

GRANTS in AID of ORIGINAL RESEARCHES in MEDICINE and the ALLIED SCIENCES.

Applications, stating the nature and objects of the intended research, should be sent before the 29th day of DECEMBER instant, to the General Secretary, at the Office of the Association, 36, Great Queen Street, London, W.C.

THE BRITISH MEDICAL JOURNAL for 1876,

Edited by ERNEST HART, Esq.

The JOURNAL includes the earliest scientific, social, and political information on all subjects interesting to the Profession; LEADING ARTICLES and Editorial Comments on the Subjects of the Week; ORIGINAL ARTICLES and LECTURES by the most eminent authorities; MEMORANDA and RECORDS of DAILY PRACTICE by Hospital and General Practitioners; Extracts from BRITISH and FOREIGN JOURNALS; Reports of the Practice of the HOSPITALS and ASYLUMS of Great Britain and Ireland; Full Reports of the Proceedings of the BRITISH MEDICAL ASSOCIATION and of its BRANCHES and Committees; SPECIAL CORRESPONDENCE from the principal cities and localities of Great Britain, Ireland, and the Continent; REPORTS of the PRINCIPAL MEDICAL SOCIETIES in SCOTLAND, and IRELAND; REPORTS on NEW INVENTIONS; SPECIAL REPORTS on SANITARY and MEDICO-LEGAL QUESTIONS; ENGLAND, REVIEWS OF BOOKS; a Department devoted to the PUBLIC HEALTH and POOR-LAW SERVICE; a Department devoted to the MILITARY and NAVAL MEDICAL SERVICES; University Intelligence; Lists of Vacant Appointments; Obituaries of Medical Men; NOTICES and ANSWERS to CORRESPONDENTS.

The arrangements for reporting the proceedings of the MEDICAL SOCIETIES in the United Kingdom are very complete, and include the transactions of Societies in London, Edinburgh, Dublin, Manchester, Glasgow, Leeds, Bradford, &c., together with abstract Reports of the Papers read, and the Cases and Specimens exhibited, at the Meetings of the Twenty-nine Branches of the BRITISH MEDICAL ASSOCIATION.

The Department devoted to the interests of the PUBLIC HEALTH and POOR-LAW MEDICAL SERVICES has been largely developed, and the services of gentlemen of the highest authority and largest experience have been obtained. The Department includes notices and answers to questions from Medical Officers of Health and Poor-Law Medical Officers, and is intended to assist and support them in the performance of their difficult duties.

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THE HARVEIAN ORATION delivered at the Royal College of Physicians of London. By **Edmund A. Parkes, M.D., F.R.C.P., F.R.S.,** Professor of Hygiene in the Army Medical School, Netley.

THE LUMLEIAN LECTURES, delivered at the Royal College of Physicians of London, on the Pathology of the Pneumogastric Nerve. By **Samuel O. Habershon, M.D., F.R.C.P.,** Senior Physician to and Lecturer on Medicine at Guy's Hospital.

THE CROONIAN LECTURES, delivered at the Royal College of Physicians of London, on the Pathology and Relations of Albuminuria. By **W. H. Dickinson, M.D., F.R.C.P.,** Physician to and Lecturer on Materia Medica at St. George's Hospital.

THE GOULSTONIAN LECTURES, delivered at the Royal College of Physicians of London, on the Natural History of Pulmonary Consumption. By **A. B. Shepherd, M.D., F.R.C.P.,** Assistant-Physician to St. Mary's Hospital.

TWO HARVEIAN LECTURES delivered at the Harveian Society of London, on Bright's Disease, and its Treatment, considered mainly in relation with Arterial Tension from Blood-contamination. By **Francis Sibson, M.D., D.C.L., F.R.C.P., F.R.S.,** Consulting Physician to St. Mary's Hospital.

THE LETTSOMIAN LECTURES at the Medical Society of London, on the Influence of Climate on the Treatment of Pulmonary Consumption. By **C. Theodore Williams, M.A., M.D., F.R.C.P.,** Physician to the Hospital for Consumption and Diseases of the Chest.

SELECTED LECTURES on the Practice of Medicine. Series I. **FEVER.** By **T. Clifford Allbutt, M.A., M.D.,** Physician to the Infirmary, and Lecturer on Medicine in the School of Medicine, Leeds.

LECTURES on Electrolysis: with Illustrations. By **John Duncan, M.D.,** Assistant Surgeon to the Royal Infirmary, Edinburgh.

AN ADDRESS on the Practical Application of the Sphygmograph. By **M. Marey, Professor** in the College of France.

REPORT of Experimental Observations on the Effects of certain Drugs in Diseases of the Chest By **R. Douglas Powell, M.D., F.R.C.P.,** Physician, and **Reginald E. Thompson, M.D., F.R.C.P.,** Assistant-Physician, to the Hospital for Consumption and Diseases of the Chest at Brompton.

REPORTS presented to the Scientific Grants Committee of the British Medical Association.—

II Contribution to the Life-History of Contagium. By **P. M. Braidwood, M.D.,** and **F. Vacher, (continued).**

III.—The Physiological Action of the Chinoline and Pyridine Compounds. By **J. G. McKendrick, M.D.,** Lecturer on Physiology in Edinburgh.

IV.—The Treatment of Pyrexia by the Gradual Abstraction of Heat: the Action of Uranium Salts in Diabetes: the Action of Trimethylamine (pure) and its Alkaline Products distilled from Herring-Brine, in Rheumatism and Gout. By **W. H. Spencer, A.M., M.B.,** Physician to the Bristol Royal Infirmary, and Lecturer on Medicine at the Bristol Medical School.

V.—The Antagonism of Aconite and Digitalis. By **J. M. Fothergill, M.D.,** Physician to the West London Hospital.

VI.—Investigations of the Electric Currents of the Brain. By **Richard Caton, M.D.,** Lecturer on Physiology in the Liverpool Royal Infirmary School of Medicine.

VII.—On Albuminuria. By **F. A. Mahomed, M.D.**

VIII.—On the Restoration of Life in Cases of Apparent Death from Chloroform. By **W. Munro, M.D.**

These Reports are paged separately, and may be cut out and preserved for binding, if desired, in a separate form.

Lectures and other Contributions from the following Members of the Profession.

WILLIAM ADAMS, F.R.C.S.Eng., Surgeon to the Great Northern Hospital. — THE TREATMENT OF BURN-SCALDS.

JULIUS ALTHAUS, M.D., Physician to the London Infirmary for Epilepsy and Paralysis. — THE SEVERER FORMS OF EPILEPSY, and their TREATMENT.

T. McCALL ANDERSON, M.D., Professor of Clinical Medicine in the University of Glasgow. — LECTURES ON CLINICAL MEDICINE.

THOMAS ANNANDALE, F.R.C.S. Edin., F.R.S.E., Surgeon to the Edinburgh Royal Infirmary, and Lecturer on Clinical Surgery. — OBSERVATIONS and CASES in CLINICAL SURGERY.

LOMBE ATTHILL, M.D., F.R.Q.C.P., Vice-President of the King and Queen's College of Physicians in Ireland; Master of the Royal Hospital. — CONTRIBUTIONS on MIDWINTER and WINTER RIND SURGERY.

THOMAS H. BARTLEET, F.R.C.S.Eng., Joint Professor of Anatomy and Physiology in Queen's College, and Surgeon to the General Hospital, Birmingham.

H. CHARLTON BASTIAN, M.D., F.R.C.P., F.R.S., Professor of Pathology in University College, and Physician to University College Hospital.

JOHN BARCLAY, M.D., Banff. — AN ACCOUNT of interesting and unusual CASES occurring during the past year's PRACTICE.

RICHARD BARWELL, F.R.C.S.Eng., Surgeon to the Charing Cross Hospital. — CLINICAL LECTURES on LOOSE CARTILLAGES in the KNEE-JOINT.

W. R. BASHAM, M.D., F.R.C.P., Senior Physician to the Westminster Hospital. — CLINICAL LECTURES on ACUTE DISEASE of the KIDNEYS.

E. BUCHANAN BAXTER, M.D., Professor of Materia Medica in King's College, London, and Assistant-Physician to King's College Hospital. — PAPERS on THERAPEUTICS and CLINICAL MEDICINE.

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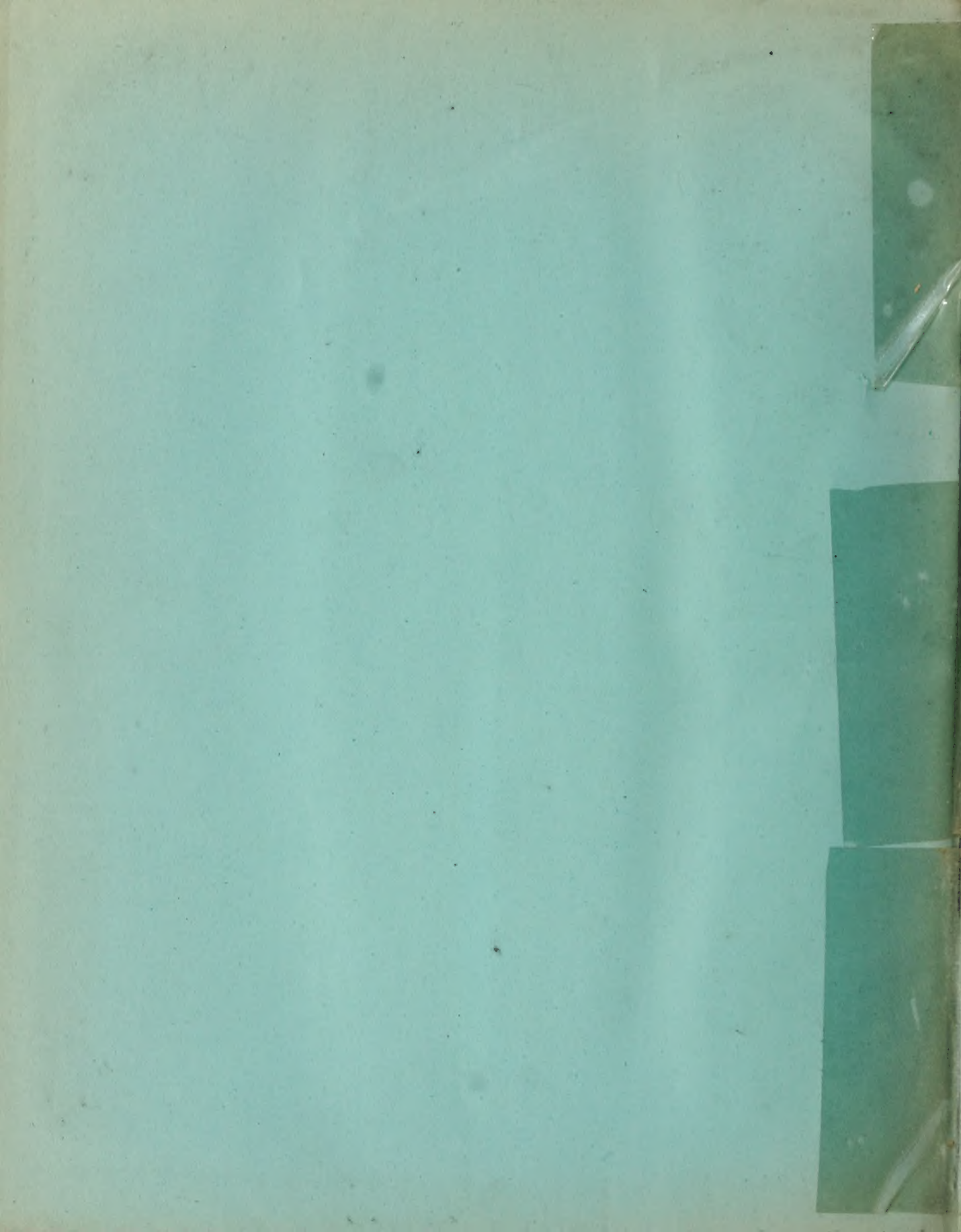
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